Global Opportunities and Institutional Embeddedness

Higher Education Consortia in Europe and Southeast Asia

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GLOBAL OPPORTUNITIES AND INSTITUTIONAL EMBEDDEDNESS

HIGHER EDUCATION CONSORTIA
IN EUROPE AND SOUTHEAST ASIA

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"Travel is fatal to prejudice, bigotry, and narrow-mindedness,
and many of our people need it solely on these accounts.
Broad, wholesome, charitable views of men and things
cannot be acquired by vegetating in one corner
of the earth all one's lifetime."
- Mark Twain -

The puzzle is solved and the journey is done. At first sight, the citation above seems contradictory to the journey that Ph.D. students embark upon when starting their research. The image of the Ph.D., vegetating in one corner, struggling in solitude is often put forward to illustrate the life of an 'AiO'. After four years, I have found evidence that this image does not apply unconditionally to any place, any time, any where. The stimulating and cosmopolitan environment, in which I have been situated the past years, has made my journey an inspiring one. It has enabled me to wander both mentally and physically, through new fields and to arrive at corners that were previously unknown to me. It has proved to me that not only physical travel, but also mental journeys are fatal to prejudice, bigotry and narrow-mindedness. That is…if you have a good tour operator at your disposal.

CHEPS has fulfilled this function fervently. Marijk and Leo, thank you for your efforts. You have operated as my chief travel agents in CHEPS. You were the guides that knew the right places, but gave me the freedom to wander of the beaten track and discover these places myself, and stimulated me to take up new impressions along the way. You provided me with a map in which I could explore freely, but halted me whenever I tended to fall of the map entirely. Not always an easy task, I must admit in hindsight. I have enjoyed working with you both. As a team, you have showed a high level of intellectual complementarity and professional compatibility, characteristics that have

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TABLE OF CONTENTS

PART III: OPERATIONALISATION AND METHODOLOGY

PART IV: EMPIRICAL ANALYSIS

PART V: CONCLUSIONS & REFLECTIONS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

PART I: INTRODUCTION AND BACKGROUND

Chapter 1   Introduction

1.1   Introduction: A National Institution in the International Environment

The question whether universities have always been international in nature or not, has been addressed by several scholars in higher education policy studies (e.g. Scott, 1998; Van der Wende, 2002). One side of the discussion is dominated by the melancholic idea of the medieval scholar wandering from one place of learning to another, communicating in Latin, seeking to extend his academic knowledge. A time when nobody asked for his papers or bothered him with bureaucratic restrictions or academic qualifications. On the other hand, this view of the university as a truly international institution can be contested by putting forward that higher education institutions are very much national institutions as they are regulated by national law, rely primarily on national sources of funding, and have been utilised as important vehicles for nation building. The ties binding national authorities and universities intensified in the course of the nineteenth and twentieth centuries (Neave, 2000). This side of the discussion argues that the contemporary university was born from the nation state, not medieval civilisation (Scott, 1998; Enders & Fullton, 2002). Still, the international outlook of the university persists, and with the fading of national borders in other sectors of societal life, it has extended and intensified in the past decades.

Internationalisation of higher education[1] now has become a regular policy issue for both governments and universities, in developed as well as developing countries. The nature and scope of internationalisation in higher education however, has gone through several changes in the past decades. Van der Wende (2002: 34) mentions the significant increase in the mobility of students and scholars, the broadening range of activities associated with internationalisation and the shift from internationalisation as a

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[1] Throughout the study, the focus is on the university sector. Other sectors (e.g. polytechnics, fachhochschulen, etc.) are not addressed. Many of the arguments made however, are also applicable to these other sectors.

marginal concern towards a central institutional issue with strategic importance. This study does not look at internationalisation in general, but more specifically, at international cooperation between universities. Still, similar changes can be identified if we limit our focus to such international collaborative arrangements between universities. These arrangements have proliferated in the past decades under headings such as *associations, networks, alliances, consortia,* etc. Based on disciplinary, geographical, historical and institutional ties and similarities, universities have grouped together under the presumption that 'they can't go at it alone' in the contemporary international and competitive environment. Similar to internationalisation in general, a large increase in the number of international arrangements and a diversification of activities within these arrangements can be observed. Instead of arrangements set up solely for channelling or administrating student exchange, research cooperation or other activities, many recent arrangements cover a multitude of activities, implemented under the umbrella of one specific arrangement. The shift towards international cooperation as a more strategic activity, impinging upon the core tasks of the university, is also apparent in the case of international arrangements between universities. This at least is a shift that is frequently proclaimed by universities and their policies for cooperation. Whether this shift towards more strategic cooperation is also the case in reality remains to be seen.

The extent to which universities and their internationalisation activities have truly changed due to processes of globalisation and regionalisation is a core question that is addressed by studying the ways in which universities cooperate across borders. By engaging in relationships with partners from other countries, universities start operating in an environment that is no longer only determined by 'their own' national actors and 'their own' organisational routines, instead they will have to take actors into account which stem from another national tradition and which carry a different institutional heritage. With regards to the changes that have taken place in the field of internationalisation of higher education, current international collaborative activities can be assumed to reach deeper at the hart of the university than the earlier (more marginal) ones. Examples of such activities range from joint educational programmes or joint service units (e.g. U21pedagogica) to full joint ventures (e.g. CARDEAN, TRIUM) branch campuses (e.g. Monash University Malaysia) or transnational virtual universities (e.g. University of Phoenix). Consequently these activities present a greater challenge to existing structures and routines. Scott claims that what is likely to emerge is a highly differentiated development, among which the emergence of networks of existing universities that trade in the global market place while maintaining their separate national identities (1998: 29). In this way the study of international arrangements among universities can be considered a microcosm for studying the impact of globalisation and regionalisation on universities. Whilst current changes provide universities with new strategic opportunities on a regional and global scale, they are at the same time organisations that have been established and operate in a national institutional context. They rely heavily on national funding, are subject to national law, etc., and it therefore remains to be seen how these institutionally embedded organisations react to these new opportunities.

1.2 Questions and Objectives

Arrangements between universities not only have several titles, ranging from networks or associations to the business-like terminology of alliances and consortia, they can also take many different shapes and forms. Although inter-organisational arrangements between universities have existed for a long time, the past decades have shown a remarkable rise in the number of such linkages (see Denman, 2002) and also changes in their nature and structure (Beerkens, 2002). Even so, the increase and change of inter-organisational arrangements in higher education has seldom been a topic of systematic research. Studies have been conducted on a macro level, addressing populations of a wide range of inter-organisational arrangements (e.g. Denman, 2002). Others have focused on changes in the higher education environment, claiming that these changes push universities towards more competition but at the same time, towards more cooperation (e.g. Middlehurst, 2001). Studies were also conducted on universities as constituent parts of such arrangements and explored their motives to engage in inter-organisational collaboration (e.g. Saffu and Mamman, 2000).

This study however, focuses on the meso-level of cooperation. Here, the arrangement itself is the unit of analysis, not the wider environment nor the individual components of inter-organisational arrangements. The arrangement itself is distinguished as a particular form of organisation. An organisation that consists of particular elements (the participating universities) but does lead an organisational life of its own. While inter-organisational arrangements in the business sector, be it amalgamations, take-overs, strategic alliances or consortia have become an intensely investigated and debated topic (e.g. Parkhe, 1991; Douma, 1997; Schenk, 1997), studies on such arrangements in higher education are still rare. Although studies on national consortia (e.g. Neal, 1988) and mergers (e.g. Goedegebuure, 1992) have been conducted, the addition of the international facet remains largely unexplored. Thus, in the case of international arrangements in higher education, little is known on the determinants for success or failure of such arrangements. Our main research question is therefore:

What features of international inter-organisational arrangements in higher education can explain the performance of such collaborative ventures?

In order to analyse this question in more detail, we will first need to find the driving forces behind the emergence of international cooperative arrangements in higher education. We contend that this can not be de-coupled from wider societal processes of internationalisation, globalisation and regionalisation. Since globalisation is a heavily debated concept in the social sciences, we must first have a better understanding of this process in general and specifically for the case of higher education. This exploration places our subject under investigation in its context and should present the reader with 'a lens' through which to examine the further analysis of the main research question. The first two sub questions are therefore:

1. How can we conceptualise processes of globalisation and regionalisation?

2. How can processes of globalisation and regionalisation explain the increase and change of international inter-organisational arrangements in higher education?

Since international inter-organisational arrangements in higher education can take a wide variety of shapes and forms, we will look at a specific type of arrangements, which we will term International higher education consortia (HEC's). In order to demarcate the study a typology or classification of arrangements needs to be developed from which the basic dimensions of HEC's can be derived. This provides us with our third sub question:

3. What dimensions differentiate International higher education consortia from other inter-organisational arrangements in higher education?

These first three questions set the stage for the examination of our main research question. The three questions refine our unit of analysis and situate it in its wider context. The next step is to develop a more detailed understanding of this particular arrangement. The starting point will be the composition of HEC's and this study will uncover the critical features of this arrangement. Hence our fourth sub question:

4. What features of International higher education consortia can explain the performance of these consortia?

Like any other social arrangement, inter-organisational arrangements can be considered a specific type of organisation. Like any other organisation, an inter-organisational arrangement can be affected by changes within the partners and/or between them. This leads us to the assertion that once an arrangement – such as a consortium – is established, effectiveness can change due to developments in the partner organisations or due to developments in the relationship between them. If in these changes the consortium acts as an agent we can talk of consortium management. Therefore, the exploration of possible mechanisms for management of consortia and other inter-organisational arrangements is also necessary. This provides us with the fifth and final sub question:

5. What type of mechanisms can be adopted by International higher education consortia in order to increase performance?

1.3   Outline of the Study

The design of this study closely follows the five research questions. The first part of the study introduces the relationship between globalisation, internationalisation and regionalisation and further demarcates the subject under investigation. In chapter two, the concepts of globalisation, internationalisation and regionalisation are explored in a general manner, since these processes in principal affect all arrangements in society. These concepts are then applied to higher education and to international cooperation between universities in particular. In chapter three, we will illustrate this exploration (again both for society in general and for higher education) for the regions of Europe

(with special emphasis on the European Union) and Southeast Asia (with special emphasis on the Association of Southeast Asian Nations). These regions provide the context in which the four consortia that function as case studies operate. These two chapters are largely based on an interdisciplinary approach, drawing from studies from sociology, anthropology, history, political science and international relations theory. Such an interdisciplinary approach is chosen in order to obtain a more comprehensive understanding of the processes. The subsequent parts of the study are mainly based on perspectives from economic sociology, organisational behaviour and strategic management theories. In the final section of the first part the notion of 'inter-organisational arrangements' are further defined and the major manifestations of such arrangements are identified, in order to give a clear demarcation of what International higher education consortia are. To achieve this, previous typologies on inter-organisational arrangements are reviewed based on organisational studies as well as typologies specifically developed for higher education. This chapter therefore enables us to develop a comprehensive typology of inter-organisational arrangements in higher education, which should provide us with the opportunity to give a refined definition of International higher education consortia.

The second part of the study commences with a brief introduction of the disciplinary perspectives used in the study of consortia properties, consortia performance and consortium management. We draw mainly from studies in economic sociology and strategic management. These are introduced in chapter five after which we return to a more detailed view on cooperation between organisations. Chapter six theoretically explores the potential determinants for the effectiveness of consortia. Due to the lack of grounded research on the effectiveness and performance of consortia in the area of higher education, we will relate to studies on international consortia and strategic alliances in the business sector. In this field a large number of empirically grounded studies have been conducted on issues relating to the composition and structure of business combinations and several of their findings will act as starting point for exploring the key concepts contributing to the performance of higher education consortia. Chapter seven explores the mechanisms for consortium management and the way they are related to the key concepts identified in chapter six. This section of the study should provide us with a thorough theoretical framework and testable hypotheses which are then used to conduct our empirical analysis.

Before commencing the analysis of the empirical data we indicate how the key concepts, relating to performance and consortium management, have been operationalised (chapter eight). Also we will elaborate on the design of the various steps in our research (chapter nine). In this chapter we will go further into the research approach and the methodology, the process of data collection, and the way in which we conducted the analysis of the empirical data.

The fourth part of the study is empirical. Chapter ten commences by introducing the four case studies chosen to investigate the phenomenon of International higher education consortia. All consortia (the ALMA Network; the ASEAN University Network; the Coimbra Group; and the European Consortium of Innovative Universities; see Appendix I for a list of the consortia member universities) are described in detail by

looking at their organisational structure, their objectives and activities and their development over time. Chapters eleven and twelve present the results of the empirical data analysis. These results are based on the quantitative and qualitative data obtained through interviews, questionnaires and document analysis. Chapter eleven presents and discusses the results for each of the consortia separately, while in chapter twelve we conduct a comparative analysis and discuss the overall results.

The confrontation between theory and empirical data provides us with the necessary information to reconsider and/or enhance our understanding of consortium performance and to identify the main types of mechanisms for network management. Anticipated relationships between the composition of consortia and their performance will be reflected upon and we present additional determinants for consortium performance, if the results of the empirical analysis give cause for this. The final chapter is devoted to reflections and conclusions on the research questions and a general reflection on the design of the study and on its theoretical and practical implications.

Chapter 2   Globalisation and Higher Education

Globalisation has become one of the key-concepts in the social sciences at the turn of the twentieth century. As with many new and fashionable catchwords, the use of the term globalisation has created an opportunity for us to understand current phenomena, but has at the same time caused great confusion. International relations scholar Jan Aart Scholte illustrates this by stating that:

> *"ideas of 'globalization' are so broad, so diverse and so changeable that it sometimes seems possible to pronounce virtually anything on the subject. Although this danger is clearly present, notions of 'globalization' can - when developed with care, precision, consistency and suitable qualifications - be more than an intellectual gimmick" (1997: 428).*

In order to gain a thorough understanding of how globalisation relates to higher education, the notion of globalisation must be developed in such a careful, precise and consistent way. A meticulous understanding of the term requires an interdisciplinary view. In this chapter, such an interdisciplinary conceptualisation of globalisation is developed and related to concepts such as internationalisation and regionalisation. Finally, the way this concept can and has been applied in the field of higher education and how it relates to international cooperation in this field will be discussed.

2.1   The Globalisation Container

In the past decade the concept of globalisation yielded a vast amount of literature and has also led to an extensive list of interpretations of this process. The trouble in conceptualising the term globalisation is partly due to the wide range of disciplines that have focused on this process. One could say that the first notions about interdependency at the global level were addressed by political geographers focusing on geo-politics and by international relation theorists, with MacKinder (1904) or Angell (1911) being some of the first to acknowledge an interdependent political system of

world-wide scope. One could even claim that the work of Marx and Engels who in the mid 19th century already talked about the 'universal interdependence of nations' were the first to address globalisation. That globalisation is by many understood to be more than interdependence among nation-states is illustrated by the globalisation literature of the 1990's, mainly arising from the disciplines of political science, sociology, anthropology, management and economics. Many authors (e.g. Giddens, 2002; Bauman, 1998; Beck, 2000a) have attempted to explain changes in the contemporary world by referring to the term globalisation. What can be concluded from the vast increase in literature on globalisation is that something is changing, that new arrangements are emerging that differ from arrangements in previous times. The nature and intensity of change however, seems to cause disagreement. We propose that these differences exist because the present changes are approached from several past realities. Authors have attempted to explain the process of globalisation by distinguishing it from the past state of affairs, taking a past 'given' as a point of departure. This is validated by the various temporal scopes chosen to determine the presence or absence of the globalisation process and the different perceptions on its existence. When discussing 'changes' we can only compare statements that use similar points of reference. These points of reference will be further analysed in the next section.

2.1.1   One Word Fits All?

Looking at the wide range of interpretations of the process of globalisation, one could claim that there would always be one that would fit one's research (or one's political agenda). In order to analyse what this (new) process could mean for the field of higher education, it is first and foremost necessary to bring some order to this maze of perspectives and definitions. On the basis of the literature that has attempted to explain or define globalisation, we can identify various approaches. What distinguishes these views is the point of reference used. After all, if we regard globalisation as a process, there must be a 'past reality' that is or has been affected by this process. Classified according to the point of reference taken we can approach 'global' as a geographical concept, distinguishing it from the local; as a concept of authority and power, distinguishing it from territorial sovereignty; as a cultural concept, distinguishing it from isolation; and finally, as an institutional concept, distinguishing it from national. These approaches can be and are applied in various disciplines. They are dependent on the historical point of reference that is used, not on the disciplinary perspective.

If 'global' is distinguished from local and is conceptualised as world-wide, we emphasise geographical expansion, from the local to the global. What has caused us to expand our activities outside our direct surroundings? This expansion has a long history of course. People have travelled throughout history, between localities as well as between regions and continents. People have extended their activities for several reasons, ranging from sheer necessity for trade or agriculture to plain curiosity. However, global expansion of their activities was severely restricted by distance and time. Since around 1500 AD, the movement of both people and goods became substantial. Inter-continental flows, based on colonial ties, took place more frequently and became more intensive, particularly for spices and raw materials. However, it took until the beginning of the past century to reach a level where activities became embedded in a world-wide system. Therefore,

according to this approach, a globally interconnected system was reached around 1900, after which it just became more intense. The main drive for this world-wide expansion was capitalist accumulation through economic trade which was enabled by naval transportation. The rapid increase experienced in the past decade was a direct result of improvements in speed and capacity in transport. The mechanisation of land and naval transport in the 19th century, the massification of aviation in the latter half of the 20th century and the digital revolution in the 1990's led to massive movements of goods, people, finance and information. This perspective does not question the nation-state but instead sees it as a part of a world-wide system of nation states. What is new at the end of the twentieth century is therefore not globalisation, since – from this perspective – we are already past that, but the intensification of this process and the ongoing transformations of the world-wide system of nation-states.

Globalisation is also discussed in the context of power and authority where it questions the relationship between territoriality and jurisdiction. In this discussion, the question is considered whether the territorial sovereignty and authority of the nation-state is at stake. There are differences in opinion on the reality of this process of de-territorialisation or de-nationalisation. Kenichi Ohmae (1994, 1995) is probably the best-known supporter of the de-nationalisation thesis, while Wade (1996) and Hirst & Thompson (1996) are highly sceptical. A more useful and realistic discussion is not centred upon whether the nation-state concept is changing but on how it is changing. The frequently mentioned model of the retreating state (e.g. Strange, 1996) did not emerge in the context of globalisation, but materialised as a response to the overtaxed form of regulatory government in the 1950's and 1960's. New perceptions on the role of the contemporary government such as the retreating state, the facilitative state, the evaluative state or the interactive state may be accurate in describing the new forms of government, but these do not provide an explanation for the change of governance in the light of globalisation. In this respect, the concept of the 'Competition State' as presented by Cerny (1997, 1999), or the adaptation of governments to the capacity for international competition, as explained by Habermas (1996), is more suitable. In addition to changes in the nature of national governance, this approach also focuses on the transfer of authority, either downward (decentralisation to foster competition), upward (to supranational bodies) or to the side (to private non-governmental actors).

A third conceptualisation of globalisation is derived from its cultural meaning. In this respect, globalisation equals the mixing of cultures and its consequences. Here, the direction of globalisation has been fiercely debated. Are we awaiting a 'clash of civilisations' (Huntington, 1996) or increasing tensions between Western consumerism and more traditional identities (the McWorld versus Jihad thesis postulated by Barber, 1996)? Such observations can not just be refuted, considering recent ethnic conflicts in the world and ethnic tensions within developed multicultural states. This pessimism increased after the September 11th tragedy and the subsequent polarisation of perceptions on universalism, tolerance and multiculturalism. Others, such as Friedman (1999), advocate a more optimistic view and claim that modern culture will triumph without the loss of traditional values. The homogenisation thesis is not only contested by pessimists. Appadurai (1996) for instance observed a process of cultural mixing and hybridisation across locations and identities. Lash and Urry (1994) found that it is

necessary to take into account not only global processes of production but also the circumstances in which cultural products are received by audiences. They argued that there is in some respects an increasing contradiction between centralised production and more decentralised and fragmented reception. Even if a process of homogenisation is taking place, the triumph of modern culture (often equated with Western or American culture) is contested. Smith in this respect observes an emerging global culture that is tied to no place or period but is context-less: "a true melange of disparate components drawn from everywhere and nowhere" (1990:177).

The final conceptualisation of 'the global' entails a more holistic approach. In the use of global as an institutional concept, the logic of national identity, commitment and citizenship is called into question and substituted by the emergence of a cosmopolitan identity or citizenship. This goes beyond the notion of a retreating state. Although the long tradition of the national sovereign state has produced several strictly national institutions (courts, parliaments etc.), the image of the nation also encompasses arrangements like citizenship, norms, values, solidarity and identity. These social arrangements are also being associated with 'stateness', for instance with being Chinese, Dutch or American. Some argue however that these forms of national commitments are eroding and are being supplanted by other forms of social organisation. What these 'new forms' are, remains an arena for intense discussion. Castells (1996-1998, 2000) for instance, argues in his theory of the network society that social organisation is now based upon information networks. Beck (2000a, 2000b) postulates the existence of a second age of modernity, where social relationships are based on transnational community ties and are no longer supported by place (e.g. neighbourhood), origin (e.g. family) or nation (e.g. state organised solidarity of citizens). This results in the socialisation of shared risks or shared risk definitions. Sassen (1991, 2000) sees national identities replaced by sub-national spaces such as cities. Hoogvelt (1998) replaces Wallerstein's (1980) distinction of the geographical core-periphery partition with the social core-periphery partition. Appadurai (1990, 1996) observed that they are shaped by different landscapes – ethnoscapes, mediascapes, technoscapes, finanscapes and ideoscapes – as building blocks of imagined worlds. Global flows, according to him, occur in and through the growing disjunctures of these landscapes. This has been a long historical process but due to the speed, scale and volume of these global flows, these disjunctures become evident and central to the politics of global culture. Since globalisation in this sense can be seen as the supplanting of national identity and commitment, it is also incorporated in Robertson's definition of globalisation (1992). He claims that the process does not simply refer to an objective process of greater interconnectedness but also to conscious and subjective matters, namely the scope and density of the consciousness of the world as a whole. The growing awareness of environmental risks – exemplified by the title of the Brundtland report, 'Our Common Future' (1987) – can be seen as the origin for this global consciousness. The resulting new perspectives on social structures are detached from nationality space or kinship, leading to cosmopolitan societies formed around networks, risks or themes. The basic thesis in this approach is that social cohesiveness is no longer embedded in national institutions but is being substituted for some form of cosmopolitan solidarity. To reach this outcome however, national institutions that have provided this cohesiveness need to be supplanted by global institutions.

In the various approaches to globalisation the main difference is between the notions of global as a geographical concept on the one hand and as an authority-related, cultural and institutional concept on the other. While the first regards contemporary changes as intensification and alteration of international relations within the world-system – which came into being over a century ago – the other three consider contemporary changes as more revolutionary. In the cultural conceptualisation of the global, this is mainly an acceleration of a long historical process. The power and institutional perceptions of globalisation see it mainly as a post-war process that accelerated through increased interactions and flows. In the geographical or geopolitical view, the process started with the emergence of transcontinental movements of people and goods – mainly based on the logic of capital accumulation – and reached its completion in the beginning of the twentieth century. The main historical events in this respect are the processes of colonisation and improvements in transportation during the industrial revolution. Many contest this notion of globalisation by stating that national sovereignty is still considered as the core of the world-system. In our view this is mainly a discussion about the nominal meaning of the word globalisation. If authors say that this word means world-wide interconnectedness, the process was indeed completed a long time ago. In that case, current changes merely alter and deepen these relations, due to further capitalist accumulation, more advanced technologies and the liberalisation of markets. The other conceptions of globalisation contest that globalisation is merely the growing world-wide inter-connectedness, but they include the political, cultural and social implications as part of the process.

This can be illustrated by pointing out the main historical events that have occurred according to the different views on globalisation. Those that see it as a concept related to territorial jurisdiction and power start their analysis by referring to the Westphalian order that emerged in 1648 and eventually crystallised into the post-war welfare states of the 1950's, 60's and 70's. The 'Thatcherism' and 'Reaganomics' of the 1980's represented a shift by delegating more authority from the state to the market. After the decline of communism, new constellations emerged, embodied by terms like the Third Way, the New Democrats, the Poldermodel or the Neue Mitte, which sought new forms of government beyond state or market, ultimately resulting in the 'Competition State' and neo-liberal policies in the 1990's. Simultaneously in Europe an upward transfer of authority took place, a long process that began with the Schumann Plan in 1950 and still evolving at this moment. Although the transfer of authority to the EU institutions has gone much further than anywhere else, it also took place in other regions such as the SADC, Mercosur, NAFTA and ASEAN[2] regions. This regional integration is very much based on a neo-liberal ideology, effectuated through the reduction or abolishment of trade barriers and tariffs. A similar process is also apparent on the global scale through agreements in the WTO framework.

Those using globalisation as a cultural concept view it over a longer time span, taking the spread of Christianity or Islam as the starting point. Western imperialism constitutes another important period in history. Also in this approach, post-war

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[2] SADC: Southern African Development Community; Mercosur: Mercado Comun del Sur; NAFTA: North American Free Trade Association; ASEAN: Association of Southeast Asian Nations.

developments, and particularly those in the last two decades of the twentieth century, are seen as being a historical turning point. Important channels in this respect are the world-wide coverage of events, the spread of Western consumer products, increasing and altering migration patterns and communication and information technologies such as the Internet, all leading to both homogenising forces as well as inclinations towards traditional values or fundamentalist movements.

The historical events considered important in the process of globalisation as an institutional concept leading to the emergence of cosmopolitan societies, are those that have created a sense of global citizenship through the awareness of the world as a whole. Examples would include the establishment of the League of Nations, the first outer space expeditions and the landing on the moon, the notion of 'spaceship earth', the emergence of several - globally operating – non governmental organisations, the direct coverage of the fall of the Berlin Wall and the shifts in the interpretation of international law in recent international disputes. Even war and justice are becoming detached from the institutions of the nation state, with war being declared not just on other nations but also on transnational (terrorist) networks. The main differences between the four approaches are summarised in table 1.

Table 2-1: Different perspectives on globalisation

Conceptualisation:	Past realities:	New realities:	Globalisation equals:
Geographical	Unconnected localities.	The world-system that came into existence around 1900.	Increasing interconnectedness
Authority	State sovereignty over clearly defined territories	Authority transferred upward, downward and sideways	Deterritorialisation
Cultural	Mosaic of cultures without significant routes for cross-cultural exchange	Melange of cultures; existing in harmony or friction	Convergence or divergence
Institutional	Nation as the institutional container of society: Identity, solidarity and citizenship based on nationality;	Social organisation and identity structured around a-spatial systems	Cosmopolitanisation

If we consider the literal meanings of the word global – '*world-wide*' and '*all-inclusive*' (globalisation therefore refers to 'making or becoming world-wide' or 'making or becoming all-inclusive') – one might conclude that a phase of globalisation (in the meaning of 'making world-wide') had been completed around the turn of the 19th century. In this point of history, we witnessed a world of interconnected nation states. A second phase of globalisation (in the meaning of all-inclusive) took off in the latter part of the twentieth century and was reinforced through the acceleration, massification, flexibilisation and expansion of flows of people, products, finance, images and information (for elaboration on this argument, see Beerkens, 2003). So far there is

nothing revolutionary new about globalisation, it has simply become faster, more massive and extensive. However, globalisation does not solely refer to the objective process of increasing interconnectedness but also to conscious and subjective matters (Robertson, 1992). Its potential consequences are perceived as revolutionary by the 'transformationalists' and 'globalists' (see Held and Mc Grew, et al., 1999) who observe a process leading in the direction of de-territorialisation, homogenisation or cosmopolitanisation. These are processes that contest the existing compartmentalisation of power bases, economies, identities, and cultures and break down and suspend the congruence of state and society (Beck, 2000: 87-88). These fundamental elements of the modern world thus become disembedded from their spatially – often nationally – confined entities. From this viewpoint, the world-wide interconnectedness between nation-states becomes supplemented by globalisation as *a process in which basic social arrangements* (like power, culture, markets, politics, rights, values, norms, ideology, identity, citizenship, solidarity) *become disembedded from their spatial context* (mainly the nation-state) *due to the acceleration, massification, flexibilisation, diffusion and expansion of transnational flows of people, products, finance, images and information.*

If we relate the definition above to the four conceptualisations found in table 1, we can conclude that those who use globalisation as a geographical concept, referring to increasing interconnectedness, only refer to part of our definition, namely the increase of flows. In this sense, globalisation thus reflects a process of increased internationalisation. As we argued before, we also include the effects of these increasing flows – that is: the resulting transformation of social arrangements – as an inherent part of the process of globalisation. The other three conceptualisations (deterritorialisation, convergence and cosmopolitanisation) actually refer to this process of social transformation and the disembedding of social arrangements. The definition above closely resembles that of Held & Mc Grew et al., who define globalisation as:

> *a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions, generating transcontinental or interregional flows and networks of activity, interaction and power* (1999: 16).

The main difference between both definitions is in their cause-effect relationship. In this respect, it is essential to acknowledge that the process of globalisation contains an inner logic, by which the prolongation of globalisation can be sustained through its own causes. In other words, intensifying flows invigorates the process of disembedding and transformation, which in turn results in the intensification of transnational or interregional flows.

From this point of view however, globalisation would ultimately develop into a tidal wave. But, as Cerny's states: "this does not mean that, once the genie is out of the bottle, globalization is irreversible" (1999: 5). This is because there are checks and balances attached to this process since the process of globalisation also intrinsically incorporates local implications and reactions. Economic, political, cultural and individual actors all jump the bandwagon of globalisation, but at the same time are ambiguous in choosing its direction and speed. In an age of globalisation, universalism and particularism,

connection and fragmentation, centralisation and decentralisation, conflict and balance are opposite sides of the same coin.

A final issue addressed here, is the issue of exclusion. The terms global or globalisation do not mean egalitarian, levelling or equalisation. In fact, many people see these as opposites. This idea is situated in the concept of 'flows'. Flows redistribute, and massive, fast and expanded flows redistribute in an extreme way. This is also recognised by Castells:

> *"The rise of [global] informationalism in this end of millennium is intertwined with rising inequality and social exclusion throughout the world. (...) Moreover, the process of social exclusion in the network society concerns both people and territories. So that, under certain conditions, entire countries, regions, cities and neighbourhoods become excluded, embracing in this exclusion most, or all, of their populations. This is different from the traditional process of spatial segregation"* (1998: 69, 72)

Within nation states, governments have cultivated a sense of national solidarity in the form of re-allocation and levelling of income through tax systems, social security facilities and subsidies of the welfare state. In this way, flows were channelled towards a more equal distribution. It is apparent that the sense of global solidarity is far less cultivated and that checks and balances are far from developed on a global scale. Our current global 'welfare-world institutions' such as the IMF, the World Bank, the organisations within the UN-framework, IGO's and NGO's have proved to be incapable of channelling flows in such a way that an equal distribution comes to pass. This side of globalisation is widely acknowledged in the literature (e.g. Stiglitz, 2002; Castells, 1998; Hoogvelt, 1998).

Castells (1998), Bauman (1998) and Hoogvelt (1998) respectively talk about the exclusion from the unconnected (as opposed to those that are connected), the exclusion of the locally tied (as opposed to the globally mobile) or the social periphery (as opposed to the social core). According to these authors, poverty and wealth also become disembedded from their spatial context. Of course we can all observe that the poverty of the disconnected, the locally tied and of the social periphery still shows extensive overlap with geographical location of the poor countries. However – in these views – growing inequality is not only observed between the developed and developing countries, but also within these countries, disembedding poverty from its national context and re-attaching it to other social constructs. This may be another, non-national, spatial context (e.g. urban ghettos, peripheral rural areas) or a-spatial contexts (e.g. networks, classes).

2.1.2 *The Terminology of Crossing Borders: Global, International, Transnational*

Confusion about the relationship between globalisation and internationalisation is apparent in globalisation studies in general as well as in studies on globalisation in higher education (for the latter, see section 2.2.1). Dicken (1998: 5) provides a good starting point for distinguishing between these two processes. According to Dicken:

> *Internationalization processes involve the simple extension of (economic) activities across national boundaries. It is essentially a quantitative process which leads to a more extensive geographical pattern of (economic) activity. Globalization processes are qualitatively different from internationalisation processes. They involve not merely the geographical extension of (economic) activity across national boundaries but also - and more importantly - the functional integration of such internationally dispersed activities.* (brackets added, EB)

In this, we can recognise points that are similar to arguments in the previous section, namely that globalisation adds an extra – qualitative – dimension to the process of increasing interconnectedness. Not merely the geographical extension of activity or increased interconnectedness, but also the functional *integration* of such activities is incorporated in the term globalisation. This corresponds with our conceptualisation of globalisation, where the term extends from a merely geographical concept to a political, cultural and institutional concept. Following Dicken, we can distinguish between international as *interconnected* arrangements and global as *integrated* arrangements.

When discussing globalisation the terms transnational and inter-national are also often a source of confusion. The similarity between them is that they both exemplify something that is related to two or more nations. Inter-national however refers to interconnected arrangements covering the territory of two or more nations, while transnational refers to integrated arrangements transcending relations between state actors. It thus extends beyond arrangements between states or state agents representing state interests (Risse Kappen, 1995). The exact boundary between interconnected and integrated however remains unclear. An inter-national market is a market that is connected through relations between two or more domestic, national markets; a transnational market is an integrated market covering parts of the territories of at least two countries. If we look at Europe for instance, we can see that the integration of the European market has evolved since the Treaty of Rome. The same can be claimed for the political domain, although in this domain the debate concerning interconnection versus integration in the current European polity is more intense. The central question here is whether regional integration is the concerted pluralist articulation of interconnected national interests, or whether it has obtained the characteristics of an integrated supra-national state, in which a new level of governance covers the region as a whole, not as individual nation-states (e.g. views respectively represented by intergovernmentalists such as Moravcsik (1995, 1998) and neo-functionalists like Haas (1958, 1961); see also Stone Sweet and Sandholtz, 1998).

In conclusion, we argue that both transnational and international should not be confused with global. If we again take markets as an example, transnational markets are not at all the same as global markets. Actually, local transnational markets in retail are very common and can easily be observed in border regions. Such markets become more global when they spread geographically like an oil slick, resembling the strategies of retailers such as A&P or Ahold or restaurants like McDonalds and its copycats. Inter-national markets are also dissimilar to global markets in two respects. In the first place, inter-national markets can exist on a sub-global level. If they extend to a world-wide level, they would constitute a world-wide interconnected system of domestic markets, as happened on a macro-level at the end of the 19th century. Another difference between

inter-national and global is the previously mentioned distinction between *interconnected* and *integrated*. Although we illustrated the differences with markets, this goes for all arrangements organised around flows, such as organisations, networks, media, environment, culture, physical infrastructure, etc.

2.2   The Concept of Globalisation in Higher Education

That globalisation is such a comprehensive processes and therefore can only be grasped in rather abstract definitions, has led to – as we saw previously – various conceptualisations of the term globalisation. In higher education research this has led to a wide range of subjects discussed under the heading of globalisation and higher education. Before discussing this range of subjects, we will first briefly address the frequently discussed issue of the difference between internationalisation of higher education and globalisation.

2.2.1   *Confusion All Over: Globalisation and the Internationalisation of Higher Education*

The confusion about the meanings of internationalisation and globalisation has also been apparent in the field of higher education. Internationalisation after all, had gained a typical meaning in this field. It has frequently been used not so much as an external process, but more as a strategy or an intended activity of higher education institutions. This becomes apparent if we look at the definition of internationalisation in higher education of Knight and De Wit (1995: 17), a definition that has become widely accepted in the domain of international education:

> *"Internationalisation of higher education is the process of integrating an international dimension into the teaching, research and service functions of a higher education institution."*

Not surprisingly, the emergence and the increasing popularity of the term globalisation, has resulted in significant confusion about the relation between globalisation and internationalisation. Peter Scott (1998: 124) perceives the relation as dialectical:

> *"Globalization can not be regarded simply as a higher form of internationalization. Instead of their relationship being seen as linear or cumulative, it may actually be dialectical. In a sense the new globalization may be the rival of the old internationalization."*

A different relationship is observed by Van der Wende, who argues that (for the case of higher education), internationalisation can be seen as a response to globalisation, which is also apparent from her definition of internationalisation (in Kalvermark & van der Wende, 1997) where internationalisation of higher education is seen as:

> *"including any systematic, sustained effort aimed at making higher education (more) responsive to the requirements and challenges related to the globalisation of societies, economy and labour markets."*

Simon Marginson (2000: 24) reflects on the relationship between globalisation and internationalisation in more general terms:

> *"The term 'globalisation' does not refer to the growing importance of 'international' relations, relations between nations, per se. The term 'internationalisation' describes the growth of relations between nations and between national cultures. Rather, the term 'globalisation' is reserved here for the growing role of world systems."*

The obvious interpretation that internationalisation refers to relations between nations, is confirmed by Currie et al. (2003). These authors, however, explicitly relate the processes with ideology (p. 11):

> *"...globalization represents neo-liberal, market-oriented forces enabling a borderless world, and internationalization represents arrangements between nation-states primarily cultivating greater tolerance and exchange of ideas".*

Scott thus sees it as a dialectical relationship, Van der Wende suggests that there is a reactive relationship, and Marginson points to a growing role of the international world system in the process of globalisation, while Currie et.al. portray the two as inherently different, relating the one to market forces and competition and the other to cultural forces and cooperation. A dialectical relationship can be supported if we return to our conceptualisation of globalisation. Internationalisation means setting up flows (connections) between two or more *countries*, while globalisation refers to a process where social arrangements that shape these connections become integrated on a world-wide scale. If we thus look at the ultimate outcomes of the processes, we can indeed say that the relationship between the two is dialectical. As long as we do not live in a truly globalised world however, globalisation will shape international flows and these flows again foster globalisation. Van der Wende's perception on the relationship between globalisation and internationalisation is related to this as she postulates the notion that internationalisation is a response to globalisation. This thesis is right, just as internationalisation can be regarded as a contributor to globalisation[3]. This does not necessarily contradict Scott's dialectical relationship. Van der Wende's argument simply assumes (the reality of) a world that is not yet truly globalised, whereas Scott, sees a dialectical relationship between the ultimate result of globalisation and a world-order connected through inter-state relations. Marginson's view on the relation is that globalisation refers to the growing role of the international world-system. A growing role of the inter-national world-system can be understood as the transfer of certain social arrangements (e.g. authority over economy and politics but also over higher education) from the national level to the world system level, which indeed reflects our definition of globalisation. Marginson, however still speaks of an inter-national world-system, because he still emphasises a central role for governments; a notion that reflects reality, but not Scott's theoretical concept of true globalisation. In the meaning of Currie

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[3] This is based on our argument in section 2.1.1: "intensifying flows invigorates the process of disembedding and transformation, which in turn results in the intensification of transnational or interregional flows". This is also apparent in UNESCO's view on the relation between higher education and globalisation: "*in its universality and international dimensions, higher education can be seen as both an actor and reactor to the phenomenon of globalization*" (2003: 5).

et.al., internationalisation is seen as a force contradictory to globalisation (or maybe even a counter response to globalisation).

Returning to our four conceptualisations of globalisation, it is argued that globalisation when approached as increasing interconnectedness (the geographical concept) is – for the case of higher education – reflected by the activities that we know as internationalisation: integrating an international dimension into the teaching, research and service functions of the university. As long as the (theoretical) state of a truly globalised world has not yet materialised, connections between nations will continue to exist and possibly even increase. This conceptualisation is discussed in section 2.2.2. The other three conceptualisations will be discussed in the subsequent sections. The question of authority and territorial sovereignty focuses on how university-state relations are reshaped. The question of culture is discussed through focusing on the tension between the appreciation of diversity versus the rationality of standardisation. Finally, the question of identity focuses on the nature of the university as an institution.

2.2.2   *Increasing Flows, Increasing Interconnectedness*

The geographical spread of linkages and the increasing interconnectedness between nations has long affected higher education institutions. In fact international linkages have always been part of the university. As observed in the general exploration of globalisation as a geographical concept, this conceptualisation does not question the matter of national sovereignty but refers to an increasing global interconnectedness. This is the process that in higher education is often referred to as internationalisation. International linkages have been apparent for a long time and reached global coverage in the late colonial period. Due to political developments, one might say that in the post World War era this global coverage was substituted by an East-West division during the cold war. In this period the motivations for international linkages were – in addition to the inherent educational motives – mainly cultural and political in nature. In curricular issues this becomes apparent in for instance area studies, comparative studies, language studies, international law programmes, etc. Also in the international flows of students, political motivations became important and strongly regulated by scholarships and exchange schemes. International exchange of students as a political instrument was also used in the case of European integration. In a comparative study on internationalisation strategies in European countries, Van der Wende (2001, 2004) observes that in many countries a shift is taking place from political, educational and cultural rationales for internationalisation towards an economic rationale. Internationalisation according to this rationale is seen as contributing to the skilled human resources needed for international competitiveness of the nation, and foreign graduates are seen as a key to good trade relations (Kalvermark and Van der Wende, 1997: p.230). Some countries also see more direct economic benefits by attracting more fee paying students to their institutions.

The various rationales have led to an increase of international flows in higher education. This has become especially apparent through the increase in flows of students across borders. In the period from 1980 to 1998, the amount of foreign students increased from less than a million to over 1.5 million (UNESCO, 1993; 2000). But it is not just the

physical mobility of students that constitute international flows. There is also staff mobility and exchange, there are flows of (financial) resources and of information and knowledge. In particular the exchange of information and knowledge has received a substantial boost through the emergence of new information and communication technologies. These new technologies have increased the opportunities for knowledge exchange in the form of scientific knowledge and research and information on for instance different systems or management models for higher education (enabling benchmarking and dissemination of best practices), but this has also enabled the provision of distance education and 'virtual' mobility of staff and students. Following our line of thinking, the increase in flows and the opportunities for creating new channels for exchange will also transform existing arrangements and structures in higher education. These transformations (relating to deterritorialisation, convergence and cosmopolitanisation) are discussed in the subsequent three sections.

2.2.3 *The University and the Competition State: Losing and Loosening Grip*

When we consider globalisation as the erosion of territorial sovereignty, we look at how the state is losing its grip on its higher education institutions, institutions that became very national institutions in the nineteenth and twentieth century (Neave, 2001). Of course governments are not just losing grip, they are also transferring this grip intentionally, upwards, downwards and sideways. This transfer is not just a consequence of or an expression of globalisation. It also emanates from the insustainability of the welfare states as they were constructed in the decades following the Second World War. We already pointed to the fact that we were discussing notions of the retreating state well before we mentioned the process of globalisation. This also goes for the governance of higher education, where the relationship between higher education and government has undergone massive change (Neave and Van Vught, 1991: 239; see also Goedegebuure et al., 1994; Neave and Van Vught, 1994). Nonetheless, the increase of flows has touched upon the authority and sovereignty of nation states as the caretakers of higher education.

Flows in higher education can take different forms: flows of students, flows of graduates, flows of information and course materials, flows of academic labour, flows of financial resources, etc. The increase in student mobility and the international opportunities for graduates have led to an increased demand for transparency and comparability of quality, credits, certification and degrees. Also the provision of courses and programmes across national borders through online education or students physically obtaining higher education in other countries can not just be ignored by national governments. Due to these developments, their higher education policies can no longer be solely based on national circumstances or benchmarked on national norms. Global competition in the labour market diminishes the power of governments to discretely set qualification requirements or accreditation criteria. In this domain, other governments and professional accreditation bodies also play a role. Part of their control on higher education is also lost since they no longer act as the sole provider of financial resources. Confronted with a decline in revenue or the progressive growth of social expenditures, many countries, at very different levels of development, tried to restrain the expansion of the public funding of education in general and of higher

education in particular (Chevallier and Eicher, 2002: 89). These budget cuts force universities to look for alternative resources (Slaughter and Leslie, 1997: 111; Knight, 2003: 95; Currie et al., 2003: 56). Universities diversify their funding bases, not just within the national domain but also internationally, through research foundations, international business, international consultancy, supranational (e.g. EU) and international (e.g. World Bank) providers of resources and by acquiring tuition fees from international students. In many countries, the government's control on 'its' higher education to a large extent was a result of their role as the provider of financial resources and as legislator. In both these core functions, national governments are transforming. Deregulation processes have taken place in many countries and have often been accompanied by a decrease in per capita funding of higher education, leading to more mixed funding arrangements, stimulating an entrepreneurial approach of universities (Van Vught et.al, 2002). Financial means can no longer be taken for granted, but rely on input-, output- and/or quality-indicators and are frequently distributed on a competitive basis.

This does not necessarily mean that governments are actually losing in this respect. Governments – in governing the competition state – are actively involved in the transfer of authority. They may transfer authority and responsibilities to higher education institutions, to regional, supranational bodies and to the private sector. They may actually need to do this to give in to the reality of the increasing claims on public funds and the decreasing proportion that is available for higher education. However, governments also actively try to improve the international competitiveness of their economies and strife for national educational and scientific excellence. To achieve this they can act collectively (e.g. the Lisbon Convention in the EU framework or the Bologna Process) or they actively promote the competitiveness of their universities by encouraging the exploration of new student markets and introducing market type mechanisms. Furthermore, to improve or retain the national competitiveness in global markets for finance, commodities, services and labour, the quality of education and the availability of knowledge are important, especially in knowledge intensive sectors. Governments therefore want to attract qualified researchers and high quality students in order for their universities to become competitive and produce a qualified labour force, compatible with the demands of the knowledge economies. This is motivating them to open up their borders, which at the same time makes them vulnerable to foreign competition. The current GATS negotiations illustrate this paradox of the competition state, where further liberalisation can offer opportunities for increasing national strengths and national competitiveness. On the other hand, it might also present severe threats to the authority of nations over their higher education systems. What can be observed is "*a need for countries to strike a balance between pursuing domestic education priorities and exploring ways in which trade in education services can be further liberalized*" (Knight, 2003: 91)

An additional theme in the discussion on higher education and globalisation in the meaning of the deterioration of national sovereignty is apparent in the discussion on higher education in developing countries and the influence of international institutions such as development banks and the IMF and bilateral and multilateral forms of development assistance. Usually access to financial resources does come with strings

attached. Action programmes on higher education, but also more general action programmes and financial rescue packages come with requirements on changes in the education sector or the public sector as a whole (e.g. strict monetary policies, privatisation, and decentralisation). Although nation states allegedly have the choice to accept these packages (including the requirements), in reality several countries are not in the position to reject such packages. This does not mean that certain principles that are usually included in such policies (e.g. greater institutional autonomy, increase of efficiency) are not compatible with the demands of higher education in developing countries. It does however constitute an implicit loss of authority of governments on their higher education policies. Whether the transfer of specific models to developing countries is effective or desirable is a major topic in this theme[4]. Other studies focus on the ability (e.g. Salmi, 2002) or inability (e.g. Stiglitz, 2002) of international players to develop policies that fit local circumstances. Studies in this area therefore also touch upon the more cultural conceptualisation of globalisation.

2.2.4   *Threats to Diversity and the Rationality of Standardisation*

The homogenisation or convergence thesis, which is often put forward in cultural conceptualisations of globalisation, can refer to many aspects of higher education: the organisational form of higher education institutions, the structure of education systems, curricula, teaching methodology, etc. The homogenisation thesis is often centred on a fear for homogenisation of content and the export of policy and management discourses. Examples of the first issue are for instance illustrated through the spread of the use of English as a language of instruction and research, or the disappearance of particular studies at the expense of others. In the case of policy and management, models and fashions rapidly diffuse across persons, organisations and nations, which do not necessarily evaluate the promises of rationality and efficiency that typically accompany such fashions (Krücken, 2002; Currie et. al., 2003). Examples of the world-wide diffusion of policy and management discourses are abundant. We can think of the current higher education policy discourse, in which models such as the 'entrepreneurial university' are spreading world-wide. In a similar fashion, one can also refer to concepts like 'new public management', 'total quality management' or 'student centred learning', which represent culturally legitimate models. In higher education, as in many other sectors, homogenisation is often feared, while diversity is something that ought to be aspired to. In this respect there is a natural tension between the advantages of mutual adjustment and comparability of systems on the one hand and the amenities of indigenous or traditional strengths on the other. This discussion is often very normative, expressing fears of McDonaldisation of higher education or academic colonialism (e.g. Brock-Utne, 2000). In the policy and management domain, this discourse often is highly sceptical about the influence of international agencies such as the World Bank, IMF or agreements like the GATS that are seen as the actors pushing for specific models in developing countries (Altbach, 1999). For the case of GATS, others argue that the WTO's influence in a particular country depends on the commitments that its own government may make to the various agreements (e.g. Van Vught et.al., 2002). In the developed countries, there is also a concern for convergence

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[4] See for example a special issue of the International Journal for Educational Development on development banks and education strategies (September 2002)

through increasing importance of market forces in higher education (Currie, 1998). Concerns about competition also played a role in the harmonisation of qualification structures in the framework of the Bologna process in Europe (Van der Wende, 2002). In addition to states, universities are also seen as agents in this process through the expansion of their boundaries by establishing off-shore campuses and franchise agreements outside their national boundaries.

2.2.5   *A Question of Identity: From National Establishment to Global U?*

Our final conceptualisation of globalisation as cosmopolitanisation would suggest that higher education, its institutions and their students and staff are loosing their national identity and now base their identity on features other than their nationality. In this conceptualisation, the past reality of the university is that of an institution that was born of the nation state and that had, and still has, a national regulatory and funding context, a significant contribution to national culture and an establishment that trains students to become national functionaries (Enders & Fulton, 2002: 3-4). On the policy level however, one can observe a shift in national policies on higher education where national identity is losing influence. This is related to the fact that governments are loosening their grip on higher education. Higher education has long been used as a way of 'nation building'. Universities were not just educational institutions but also protected the national cultural heritage and provided the future leaders for the national society and economy. Many (but by no means all) universities nowadays offer education as a service that is not tied to a specific locality or nation but that has become a commodity for individual investment that can be purchased either in the country of residence, in other countries or in the virtual world. Even though higher education is still used as an instrument for creating cultural, social or economic cohesiveness, this now also takes place on supranational levels, like for instance in the European Union (through the Erasmus and Socrates programmes), but also in other economic or political regional blocks. Promoting a kind of 'Europeanness' and preparing students for European identity, citizenship and employability are objectives of various developments on the European level like the Bologna Process or the Tempus programmes (see also chapter 3).

The change of character at the expense of national identity is also apparent in universities as organisations. Most universities were, and still are, very much national institutions. Some institutions however are expanding their relationships and even their organisational boundaries towards regional or global levels. Universities are engaging in several international networks and associations based on their similar identities, not their nationalities (Beerkens, 2002). Some universities (e.g. Australian universities such as Monash, Swinburne and Curtin or the University of Nottingham in the UK) even 'globalise' by establishing branch campuses in other countries. Although these foreign campuses still need to comply with national legislation with regards to curriculum content and language of instruction, governments are in some cases loosening these restrictions in order to keep students in their countries or simply because they themselves cannot provide the capacity to live up to the demand for higher education in their countries.

This 'borderlessness' of education has also materialised through the emergence of new providers of higher and adult education. An Australian study, Cunningham et al. (2000) and a UK study (CVCP, 2000) observe the emergence of new providers such as corporate, virtual and for profit universities, aiming particularly for the non-traditional student segments, but also collaborative ventures between existing higher education institutions. These are new arrangements that may operate in national frameworks, but are much less national creations than many of the contemporary universities. Whether these new providers will substantially reshape and de-nationalise higher education is a question that cannot yet be answered. Some however do see such a change in particular segments of higher education provision: "the most globalised sub-sector is fee-based training, centred on the North American universities, producing credentials with global currency ... the early stages of a global university system (is) in formation" (Marginson 1998; cited in Cunningham, 2000).

It is clear that "dissolving boundaries raise issues of identity, structure, co-ordination and regulation" (Middlehurst, 2001). These changes may lead to universities losing part of their national identity, substituting it for a global identity for some, and regional or local identity for others. To what extent the loss on one side (traditional values, cultural heritage, etc.) is compensated by benefits on the other (international awareness, knowledge about cross-cultural issues, comparability and transparency) remains a topic for debate. The 'national establishment' and the 'global U' operate in different environments, and their performance in these environments depends on how well they adapt their organisation and identity to the environment in question. However, the 'national establishment' and the 'global U' are often incorporated in one single university, expanding the opportunities but also responsibilities for universities. According to Simon Marginson (2002: 413-414) what we are experiencing is a complex inter-penetration of the national dimension and with the global dimension:

> *"In some industries, global corporations may detach themselves from their founding national context and operate in the same manner anywhere. (On the other hand,) universities are too context dependent for this. Even when partly globalised, they remain grounded in 'thick' and complex relations within the local societies they serve".*

2.2.6 *Globalisation and Higher Education: Concluding Remarks*

The discussion of the various conceptualisations of globalisation and their applications in higher education research illustrates the broad field included under this heading. Universities are objects as well as subjects, they influence and at the same time are affected by the process of globalisation (Scott, 1998: 122). Universities become disembedded from their national context due to more intense flows. At the same time this provokes further globalisation of higher education and of other sectors. Another point made by Scott is that all universities are subject to the same process of globalisation. Although one might claim that there is an all-embracing process of globalisation (which is not a useful concept), universities are likely to be affected differently by and contribute differently to globalisation of different arrangements. It may even be the case that different groups within the university are affected differently

by globalisation and accordingly, react to it in different ways. Also various themes in higher education policies and institutional strategies might be affected by globalisation in different ways. These observations only add to the complexity of the relationship between higher education and globalisation.

An important point in the use of the term globalisation is that we need to know the answer to this question: the globalisation of what? The 'what' in this question can take on a wide variety of social arrangements ranging from the abstract to the concrete. For higher education research, the main distinction is between the globalisation of higher education and the globalisation of other social arrangements. The globalisation of economic sectors, for instance, is important to higher education, but we are talking about something different than when we are discussing the globalisation of the higher education sector itself. Furthermore, we need to indicate which part, group or meaning of the university is either globalising or affected by globalisation.

Finally, a distinction needs to be made between 'globalisation' and 'effects of globalisation'. Globalisation is sometimes treated as an equivalent to managerialism, marketisation, decline of the welfare state, the collapse of democracy, commodification or to a set of business practices. Using such definitions is mistaking 'globalisation' with (potential) 'effects of globalisation'. The process and its effects thus need to be separated, not equated. In equating the process of globalisation with its effects, ideological and normative views are frequently propagated. Quoting Toulmin (1999: 906), one might say that "globalisation is both a historical fact and a political football". This is confirmed by Scott's observation (2003: 212):

> *The lesson drawn by many political (and university) leaders was that the way forward for higher education was to abandon collectivist public-service public-sector policies and practices and embrace the 'market'; universities must seize the opportunity to become the leading organizations in the burgeoning global knowledge economy. Not to seize this opportunity was to risk marginalization – even, eventually, extinction. The discussion of the impact of globalization in higher education continues to be dominated by this neo-liberal orthodoxy, but it is this orthodoxy (better, ideology) that must be challenged if universities are successfully to embrace the 'world', in all its problematical diversity, rather than simply the global marketplace.*

Although taking a critical stance is one of the functions of academe, facts and prophecies should be presented as such and should not be entangled. We will therefore take our neutral definition and place it in the context of higher education. Combined with the definition given in 2.1.1, globalisation of higher education can then be defined as *a process in which basic social arrangements within and around the university become disembedded from their national context due to the intensification of transnational flows of people, information and resources.*

In this respect, the internationalisation of higher education is seen as both a reaction to and a driver for globalisation. Internationalisation of higher education reacts to globalisation by "making higher education (more) responsive to the requirements and challenges related to the globalisation of societies, economy and labour markets" (Kalvermark and Van der Wende, 1997). At the same time, by responding in this way, it shapes cosmopolitan citizens, identifies and analyses global problems and creates a consciousness of the world as a whole.

2.3 Globalisation and Inter-Organisational Arrangements in Higher Education

Now that the relationship between higher education and globalisation has been discussed, we can zoom in on the relationship between globalisation and international inter-organisational arrangements in higher education. This section takes a closer look at the way globalisation is related to the emergence, increase and change of inter-organisational arrangements in higher education

2.3.1 Increased Interconnectedness and the Demand for Linkages

The increased interconnectedness between nations and other social arrangements has also affected higher education. There is a demand for international activities from the traditional stakeholders both in and outside the university. Many contemporary students demand opportunities for international experiences within their regular curriculum because they acknowledge the merit of such an experience for their future careers and personal development. This added value is also recognised by teachers and those who assess the quality of education. Due to a growing level of global interconnectedness of economies and other sectors and an increasingly multicultural society, future employers likewise acknowledge the advantage of employees with international and cross-cultural experiences. Similar observations are also apparent for teaching and research staff. International lectures or the involvement in international research projects is highly valued in the academic community. This demand for international activities has provoked universities to expand their networks in order to attract and retain students and academics. What can also be observed is a change in the production of knowledge (Gibbons et al., 1994). The shift to transdisciplinarity, the inclusion of (national and international) stakeholders outside the university, increased cooperation with (national and international) business, all create a demand to link with other organisations, be it other universities or organisations outside academe, such as professional associations, companies or international organisations. The increased interconnectedness also changes the content of teaching. International and regional (e.g. European) issues need to be incorporated in several programmes, like law, business studies and other social sciences. For this, it may be necessary to include local knowledge of cultures, languages, legal systems etc. This is knowledge that can be obtained through links with local organisations or universities.

2.3.2 The Necessity of Linkages in the Competition State

The changing relation between the university and the state has, in some instances, created the necessity of establishing linkages. The developments in the policy domain that affect organisational boundaries and promote the establishment of inter-organisational linkages are related to the changes in resource dependencies that universities confront through a more diversified funding base, greater deregulation and exposure to market competition. Although the pace and intensity of these developments differ from one country to another, it seems to be a development that is taking place on an almost global scale, in both developed and developing countries (e.g. Hall et al., 2002:15; Gornitzka and Maassen, 2000: 283; Anderson and Johnson, 1998: x). While

many universities, especially in continental Europe, have long dealt with national governments as their single source of funding, universities in many countries now are partly dependent on other parties for their financial resources. Besides, government funding has also been increasingly distributed on a competitive basis and related to output indicators.

The nature of resource dependencies has been changed by the emergence of non-traditional education providers, depriving universities of their monopoly in the production of scientific knowledge. As a response to the increasing competition for resources, universities have increasingly focused on their external environment to control the new risks they face. Through engaging in inter-organisational arrangements, universities can co-opt potential competitors into becoming allies in the struggle for scarce resources or to gain access to and exploit the complementary assets that each bring into the arrangement. In addition, they can combine their specific strengths and competencies in order to achieve added value through the synergy created by means of cooperation. Furthermore, international funding sources have emerged as a supplementary (although still marginal) resource for universities. International foundations, research foundations from countries other than the home country, and, especially for Europe, supranational agencies (e.g. the EU Framework Programmes), can provide an alternative source of funding for universities. Although these alternative sources are still marginal compared to national funding sources, there are several examples of the increasing importance of international funding sources, one being the growing importance of international student fees. This is most apparent in the case of Australia, where international student fees have become an important source of income to Australian universities (over 8% in 1998; Dobson, 2001). Other examples include the financial resources in the European Framework programmes which have more then tripled since the First Framework Programme of 1984. The budget for the Fifth Framework Programme amounted to almost 15 billion Euros, while the current Sixth Framework Programme for 2002-2006 has a total budget of 17.5 billion Euros (Van der Wende and Huisman, 2004; see also the next chapter).

2.3.3   Standards and the Prospect for Linkages

As we observed before, the increased interconnectedness on a global scale has also created a drive towards homogenisation, harmonisation and standardisation. In turn this has provided greater opportunities for universities to cooperate. The convergence of degree structures as foreseen in the Bologna Declaration for example, is explicitly meant for promoting European exchange and cooperation. The European Credit Transfer System (ECTS) and the diploma supplement can be seen as precursors of the Bologna process. These instruments were created to improve comparability of degrees and programmes, and also had a role in promoting further exchange and collaboration. Outside Europe, there is also an increased demand for comparability of degrees and programmes, by students as well as by staff or future employers. In terms of content, standardisation is likely to occur due to increased information exchange and the increased interaction of academics within international (scientific) bodies. Through this interaction, new ideas and best practices can be exchanged and specific methods or curricula structures can become the standard within specific groups. Knowledge about each others methods and programmes or the convergence thereof, will make it easier

for universities to cooperate in particular programmes or even create joint programmes. Furthermore, a standardisation in ICT structures (e.g. learning platforms) can also foster cooperation.

2.3.4   *Common Identities and New Opportunities*

Cosmopolitanisation was earlier identified as one of the conceptualisations of globalisation. This process is likely to have a stimulating effect on the creation of linkages. According to this conceptualisation, universities would, less than before, be embedded in their national institutional context. While the nation was the institutional container of social life, including higher education, the process of globalisation is believed to have caused a process of disembedding. If this were the case, it would be easier to establish and maintain international arrangements between universities since there is an emerging common identity (replacing the national identity). Differences in the institutional contexts in which universities operate, would become less significant in this argument. Universities would then become more footloose, establishing linkages with other universities irrespective of location, distance or nationality. This reasoning can extended even further, meaning that cooperation with domestic universities would be similar to cooperation with foreign universities since the *inter-national* aspect of cooperation would be irrelevant. Obviously, this is not the case, but what this conceptualisation does imply is that steps are being taken in this direction. Another implication is that the 'market for higher education' has become detached or disembedded from the national context and now constitutes a global market, resulting in global competition. The expansion of the university's markets towards the global level brings along new opportunities for universities but also new threats. In the business sector, globalised competition has led to a growth in international arrangements where organisations 'cooperate to compete' (Faulkner, 1995). With the globalisation of the market for higher education, universities can form alliances with other universities in order to protect themselves from hyper competition and reap the benefits of collective action, but also to generate new opportunities for the exchange of students, resources and information.

2.4   International Inter-Organisational Arrangements and Globalisation: Concluding Remarks

In the preceding sections, different conceptualisations of globalisation have been identified and extended to the higher education sector in general and international inter-organisational arrangements in particular. We have made clear that globalisation has in many different ways enabled and provoked the establishment of international inter-organisational arrangements in higher education. In our exploration of the concept of globalisation and its relation to higher education, we have also stressed that globalisation causes counter reactions, often related to the preservation of traditional values. Obviously this will also be the case for universities, which carry with them a long tradition and profound institutional heritage which emerged in the national context.

The various conceptualisations identified could all be applied in a study on international higher education consortia, although they would address different issues surrounding this phenomenon. In this study, we will approach globalisation as an institutional concept, where the nation no longer is believed to be the sole institutional container of society but where social organisation and identity becomes based on other structures. In this conceptualisation the institutional context in which the university is embedded is changing and the opportunities for universities to operate expand to the global level. However, globalisation was also conceptualised as a process, and it was observed that we are far from a fully globalised world where time and space constraints are abolished and people and institutions are fully detached from their national context. This also becomes apparent in higher education cooperation.

It is assumed that the institutional context of the university is still to a large extent determined by national institutions, and therefore creates complications in *inter-national* cooperation. But at the same time, opportunities (and accompanying threats) for universities have expanded. However, for an organisation embedded in national institutions, reaping the benefits of these opportunities provides a major challenge. We will zoom in on this dilemma for the case of higher education consortia in Europe and Southeast Asia in part two of the study. The remainder of part one address the relation between globalisation and regionalisation, in particular for the case of Europe and Southeast Asia, and the further demarcation of higher education consortia.

Chapter 3   Regionalisation and Higher Education in Europe and Southeast Asia

In Chapter two, we have explored the concept of globalisation. In this chapter we will look at how regionalisation is related to the process of globalisation and how it has been shaped in the regions of Europe and Southeast Asia. After the relation between globalisation and regionalisation has been established, we will shortly describe how regional associations and organisations have emerged in both regions. In the final section we will look at how the institutionalisation of cooperation in higher education has materialised in Europe and Southeast Asia.

3.1   Regionalisation and Globalisation

A region refers to a spatial entity that shares specific characteristics. Regionalisation, as it is often discussed under the heading of globalisation, refers to the integration of nations or the formation of groups of countries[5], usually around a specific themes or interests such as trade or security issues. Although regional blocks are often based on historically emerged characteristics (e.g. physical features, culture, religion), the past decades show an increased regionalisation around economic issues, such as the creation of free trade areas or common markets (e.g. NAFTA, AFTA, Mercosur). This also exemplifies the distinction we can make between regions on the basis of agency. Historically emerged regions emanate from non deliberate processes, which are either based on physical circumstances or on processes where no clear agency can be detected.

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[5] A distinction can be made between regionalisation as the formation of groups of countries and regionalisation as the formation of subnational territorial entities (e.g. Delamaide, 1994). We use the former meaning unless indicated otherwise

In the past decades, governments and non-national agents have been involved in deliberate processes of regionalisation, frequently based on the historical common characteristics. This resembles the distinction that runs along the lines of 'regionalism from below' versus 'top-down regionalisation' defined by national governments or the supranational organisations like the European Union (EU) or the Association of Southeast Asian Nations (ASEAN).

This study will approach regionalisation processes as a subset of globalisation. In terms of the terminology used in chapter two, we could say that regionalisation is transnationalisation on a sub-global scale between social arrangements within adjacent areas. Regionalisation thus illustrates a process where social arrangements become disembedded from their national context and are reattached to a group of nations. In many parts of the world, this has occurred on the basis of top-down regionalisation, as an inter-governmental project that has evolved and led to an institutionalised structure of inter-governmental or supranational cooperation. To what extent we can speak of supranational decision-making or intergovernmental decision-making is a matter of debate in regional integration studies.

The central question in this debate is whether regional integration is the concerted pluralist articulation of national interests, or if it has obtained the characteristics of a supranational state, in which a new level of governance covers the region as a whole, not as individual nation-states. The theoretical debate has centred on the intergovernmental-supranational dichotomy. Intergovernmental institutionalism stresses the role of states and their pursuit of power and national interests. Andrew Moravcsik (1995) identified three principles on which intergovernmental institutionalism is based: first, it implies interstate bargains through which member states attempt to achieve their own policy preferences. Second, it entails lowest-common denominator bargaining, which means that bargains tend to reflect the lowest-common-denominator on which the major countries can agree. The third principle of intergovernmentalism is the protection of sovereignty. When joining an international organisation or community, governments seek to protect their states against future erosion of sovereignty by demanding the unanimous consent of regime members to sovereignty-related reforms. Supranationalism on the other hand, denotes a framework in which supranational factors have a significant impact on the member states. Actors and institutions operating 'above' the nation-states acquire a degree of autonomy and become independent actors. The European political institutions are the most evident examples of such actors. Supranationalism starts from the neo-functional approach of regional integration (e.g. Haas, 1958; Nye, 1970). A variant on the neo-functional approach, the transaction based approach (Stone Sweet and Sandholtz, 1998), best resembles our line of reasoning in the past chapter.

The basic starting point in this approach is that the relative intensity of transnational activity causes shifts in the level of supranational governance. This can be seen as the political translation of our observation that the intensity of flows causes a process of disembedding. With this argumentation, the approach also allows for different speeds of transformation in different policy sectors (something that we previously identified as an inherent feature of globalisation). Different policy sectors may find themselves on

different positions in the intergovernmental-supranational continuum. The approach shares with the neo-functionalism of Haas (1958) the *logic of institutionalisation* at the supranational level, which implies that when supranational rules, supranational organisations and transnational society have emerged, these rules, organisations and transnational actors become active driving forces for further integration. This logic of institutionalisation resembles the process that we have termed the 'inner logic' in chapter two. A related neo-functional legacy is situated in the importance of spill-over. Spill-over was defined by Lindberg (1963: 9) as

> *"a situation in which a given action, related to a specific goal, creates a situation in which the original goal can be assured only by taking further actions, which in turn create a further condition and a need for more action, and so forth."*

This concept of spill-over resembles the cross-sectoral spill-over, that we identified before. In the two regions discussed here – Europe and Southeast Asia – the cooperation had its roots in security issues and economic development but also spilled over to other sectors of society in later stages.

3.2   The Institutionalisation of Regionalisation

3.2.1   *European Union*

Since its establishment in the 1950s, the European Union (EU) has developed and grown into an international entity whose scale and scope of activity outweigh those of any other comparable unit in the world (Cole and Cole, 1993: 1). The origins of the European Communities, now known as the European Union, date back to the Europe that emerged in the post-war era. Deeply influenced by wars dominated by Franco-German conflicts, the founders of the EC saw closer economic and political ties as being the best way of reducing the risks of a repetition of such conflicts. This has led the French minister of foreign affairs, Robert Schuman, to propose that the Franco-German coal and steel production be placed under a joint authority. This led to the founding of the European Coal and Steel Community in 1952. The first 6 member states were West Germany, France, Italy, the Netherlands, Belgium and Luxembourg. The success of the ECSC resulted in the six member countries committing themselves to further integration in other sectors. In 1957 this led to the Treaty of Rome, setting up the European Economic Community (EEC). In 1973, the EEC expanded to include the UK, the Republic of Ireland and Denmark. Next, Greece joined in 1981 and Spain and Portugal in 1986. In the course of the 1980s, although substantial progress had been made in many activities, it was felt that progress was insufficient in the more fundamental areas such as the reduction of regional and social inequalities and the harmonisation of legislation to establish a single internal market. Negotiations on these fundamental issues resulted in the coming into force of the Single European Act, the first significant reform of the European Community legislation since its foundation (see Urwin, 1991: 230-235). The SEA formed the basis for subsequent changes in the move towards the single market, the need for economical and social cohesion and the strengthening of the institutions of the EC through qualified majority voting in the Council, strengthening the executive powers of the Commission and giving a more

substantial role to the European Parliament. At the end of the 1980s and beginning of the 1990s integration progressed and in 1991 the Treaty on the European Union was agreed upon in Maastricht, anticipating a political, economic and monetary union in Europe. During this same period, the developments in Central and Eastern Europe led to a considerable reappraisal of the future direction and scope of the EU. The discussion on how the reunification of Europe will affect the European Union is still continuing to this day. By 1995, the EU was enlarged with Finland, Sweden and Austria, and now comprised fifteen member states. With a list of ten countries for further enlargement in 2004, the EU now faces one of the largest challenges in its existence.

In the course of its existence, the EU has developed a broad institutional system consisting of several bodies with various degrees of authority (see Kapteyn and Verloren van Themaat, 1989). The core bodies comprise of the European Parliament, the Council of the Union (which is composed of the heads of government of the member states), the European Commission, the European Court of Justice and the Court of Auditors. Five further bodies are part of the institutional system: The European Central Bank, the European Investment Bank, the European Economic and Social Committee, the Committee of the Regions and the European Ombudsman.

Although its origins lay in the cooperation in the coal and steel sector, in the decades that followed, the EU extended its scope to include a wide range of activities that affected European citizens both indirectly and directly. Direct effects for instance emerged from legislation, giving European citizens both rights and duties under European Law. Other regulations and directives force national governments to implement the new legislation under national law. Much of the national legislation in the EU member countries is now determined by European directives and regulations, particularly in fields such as environmental policies and trade policies. The EU has also exerted its influence through the redistribution of financial means. This has been particularly apparent in the field of agriculture, exemplified by the Common Agricultural Policy, the main sector on the EU's budget. In addition to legislation, the EU has also come closer to citizens through various regional socio-economic programmes like Interreg[6]. Interreg subsidises local cross-border projects undertaken collaboratively by local authorities and other organisations located in adjoining border areas.

   The treaties in the EU framework constitute a new, distinctive legal order which regulate the powers, rights and obligations of the Union and its subjects (ibid: 38-39). Through this legal authority, the EU has exerted considerable influence over several sectors of society. However, the EU does operate under the subsidiarity principle, which still forms the basis for EU policies. This principle implies that the EU only acts in issues where national actions are not sufficient to reach common objectives. In issues where cross-border consequences are not apparent, this principle can be upheld without severe problems. Still, many issues that used to take place exclusively in the national domain, have become transnational issues due to flows of people, goods, services and capital and the subsequent processes of globalisation and regionalisation. This has

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[6] The first Interreg programme started in 1991. At the time of writing, the Interreg III programme is in progress, running from 2001 until 2008.

occurred in fields such as drug policies, health care, employment conditions, and also in the field of higher education.

What can be observed is that under the pretext of the realisation of the internal market, many not strictly economical issues have entered the EU's sphere of influence. One of them being (higher) education. The European Court of Justice played a significant role in this process of spill-over from regulations on the free movement of people and services to regulations related to higher education (see Verbruggen 2001). However, the EU's formal authority over the field of higher education is very limited (Hackl, 2001; Van der Wende, 2000; Verhoeven & De Wit, 1999; Field, 1997). Many of those sharing the scepticism paradoxically claim that the EU is a 'significant player' in European higher education (Field, 1998: 73) whose influence "should not be underestimated" (Verhoeven & De Wit, 1999: 9). We will further discuss this influence in section 3.3).

3.2.2   *Association of Southeast Asian Nations*

On the 8th of August 1967, five countries, Indonesia, the Philippines, Malaysia, Singapore and Thailand formalised their regional grouping with the adoption of a document known as the Bangkok Declaration. At its foundation it was largely a coalition aimed at maintaining political stability, security and peace in the region through economic, social and cultural cooperation. ASEAN was the most successful after previous attempts at regional cooperation, such as the Association of Southeast Asia (ASA) and the association between Indonesia, Malaysia and the Philippines, known as Maphilindo, failed. ASEAN now consists of ten Southeast Asian countries. Brunei Darussalam joined in 1984, Vietnam in 1995, Laos and Myanmar in 1997, and the most recent member, Cambodia, in 1999.   When ASEAN was founded, the concept of Southeast Asia however was a rather new and artificial construct. It was a collection of countries[7] grouped together mainly due to their geographic location and with little else binding them in terms of language, culture, religion, politics or colonial past or even in their levels of development (Gomez-Manrique, 1986). Despite this diversity, cooperation was established and after several decades of cooperation, ASEAN is now often mentioned as the most successful of regional arrangements that has emerged from a developing region (e.g. Dosch, 1996: 103; Buszynski, 1997; Dent, 1998: 185).

ASEAN is an inter-governmental organisation where decisions are based on consensus of all member countries. It is not a supranational entity acting independently of its members. It has no regional parliament or council of ministers with legal powers, no power of enforcement and no judicial system. Officially, the highest decision-making body in ASEAN is the ASEAN Summit. In the early years of ASEAN these summits were not held on a regular basis. At the fourth summit in 1992[8], it was decided that the ASEAN Summits would take place every three years. The foreign affairs ministers of the ASEAN countries meet annually in the ASEAN Ministerial Meeting, which de facto is the highest decision making body in the association (Wichmann, 1996). Ministerial

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[7] Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam

[8] the first Summit was held in 1976, the second in 1977, and the third summit was ten years later in 1987.

meetings for specific sectors are convened when deemed necessary, in order to draw up programmes to give guidance to ASEAN cooperation.

Today, regional security issues remain a top priority on ASEAN's agenda, although more recently the emphasis has shifted more towards the stimulation of economic cooperation within the region. This is centred on the ASEAN Free Trade Area (AFTA), the proposals for which were first brought forward in January 1992. The objective of AFTA is to increase the ASEAN region's competitive advantage in the world market. A vital step in this direction is the liberalisation of trade through the elimination of tariff and non-tariff barriers among its members. Member Countries are working towards the total elimination of import duties on all products to achieve the ultimate for achieving this objective will be in 2015 for the six original ASEAN Member Countries and 2018 for the newer Members. In November 2000, the ten member countries agreed to promote further economic integration in the region in order to form free trade areas that would include the ASEAN countries plus China, South Korea and Japan (the so-called 'ASEAN plus three'). At the Second ASEAN Summit in Kuala Lumpur in 1977 a call was made for expanding cooperative activities to include more social issues, mainly related to human resource development in the region. Related issues such as the integration of women and youth in human resource development, the elimination of poverty, disease and illiteracy, rural development policies and the curbing of crime also became more prominent in ASEAN policies. The cooperation in these fields fall under the tasks of the Bureau of Functional Cooperation. The areas of functional cooperation include the environment, social welfare, science and technology, culture and information, transnational crime and also (higher) education.

Although some parallels can be drawn between the EU and ASEAN, they remain very different. The EU describes itself as a Union that is built on an institutional system, which is the only of its kind in the world. ASEAN however, is more like other regional associations: it is a voluntary association, it has no parliament, no court of justice, no common currency, no central monetary authority, members negotiate trade agreements on an individual bases, not the association as a whole. Furthermore it is far smaller in terms of its budget and personnel. ASEAN has however gone much further than other regional organisations. It has taken far reaching measures in the direction of a free trade area, it stepped up cooperation in the financial domain due to the 97-98 financial crisis and it has expanded its cooperation to many areas outside the security and economic domain. The question of whether ASEAN would become similar to the EU was addressed by the former ASEAN Secretary General Rudolfo C. Severino and he stated that it would most likely be not:

> *"(...) at least not exactly. As the EU itself acknowledges, it is unique as a regional organization and will probably remain so. But we can expect domestic and external forces, the logic of globalization, and the imperatives of regionalism to move ASEAN to resemble the EU more closely than it does today, and as ASEAN evolves, more closely than we can foresee today"* (Severino, 2001).

3.3   Educational Cooperation and its Institutional Landscapes

3.3.1   *Europe*

The Action Programme in the Field of Education, which was approved by the European Council in 1976, marked the start of a formal European educational policy. In this programme a number of broad policy objectives were addressed among which were the promotion of closer relations between educational systems and cooperation in the field of education. Although resources linked to this programme were very limited, the activities did influence the design of later programmes and stimulated the development of many cooperative networks that would emerge after the adoption of this programme (Ceri Jones, 1991). In that same year, the first Joint Study Programmes were established, which are now seen as the predecessors of the ERASMUS programme that started in 1987. During this period, the latter half of the 1980's, further initiatives also emerged in the European domain. Examples include COMETT, in order to promote cooperation between higher education and industry, LINGUA, for the improvement of foreign language competence and TEMPUS, which stimulated the development of higher education systems in Central and Eastern Europe (CEE). ERASMUS however, can be seen as the flagship activity in the field of higher education (Van der Wende & Huisman, 2004). This programme was aimed at and succeeded in boosting student and staff mobility and inter-organisational cooperation within the European Community (and later also included the EFTA countries and the CEE countries).

The principle of subsidiarity implies that every Member State of the European Union retains full responsibility for the content of teaching and the organisation of its own education system. In accordance with Articles 149 and 150 of the Amsterdam Treaty, the Community's role is to contribute to the development of quality education by encouraging cooperation between Member States and, if necessary, by supporting and supplementing their action. The responsibility of the EU therefore is complementary to the Member States and is meant to develop the European dimension in education, encourage mobility and promote cooperation between schools and universities. Similar to other sectors, higher education informally became part of a broader agenda of economic and social coherence with the prospect of the completion of the internal market in the beginning of the nineties. It was also during this period when intra-European mobility was heavily supported, that Europe lost its leading position of the world's number one destination for study abroad to the USA (Van der Wende & Huisman, 2004).

In the second half of the 1990s, the ERASMUS programme became part of the broader SOCRATES Programme. Although the core policy remained unchanged some important shifts could be observed (Wächter et al., 1999). More priority was given to the internationalisation and Europeanisation of curricula which was thought to foster cooperation and strengthen the European dimension in higher education. One of the instruments used to aid this was the European Credit Transfer System (ECTS). Also, responsibility for the programme shifted from the individual to the institutional level. Under the SOCRATES regime, institutions as a whole engaged in an institutional contract with the European Union, and as a precondition they were required to

formulate a European Policy Statement, forcing them to develop an institutional strategy on European and international cooperation. Another main shift was of a geographical nature. Under the new programme, the number of eligible countries was significantly increased, mainly through the inclusion of countries from Central and Eastern Europe. In spite of these changes, cooperation remained hampered by the diversity in systems, qualifications and educational regulations of the member states. The subsidiarity principle prevents the European Commission from intervening in issues such as educational content and quality. Moreover, European intervention in such 'national' issues was politically very sensitive (Van der Wende, 2000). Another issue that hindered the path to a more comparable structure of national systems was the emphasis placed on the preservation of diversity. Especially in the period where the resistance against globalisation emerged on a global scale, standardisation, homogenisation and uniformity obtained a negative undertone, while diversity and variety received more positive connotations. This set the stage for a more bottom-up approach, with the initiative shifting from the European to the national level.

The ultimate product in this balancing act was the Bologna Declaration of 1999. According to the Confederation of EU Rectors' Conferences (CERC) and the Association of European Universities (CRE) this document "is a key document which marks a turning point in the development of European higher education" (1999: 3). Instead of being imposed by the EU, the declaration was signed by 29 countries from Europe as a commitment freely taken to reform their own higher education system or systems in order to create overall convergence at the European level. The process is aimed at creating convergence and is not a path towards standardisation or uniformity of European higher education. "The fundamental principles of autonomy and diversity are respected. The Declaration reflects a search for a common European answer to common European problems. (...) The Declaration recognises the value of coordinated reforms, compatible systems and common action" (ibid.). Its aim is to establish the European area of higher education and to promote the European system of higher education in the world. It proposes the adoption of a system of easily readable and comparable degrees, the establishment of a system of credits, and the elimination of all remaining obstacles standing in the way of free mobility.

In addition to European initiatives in higher education, universities have also been affected by the European research policies. The Europeanisation of university research has mainly been developed through the Framework Programmes, founded in the 1980s. A collective effort in research on the European level was justified by four factors (developed by the then German research minister Riesenhuber; see also Van der Wende and Huisman, 2004). First, a collective effort was justified if it was needed because the research was beyond the capacity of individual members. Collective efforts can also be justified by efficiency reasons, when cooperation would imply a financial benefit. Thirdly, cooperation was needed in those cases where the content of the problem was of a transnational nature. A final field where joint research would be justified was in those areas that contributed to the cohesion of the common market and the unity of European research and technology. The First Framework programme was launched in 1984 and had a budget of 4,5 billion ECU. The Fifth Framework programme, which ran from 1998 until 2002 had a budget of 15 billion ECU. The Sixth Framework Programme

(2002-2006) has placed a strong emphasis on networking through the introduction of instruments such as the 'networks of excellence' and 'integrated projects'. Also outside the EU framework, initiatives have emerged for promoting cooperation in research. One example is the European Science Foundation which is committed to facilitating cooperation and collaboration in European science. The ESF has 76 member organisations from 29 countries. Also on a disciplinary level, cooperation in research becomes more and more institutionalised with the emergence of numerous associations and consortia with individual and/or institutional membership.

These European activities have proved to be an incentive for the establishment of a wide range of inter-organisational arrangements. Cooperative academic arrangements in Europe have increased enormously over the last decades (Van der Wende and Middlehurst, 2003). This increase has been stimulated by the EU programmes for cooperation and mobility. Examples of such arrangements in the ERASMUS framework are the Thematic Networks. The purpose of these networks is to examine the European dimension within a given discipline or to address other cross-disciplinary or administrative issues with a common interest for cooperation in higher education. The total number of higher education institutions participating in Thematic Network Projects increased from 3,971 in 1997 to 5,555 in 1999 (Klemperer and Van der Wende, 2000). In addition to the European and national initiatives, several arrangements have also emerged on initiative of universities and other higher education institutions. In the late 1980s and the 1990s, a wide variety of inter-university arrangements have been established. Many of such networks can be seen as a reaction to the programmes at the EU level. Universities have engaged in networks as a response to both European educational policies (e.g. Coimbra-group, Utrecht Network, Santander Group, UNICA) and European policies in other areas (e.g. ALMA).
    In the latter part of the 1990s, many networks emerged that can best be explained as a response to the globalisation processes in higher education and the increased global competition in the market for higher education. The coexistence of cooperation and competition meant that European higher education institutions had to consider their internationalisation strategies in the light of two contrasting paradigms, that of traditional (and mainly European) cooperation and that of the new international (and global) competition (Van der Wende, 2001a). From the latter perspective, universities work together and form strategic alliances in order to attain a better strategic position in the global market for higher education (e.g. European Consortium of Innovative Universities, Global University Alliance, Universitas 21). Increased competition is therefore accompanied by increased cooperation or, in other words, universities seem to be cooperating to compete.

Both the EU initiatives in higher education and research and the ongoing Bologna process have changed the institutional landscape of European higher education, adding several transnational associations, bilateral partnerships and multilateral groupings to the existing national landscapes. The wide and dense network of linkages that emerged through cooperation and exchange has provided European universities with the need for coordination and communication and for external positioning. We will show in chapter four, what kind of arrangements can and have emerged. The increasing entanglement of universities, faculties and departments or institutes and also of

individual teaching and research staff, managers, policy makers and students has made inter-organisational arrangements in Europe at least more visible, if not more significant.

3.3.2   *Southeast Asia*

Although in many countries, a shift towards more autonomy can be detected, in general it can be said that the national governments in Southeast Asia still exercise a tight control over their higher education systems. Most of the systems have their roots in non Asian systems like French, Dutch, Spanish, American and English. Furthermore, they operate in very different administrative and political contexts. In the 1970s and 1980s, many fundamental innovations took place in the ASEAN higher education systems, but the valuable insights and experiences were hardly disseminated over borders (Selvaratnam & Gopinathan, 1984). In the late 1980s and the 1990s, new initiatives were established and older ones were better exploited in order to cooperate and to coordinate developments on both the inter-governmental level and the inter-university level.

Higher education cooperation within Southeast Asia can probably best be traced back to the founding of the Association of Southeast Asian Institutions of Higher Learning (ASAIHL). The ASAIHL was founded in 1956 as a non-governmental organization at a meeting in Bangkok of the heads of eight state universities in Southeast Asia. The association provides a forum for the discussion of academic development and general university development and assists member institutions in the development of cooperative arrangements on specific projects and relationships with regional and international bodies. It consists of 110 member universities from the region and a further 42 members from Japan, Australia, New Zealand, the USA, Canada and Sweden. Another initiative, the Association of Universities of Asia and the Pacific (AUAP) is of a more recent nature. The AUAP was established in 1995 by representatives of universities from the Asia-Pacific region with the objective to foster regional cooperation among universities and therefore contribute to the improvement of national systems of higher education, economic and social development and human resources development. The AUAP now has over one hundred member institutions and it extends beyond the Southeast Asian region with members from Australia and New Zealand, East Asia and South Asia. An initiative which covers an even wider geographical area is the University Mobility in Asia and the Pacific (UMAP) programme, founded in 1993. It is an association of regional government and non-government representatives of the higher education sector, who cooperate in order to foster mobility of staff and students. In the framework of the UMAP Credit Transfer Scheme, member countries and their universities are working towards standard arrangements for recognition of studies undertaken by students within the UMAP Programme.

On the inter-governmental level, the first initiative on further collaboration in education was the establishment of the Southeast Asian Ministers of Education Organization (SEAMEO). SEAMEO was established in 1965 with the purpose of promoting cooperation in education, science and culture in the Southeast Asian region. One of its

major instruments to achieve this is the establishment of Regional Centres, which together constitute the SEAMEO Network. Currently, a total of twelve centres have been set up. Some have a disciplinary focus, such as agriculture, mathematics, engineering, tropical medicine and archaeology. Others are more thematic concentrating on vocational training, open learning and one on higher education and development (Regional Institute of Higher Education and Development). RIHED was established jointly by UNESCO and the International Association of Universities (IAU) in collaboration with the Ford Foundation. It was founded in 1970 but it was not until 1985 that it was officially placed under the umbrella of SEAMEO. One of the projects within RIHED is the Regional Cooperation Programme. The purpose of this programme is to promote regional cooperation among colleges and universities in the region. Within this programme, several sub-regional activities in inter-university networking are promoted. Examples include networking in the Greater Mekong Subregion, the East ASEAN Growth Area, and the Indonesia-Malaysia-Thailand Growth Triangle. In the latter a network of eight universities from the border regions of Thailand, Malaysia and Indonesia has been set up in 1993 (IMT-GT Uninet). RIHED also cooperates with UNESCO in the UNITWIN Programme and in the UNESCO Chair Programme, and in activities aimed at encouraging cross border networks of universities. UNESCO is also involved in regional cooperation through its 'Asia and Pacific Regional Bureau for Education'. The UNESCO office in Bangkok was established in 1961 as the Asian Regional Office for Primary and Compulsory Education and was later extended to cover all levels of the education sector. The Asia and Pacific Regional Bureau for Education is the technical advisory body to all field offices and member states of the region and the site of regional programmes in most areas covered by the education sector.

At the ASEAN level, the first initiatives in cooperation were born in 1977, at the first meeting of the ASEAN Ministers of Education. Already in this meeting views on the concept of an 'ASEAN University' were discussed. However, it took almost 15 years for this topic to come up again. In the 1980s, cooperation in the field of education in ASEAN was mainly designed around the ASEAN Development Education Project (ADEP). The ADEP is a joint project of the Governments of ASEAN and the Australian Government. The objectives of this programme were to strengthen the national capabilities through the sharing of expertise, experiences and resources in education. This project focused on education in general and, aside from teacher education, did not focus on higher education in particular. At the fourth ASEAN Summit in 1992, the leaders decided to strengthen the existing network of higher education institutions in the region and ultimately establish an ASEAN University. To develop this concept, a study team was established immediately after the Summit. Their report was reviewed by the first meeting of the ASEAN subcommittee on Education (ASCOE). Here, the subcommittee agreed upon the establishment of an ASEAN University by forming a network of degree-granting institutions in the region. At the second ASCOE meeting in 1994, a draft charter for the ASEAN University Network was prepared, leading to the founding of AUN in November 1995.

3.4   Regionalisation and Higher Education in Europe and Southeast Asia: Concluding Remarks

The level of interconnectedness within the field of higher education in both the regions of Europe and Southeast Asia can be viewed as a consequence of the broader processes of regionalisation – mainly in the economic domain – that have been going on for decades. Considering the overall level of integration, it is therefore not surprising that inter-university interaction in Europe is more frequent and more substantial in Europe than in the ASEAN countries. Although higher education has not been a substantive competency of either the EU or ASEAN, it is becoming more of an issue due to the integration of other activities and due to the function it can perform within regional economic development and the development of a regional awareness. Up to this point, some parallels can be observed between the regions. Also, especially after the EU enlargement, both regions display a considerable level of disparity between the standard of economic and social development of the member countries. Moreover, both regions explicitly identify this disparity in their policies on higher education as well as in other fields. It is clear however that the overall level of development and standard of living in Europe is higher than in Southeast Asia, where only Singapore might be considered as fully developed according to Western European economic standards.

With respect to intra-regional diversity, there is some level of convergence in both regions, although in Southeast Asia it might be seen as more externally driven (through international organisations such as the World Bank, Asian Development Bank, and through links with foreign governments) than in the EU, where the Commission actively promotes interaction between member countries and accession countries (for higher education, for example through the Tempus programme). In both regions a shift from centrally planned higher education systems towards more market oriented approaches can be observed, although the speed with which this shift is taking place, and the policies chosen to design this shift differ from country to country, in both Europe and Southeast Asia.

Chapter 4   Inter-Organisational Arrangements in Higher Education

4.1   Introduction: Collaboration on Different Levels

By choosing terms like alliances, networks, joint ventures, consortia, associations, partnerships, et cetera, the creation of a well sounding and appealing acronym sometimes seems to be the decisive argument in naming the arrangements. In this chapter, we will attempt to go beyond these nominal differences and focus on the essential features. On the basis of these features, we will develop a typology of inter-organisational arrangements in higher education. Prior to this exploration, we will first further define the subjects under investigation. Since we focus on international arrangements between organisations, we only briefly address international cooperation at the national level and cooperation at the individual level.

On the national level, a wide range of international cooperative relations has emerged over the past decades. National policies for higher education often consist of programmes and funds enabling students and researchers to be internationally mobile. The relations can also be more direct, like agreements on mutual adaptation of educational systems. In Western Europe, these international linkages are often established within the framework of the European Union, although even this supra-national organisation increasingly uses a direct approach towards higher education institutions and therewith bypassing national governments (e.g. the Institutional Contracts in the ERASMUS Programme). Bilateral linkages were in general very much based either on 'west-west' cooperation and exchange or on north-south development aid relations or twinning programmes. Also, many of such bilateral and multilateral inter-governmental relations focus on regional integration, like cooperation schemes in the Nordic countries or the Dutch-Flemish-German Cross border cooperation programmes. In recent decades, also south-south relations are getting more frequent,

for example in the ASEAN region (Association of South East Asian Nations) or the SADCC region (Southern African Development Co-ordination Conference).

Cooperation also takes place between individuals. Obviously, cooperation will always boil down to cooperation between individuals. It can however also be the case that individuals cooperate internationally outside the domain of the organisation they are associated with. First, there are the informal links between academics. These links or academic communities are probably the oldest and still most important form of international cooperation and are apparent in all fields and disciplines, with international journals and conferences functioning as a vehicle for communication and information exchange. In many cases, these informal relations have been formalised by the emergence of a wide range of associations, networks, et cetera. Examples of such associations in the field of higher education research are the Consortium for Higher Education Researchers (CHER) and the European Association for Institutional Research (EAIR; recently renamed to 'The Higher education Society', while preserving its acronym). Associations have also been established among other groups in higher education like administrators or students. Examples of these are the European Association for International Education (EAIE; for international relations officers in higher education institutions) and the Association des Etats Généraux des Etudiants de l'Europe (AEGEE). Although the members of these associations are all affiliated with some organisation, their membership is (partly or exclusively) on an individual basis. This study however, concentrates on formal linkages between organisations in the field of higher education. In order to develop a typology of international inter-organisational relations, we will start of with a review of existing classifications on linkages within higher education. We will combine the results of this exploration with insights from organisational studies, in order to arrive at a comprehensive typology that will allow us to demarcate our objects of study: international higher education consortia.

4.2   Typologies of International Collaboration in Higher Education: a Review

Now that we have provided a background for the emergence of international organisational arrangements, we will focus on the different shapes these arrangements can adopt. In the past decades merely a few studies have been published that attempt to classify various types of cooperation in higher education. In this section, we will take a brief look at five studies that present a classification or typology of such arrangements. The first classification we will discuss –Harman (1988) – is not developed explicitly for international cooperation but refers to cooperation within the national domain. The other three typologies – Neave (1992), Wächter (2000) and Van Ginkel (1996)/De Wit (2002) – explicitly refer to international cooperation.

Harman's organisational linkages continuum (based on Peterson, 1974 and applied by Goedegebuure, 1992) ranges from cooperative to unitary arrangements, with arrangements in between (consortia and federations) indicated as coordination. This classification was developed for relating mergers to different forms of inter-

organisational cooperation. Harman's continuum focuses primarily on the structure of cooperation ranging from loose cooperation between institutions to full blown institutional mergers. This also involves a certain level of transfer of authority and autonomy ranging from only moderate transfer in the case of cooperation to full transfer of authority to a new organisation in the case of amalgamation. It is particularly useful since it points to potential arrangements that are in between loose cooperation and amalgamation. As we will see later, these intermediate forms are also apparent in international inter-organisational arrangements.

A first categorisation of international arrangements comes from Neave (1992) who presents the different forms of cooperation as five stages in network development: (i) monodisciplinary linkages, (ii) exchange partnerships, (iii) network partnerships, (iv) multidisciplinary networks and (v) consortia. This classification is mainly based upon the organisational complexity of inter-organisational cooperation. The importance of this classification is that it relates complexity to both the number of participants and to the number of disciplines involved. The transition from the first to the second stage of network development is mainly determined by the existence of a formal and permanent administrative structure, operating at the level of the institution. Their operating base however, remains rooted in the base units of the university. The next stage, the network partnerships, moves the pattern of international cooperation from the classical bi-lateral linkages to the multi-institutional partnership. These might be mono-disciplinary, but can also become multi-disciplinary in nature. The final stage, the consortium, is characterised by the existence of a coordinating unit or division, common to all partner institutions with its own financial competencies. Furthermore, the coordination is no longer performed in the units that are located in each establishment but it constitutes a further administrative layer above that of the institution.

On the basis of a description of 37 European arrangements and 14 arrangements that are either global in scope or are located on other continents, Wächter (2000: 170) presents a categorisation of associations in higher education consisting of five groups: associations of higher education institutions, associations of associations from higher education, associations composed of individual members, regional associations and associations with members from outside and inside higher education. This typology takes a broader perspective on the international linkages in higher education by including individual membership associations and even associations of associations. Furthermore, it does not only focus on close cooperation but also on other functions of arrangements such as advocacy and information exchange. It also points to the fact that arrangements can also include members from other sectors outside higher education. The main shortcoming however, which is inherent in the broad perspective taken by the author, is that categories are too broad and show too much overlap. In fact, the first category – associations of higher education institutions – covers all formal arrangements between higher education institutions. Wächter however, does indicate that this group "can be further differentiated into networks which are discipline- or theme- unspecific (comprehensive) and those which focus on a particular academic field or theme" (p. 171).

The final categorisation we will review was developed by De Wit (2002) and is based on Van Ginkel's (1996) typology of inter-institutional cooperation in Europe. Van Ginkel distinguishes associations, inter-university cooperation projects, university enterprise training partnerships and institutional networks; De Wit provides three categories: academic associations, academic consortia, and institutional networks. Within the first category – associations – De Wit makes a further distinction between three types of associations. The first are associations as an organisation of academics or administrators and/or their academic units. These associations, which have a long history in higher education, are based on individual membership, they are single purpose, academic, discipline based, and they are faculty driven.

A second type consists of the arrangements of an individual, administrative nature, such as the International Association for University Presidents. The final type distinguished by De Wit consists of associations that are institutional, multipurpose, management-based and leadership-driven, like the International Association of Universities. Academic consortia are described as a group of academic units who are united for the single purpose of fulfilling a contract. They are characterised by a limited life span, and are faculty or leadership driven. According to De Wit "suchlike consortia will continue to be the most common form of international organisation in higher education, and increasingly as part of academic associations or institutional networks".

Arrangements of the final type – institutional networks – are groups of academic units who are united for multiple purposes, are leadership-driven and have an infinite life-span. The past decades, many institutional networks have emerged in the European domain (e.g. Network of Universities from the Capitals of Europe [UNICA], the European Consortium for Innovative Universities [ECIU] or the Coimbra Group) or even in sub-European regions (e.g. ALMA in the Meuse-Rhine region), but also other regions have witnessed the emergence of such networks (e.g. Asociación de Universidades Grupe Montevideo in Latin America or the ASEAN University Network in the ASEAN region). Recently, also several supra-regional networks have emerged which cover multiple regions or are even global in scope (e.g. Universitas 21; Global University Alliance). Although the initial classification presented by De Wit is rather broad, leading to a wide diversity of international arrangements within the categories, it does provide several helpful insights. First, the distinction between associations and other arrangements is important, with the first more related to development of the associated actors and the other arrangements related to actual cooperation between participants. Other useful additions to other typologies are based on the subdivisions applied to the three categories. De Wit does not only discriminate between institutional and sub-institutional arrangements but divides the latter into cooperation in thematic and disciplinary issues. Furthermore, he makes a distinction between cooperation for a limited and infinite life span.

Although the analysis portrayed above provides useful new insights, either they lack a systematic derivation of their classifications or they focus on one specific aspect of inter-organisational arrangements. In the following part we will proceed from the findings above and complement these findings with perspectives from other fields, to arrive at both a systematic and multidimensional typology of international inter-organisational linkages in higher education.

4.3   Towards a Comprehensive Typology

In order to arrive at a systematic typology we will take the following approach. We will start by looking at some basic features of inter-organisational arrangements. If we take into account the previous typologies some basic features can be distinguished: size (Neave, 1992) and reach or scope (Neave, 1992; De Wit, 2002). Other features that we will distinguish need a more in-depth analysis of the arrangements: the nature of integration (Van Ginkel, 1996; Wächter, 2000) and the intensity of the linkages (Harman, 1988).

4.3.1   *Basic Features of Inter-Organisational Arrangements: Size*

One of the most mentioned features in distinguishing inter-organisational relations is the amount of organisations represented in the arrangement. (Alter & Hage, 1993, 1997; Child & Faulkner, 1998; Faulkner, 1995; Aldrich & Whetten, 1981, Whetten, 1981). This element is also mentioned above in Neave's classification. Although many authors agree on the importance of the number of participants, the reasons for the relevance of this dimension differ. Many distinguish between dyadic linkages on the one hand and multilateral linkages or networks on the other, based on complexity (e.g. Child and Faulkner, 1998). The distinction on the basis of the number of participants is an obvious one. The demarcation between different sizes however, poses problems. We agree with the distinction between two and multiple participants, since bilateral linkages are (*ceterus paribus*) easier to maintain than linkages that are to be maintained among a large amount of members. Multilateral inter-organisational relations in higher education however can differ widely in their amount of participants, ranging from only a few to several hundreds. There thus needs to be a further distinction apart from the distinction between two versus more than two.

We suggest here that a distinction by the number of participants is not only based on complexity but also on the interests that are represented in the arrangement. Here we can distinguish two broad categories: those where *individual* institutional interests of the participants are represented and those where a *collective* interest is represented. Arrangements that fall within the first category will consist of two or more members that will invest a certain amount of financial or human resources or knowledge into the arrangement, and expect a rate of return on these investments. In this view, organisations establish linkages to strengthen their own position vis-à-vis the external environment. Reasons for entering into cooperative arrangements that can be mentioned here are: risk reduction, economies of scale and/or rationalisation, technology exchanges, co-optation, overcoming trade or investment barriers, facilitating international expansion, vertical integration advantages. In general, organisations try to actively control their external environment to cope with uncertainty; a perspective advocated by resource dependence theorists (e.g. Aldrich, 1979; Pfeffer and Salancik, 1978; Pfeffer and Nowak, 1976). The networks among organisations thus emerge to serve the *individual organisational interests* of the participants. Obviously, no organisations will get involved in such cooperative arrangements if they do not expect to gain from the cooperation. They all expect to reap their benefits, but have to cooperate to do so. The relations in these arrangements are thus reciprocal, where each individual

organisation has to do one's bit to make the arrangement work and therewith profit from the cooperation. This also explains why membership to such arrangements is not open, but the selection of appropriate partners forms an important part of the cooperative strategy.

Other arrangements however are established in order to pursue a particular collective interest (see also Galaskiewicz, 1985). These arrangements are not so much based on resource exchanges but on advocacy. According to Olson (1965), organisations engage in collective action and contribute time and resources to the collective effort without being overly concerned about the return they should expect in the short term. This is explained by the existence of shared values and a sense of "we-ness" among the members of the coalition. Inter-organisational linkages that emerge in this arena can be referred to as coalitions or associations, which are established for the representation of *collective interests*. They are usually characterised by a large amount of member institutions and an open membership (for a particular type of institution). The participating institutions can gain from the activities within such associations without transferring a significant share of power to the collective. We thus arrive at three broad types of inter-organisational arrangements: *associations* with numerous members, *bilateral partnerships* with two members and *multilateral networks* with a limited amount of members. These three basic types can be further subdivided based on their scope.

4.3.2   *Basic Features of Inter-Organisational Arrangements: Scope*

With respect to our second feature – scope – we can refer to both the *scope in time* and *scope in activities*. De Wit already pointed to the distinction between arrangements with a limited and an infinite time-span. The first types in general are project-based cooperative arrangements aimed at a particular task, while the second types are of a more strategic nature, anticipating on future developments. We must add here that this distinction does not apply to associations since they are generally established for an indefinite time-span. Since they are formed around a particular issue (discipline, theme, etc) they will continue to represent these interests for as long as they exist or as long as they maintain the member support for this task (which are both indefinite). The temporal scope of partnerships and networks concerns the question whether the relation is established for *short-term operations* or for *long term adaptation*. In the first category, Lorange & Roos (1992) include ad hoc pools and project based joint ventures. In these forms, the various parties invest resources on a temporary basis to accomplish an operational goal, after which the relation will be revoked. These joint operational ventures are finite and will be dissolved when the mission is accomplished. Arrangements with an indefinite time-span can be seen as organisational forms, which will lead a strategic life of their own and are therefore not explicitly established to be dissolved in a later stage. Consequently, the objectives of suchlike arrangements are more abstract and do not envisage a direct tangible result. The objectives of such strategic inter-organisational arrangements should be broad and flexible enough to enable adaptation to future challenges.

Scope can also refer to the *scope of activities* that are being undertaken within the arrangements or the domain in which the arrangement operates. Here we can make a distinction between arrangements that focus on a particular task performed within higher education institutions and those that are more comprehensive in scope. The former type of arrangements evolves around particular issues which can be either disciplinary or thematic in nature (De Wit, 2002). They are not institution-wide but emerge in a particular part of the organisation. Disciplinary arrangements among higher education institutions or with other organisations emerge within particular locations of the institutions, usually faculties, schools or departments and can involve cooperation in research, in student exchange, in professional development et cetera. Thematic arrangements evolve around issues that exceed disciplinary boundaries, such as quality assurance, use of new technologies, library cooperation et cetera. Such *thematic or disciplinary arrangements* thus are limited to particular themes or disciplines and to a particular part of the organisation.

Many arrangements however consist of cooperation on multiple themes and disciplines and have an institution-wide impact. Next to multiple discipline and thematic areas of cooperation, such *institutional multi-point arrangements*[9] frequently involve institutional cooperation on a central level. What must be added here is that these institutional arrangements are very unlikely to be formed around operational goals. As we saw before, operational partnerships or networks will be abolished as soon as the goal has been achieved. When they are not formed around one but around multiple goals, the arrangement gains a more strategic character. Therefore, 'operational' and 'institutional multi-point' arrangements should exclude each other in our typology.

The observations above provide us with a subdivision between inter-organisational arrangements based on size and scope as illustrated in table 2.

Table 4-1: Inter-organisational arrangements according to size and scope

Arrangements	Size	Membership	Temporal scope	Reach
Thematic/disciplinary associations	Numerous	Open	Indefinite	Them/Disc
Institutional associations	Numerous	Open	Indefinite	Comprehensive
Project Partnerships	Two	Restricted	Limited	Them/Disc
Thematic/disciplinary partnerships	Two	Restricted	Indefinite	Them/Disc
Institutional partnerships	Two	Restricted	Indefinite	Comprehensive
Project Consortia	Limited	Restricted	Limited	Them/Disc
Thematic/disciplinary Consortia	Limited	Restricted	Indefinite	Them/Disc
Institutional Consortia	Limited	Restricted	Indefinite	Comprehensive

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[9] The term 'multi-point' is based on the terminology introduced by Bidault and Salgado (2001).

This typology forms the basis for the further demarcation of our study object. Although we acknowledge that the distinguished categories are still very broad and a range of different types of inter-organisational linkages can be distinguished within the categories, we also argue that typologies are always based on a trade-off between comprehensiveness and clarity. We will therefore not include other dimensions in the typology, although we will explore some additional dimensions that are necessary to further demarcate the types of inter-organisational arrangements we are investigating. These dimensions will be: the type of integration of activities, the intensity of collaboration and the level of equity.

4.4   Additional Dimensions: Integration, Equity and Intensity

4.4.1   Composition and the Integration of Activities

Van Ginkel and Wächter mentioned the possibility of cross-sectoral cooperation in higher education (e.g. university-industry linkages). As we observed before, organisational and sectoral boundaries are frequently crossed in the current higher education environment. The increasingly porous traditional boundaries between organisations, and between sectors, make a rigid distinction between university and industry or business and between public and private less functional (see Middlehurst, 2001). We therefore prefer to discuss the nature of integration instead of composition. A generally accepted distinction in the nature of integration is based on the difference between horizontal and vertical integration (e.g. Goedegebuure, 1992; Alter and Hage, 1993, 1997). Horizontal integration occurs between organisations that produce the same products or services, while vertical integration occurs between organisations that are originally situated in different sectors. Since we take the higher education sector as our point of departure, we will refer to 'higher education arrangements' and 'cross-sectoral arrangements'.

4.4.2   The Power Relation between Partners: Equity and Non-Equity Arrangements

A second distinction that we want to discuss is the relation between the partners in terms of power. Although associations are based on equal membership, since a collective interest is represented, bilateral partnerships and multilateral networks can be based on equal membership, but such arrangements can also be dominated by one or more partners. In the latter type, the decision-making or the contribution of resources into the relationship is dominated by one or a group of institutions over the other(s). This distinction especially plays a role in North-South relations, where one part of the members is committed to the further development of the other part. Another example are franchise agreements or the establishment of branch campuses in cooperation with local partners, where the type and amount of resources contributed and the type of interests involved differ between one member and the other. Many arrangements however are based on equal relations of the members, meaning that each member has an equal say in decisions and are expected to contribute equally to the relationship.

4.4.3   *The Intensity of Collaboration*

The various associations, partnerships and networks can all be organised in different ways, representing a different level of intensity of cooperation. We will take Harman's classification of cooperation-coordination-amalgamation as a starting point. In the case of associations, organisational structures of the arrangements are rather uniform and independent from the question whether they are cross-sectoral or uni-sectoral and partial or institutional. We already noted that associations serve as a means of advocacy and are representatives of particular collective interests. The associations are based on open membership for a particular type of institutions, disciplines or themes. They operate rather autonomous and membership participation is based on membership fees for which the members expect the associations to represent them vis-à-vis other actors and to organise various activities (e.g. conferences, journals, workshops). In addition to periodical membership meetings (in which activities are discussed and board members are elected), the main power of the member institutions is the possibility to withdraw themselves from membership. In these arrangements, interaction is very limited and one can hardly speak of cooperative arrangements. These arrangements are generally organised loosely and are only moderately integrated into institutional policies since they do not have high institutional priority. This does not mean that they do not perform significant roles. Their significance can be very high for a certain discipline, for a certain theme or for the general role of 'the university' in a region. The significance of an association for one particular institution on the other hand, is only moderate. In terms of Harman's continuum, we can say that associations co-ordinate on the basis of a particular collective interest. There is only a low level of delegation of authority and the loss of autonomy is minimal. A further sub-division for the intensity of cooperation is therefore insignificant for the case of associations.

Bilateral partnerships and multilateral networks however come in several organisational forms. Harman's continuum of linkages presents a linear transition from loose corporation to amalgamations. The transfer of authority is the central issue in this model. It is valuable that Harman makes a distinction between cooperation (voluntary cooperative agreements) and coordination (formalised consortia and federations). This distinction is also made by Mulford and Rogers (1982). They define coordination as: "the process whereby two organisations create and/or use existing decision rules that have been established to deal collectively with their shared task environment". Coordination is then seen as a more formalised way of cooperation. This formalisation can be expressed through decision rules, intermediary agencies, project bureaux etc. The important feature is that a particular new arrangement is established to coordinate the inter-organisational activities.

It is obvious that coordination is likely to have more far-reaching consequences than cooperation. If we take into account Harman's classification, an ultimate next step would be amalgamation. In this case, ownership or autonomy is totally transferred from the original organisations to the new organisation. One could characterise amalgamation as having formal rules, unitary goals, all resources involved and a full transfer of authority and thus loss of autonomy. The cooperation-coordination-amalgamation continuum can be applied to higher education as well as cross-sectoral relations and to bilateral as well as multilateral arrangements.

4.5   Conclusions and Implications

In this chapter, we have attempted to give an insight in the maze of international inter-organisational arrangements in higher education. Based on several classifications of cooperation in higher education and using insights from organisational and management studies, we have developed a basic typology of international inter-organisational cooperation. Furthermore we identified several other dimensions relevant in distinguishing different types of inter-organisational arrangements.

Our objects under investigation – International higher education consortia – can be seen as a specific type of institutional networks. This means that we will be investigating multi-point groupings of organisations which have a limited amount of members and where membership is restricted to particular organisations that are allowed by the other partners to enter the arrangement. Also they have an indefinite time-span. Therefore they are not meant to be dissolved at a particular moment. Cooperation takes place in several activities, covering multiple disciplines and/or themes. With respect to the additional dimensions we identified – integration, equity, intensity – International higher education consortia can be seen as a horizontal arrangement between higher education institutions which are based on equity and where collaboration takes place through coordination. The arrangements exceed loose cooperation, since an additional administrative layer is created above the participating organisations. On the other hand, the arrangements are not meant to lead to amalgamation, at least not in the foreseeable future. The various dimensions of International higher education consortia are summarised in table 4-2.

Table 4-2: Dimensions of International higher education consortia

Dimensions	International higher education consortia
1. Members:	Multiple; three or more but limited
2. Membership:	Restricted, based on agreement of partners
3. Interests:	Individual interests of participating institutions
4. Time-span:	Time-span is not defined in advance
5. Activities:	Simultaneously covering multiple disciplines & themes
6. Integration:	Horizontal integration between universities
7. Relations:	Relations based on equal say and equal contribution
8. Intensity:	Collaboration based on coordination

These dimensions will constitute the criteria for the selection of our case studies (see chapter eight). Before analysing the process and performance of cooperation in consortia, we will first attempt to develop a sound theoretical framework for cooperation in consortia and the factors that impact upon the ultimate performance of such consortia. This theoretical framework will be presented in Part II of this study.

PART II: THEORETICAL FRAMEWORK

Chapter 5   Introduction to Approaches and Concepts

5.1   Introduction

A cooperative relation between actors is a social arrangement, while the exchange of resources can be seen as an economic activity. In this study we will treat higher education consortia as arrangements in which organisations cooperate to exchange and pool resources in order to look after their individual interests. Basically, this means that cooperation is seen as an economic activity that is performed within a social context in which the actors are embedded. We will draw from two distinct approaches to explain the behaviour and the effectiveness of behaviour of organisations: strategic management and economic sociology. Although both approaches stem from very different traditions – as will be shown in sections two and three – there are several points of divergence and opportunities for building bridges between the two approaches. We will first look at the differences between the approaches. Secondly we will introduce some core concepts that are derived from both approaches. In the final section we will look at the relevance for linking both approaches in the contemporary globalising environment that universities and other organisations operate in. The reflections expressed in this chapter will then be the basis for our further analysis of cooperation in International higher education consortia.

5.2   Two Approaches to Firm Behaviour: Strategic Management and Economic Sociology

Why firms do what they do is of central concern to both strategic management theorists and economic sociologists. This study borrows from both approaches and attempts to combine their main concepts. Each approach provides an image of firm behaviour from

a particular point of view. Both economic sociology and strategic management draw on diverse ideas. Economic sociologists draw on Max Weber's ideas about institutions, Émile Durkheim's ideas about social milieu and identity, and Karl Marx's ideas about power (e.g. see Swedberg, 1987; 1991). Strategic management theorists draw not merely on different paradigms, but on different disciplines: economics, psychology, and sociology. In addition to the differences *within* the two fields, there are some very fundamental differences *between* them. Dobbin and Baum (2000) identify three core differences between strategic management and economic sociology: the perspective taken, their methodology and the premises used.

Strategic management theorists and economic sociologists view the firm from different standpoints. Briefly stated, strategic management theorists explore efficiency and effectiveness from the perspective of the firm, developing theories of why one strategy is more successful than another, given product, firm, and industry characteristics. Mainstream economics has traditionally ignored the role of managers and left little scope for strategic choice (Baum and Dobbin, 2000). In economic theory, a firm observes market prices and then makes efficient choices of output quantities. Strategic management has addressed these limitations of price theory. At first the field adhered closely to rational neo-classical economic assumptions of firm heterogeneity, but later more attention to behavioural aspects was given (e.g. Caves and Porter, 1977) and to explaining heterogeneity of firms (building upon the work of Penrose, 1959).

Sociologists on the other hand, focus on efficiency and effectiveness from the perspective of the corporate environment, developing theories about the context in which one strategy becomes defined as efficient and diffuses across the corporate landscape. The starting point here is that existing institutions, such as policy arrangements and management legacies, create both structural and cognitive constraints on firm behaviour (DiMaggio & Powell 1983). This perspective on the firm places more emphasis on the constraints that the environment poses for their behaviour.

Both approaches commence with very different methodological imperatives. While the goal of strategic management theorists is to develop theories on why certain strategies are optimal, or at least efficient, based typically on insights from successful firms, sociologists take a different approach. Sociologists in general seek to explain variance in behaviour across large populations of firms and over a period of time. These differences derive in part from the very different goals of both approaches. Strategic management is oriented towards developing concrete prescriptions for firms from exemplary cases, whereas economic sociology is oriented to explaining trends in corporate behaviour post hoc. For strategic theorists the goal is to explain the success of a strategy before it has become standard operating procedure. For sociologists the goal is to explain how context and history contribute to management trends and firm behaviour, often after those trends have come and gone. As a consequence, strategic theorists may see the ideas of sociologists as too little and too late, and sociologists may see the ideas of strategic theorists as premature and based on unrepresentative samples (Dobbin and Baum, 2000). The most basic method in strategic management is to observe the winners and uncover what makes them win, while the most basic method in economic

sociology is to observe large numbers of firms and find explanations for the differences in their behaviour, following comparative analytical strategies.

A third core difference between the two approaches is that the two fields start with very different premises. Strategic management theorists presume that firm behaviour is principally driven by competitive pressures and the quest for efficiency. They tend to emphasise market factors and give relatively little power to historical, political, and social factors. Sociologists also view competitive pressures and the quest for efficiency as important for explaining the behaviour of a firm, but they see competition as occurring within a highly structured historical and regulatory context. Competitive pressures may lead firms to alter their strategies, but the new strategies they choose are shaped by public policy, imitation, network position, power, and historical heritage.

5.3 Key Concepts in the Study

5.3.1 Key Concept: Sustainable Competitive Advantage

A basic premise in this study is that universities seek to obtain and retain a competitive advantage over their competitors. The concept of competitive advantage plays a central role in strategic management studies. A systematic analysis of this concept emerged in the 1960s in the so-called Harvard School approach (Calcagno, 1999). This approach to the analysis of competitive advantage focused on the study of the external environment's influence on a firm's strategy. According to this perspective, firms operating in the same industry receive identical inputs and are forced to adopt identical strategies. With this line of thinking, no sustainable competitive advantage is possible. All the firms operating in the same industry receive identical opportunities and obtain the same results. Eventual diversity is possible only in the short term and therefore, the firm's success is the result of the its ability to respond to threats and opportunities existing in the specific industrial environment in which it operates. The strategic decisional processes and the profit-results that firms obtain are heavily influenced by external market conditions. Alderson (1965) was one of the first to recognize that firms should strive for unique characteristics in order to distinguish themselves from competitors. According to Alderson, differential advantage could be achieved through lowering prices, selective advertising, and/or product improvements and innovations. These concepts lay the core foundation for firms in moving toward competitive advantage, although the strategies pursued to obtain competitive advantage have now become more sophisticated.

After the Harvard School, the most important milestone in competitive advantage studies is related to Porter's work (1980; 1985). In his view, "competitive advantage is at the heart of a firm's performance in competitive markets" (1985: xv). He argued that a firm's ability to outperform its competitors lay in its ability to translate its competitive strategy into a competitive advantage. Competitive strategy entails positioning the firm favourably in an industry relative to competitors. Competitive advantage, the achievement of above average industry profitability, is garnered by differentiating or by being the lowest cost producer in the industry. In making the choice between being a

differentiator or low cost producer, a firm must consider five competitive forces: the bargaining power of customers, the bargaining power of suppliers, the intensity of rivalry amongst firms in the industry, the threat of substitute products and the threat of new entrants into the industry. Thus, in this framework, gaining competitive advantage is still determined primarily by responding effectively to the external environment. Industry-specific requirements are therefore seen as determinants in a firm's opportunity to obtain a competitive advantage over its competitors. Porter also introduced the term *sustainable* competitive advantage and defined it as "above-average performance in the long run" (1985: 11). In his definition however, the temporal scope of 'the long run' is not further specified.

Rather than specifying the amount of time that differentiates a sustained from a temporary competitive advantage, Porter focuses on specifying the sources of sustainable competitive advantage. Sustainability arises from the sources and number of cost or differentiation advantages (Ghemewat, 1986; Porter, 1985). Cost advantages that are sustainable include entry or mobility barriers such as economies of scale (Ghemawat, 1986) and proprietary learning (Porter, 1985). Sustainable differentiation advantages include a unique activity or product valued by customers that competitors cannot easily imitate (Grant, 1991; Porter, 1985). The competitive advantage is more sustainable the greater the number of sources of cost or differentiation advantages (Ghemewat, 1986; Porter, 1985).

Porter's framework of competitive advantage and sustainable competitive advantage held sway in strategic management until the resource-based view (RBV) emerged and became a popular alternative in the early 1990s. Wernerfelt's (1984) article, 'A Resource-Based View of the Firm' and Barney's (1991) article, 'Firm resources and sustained competitive advantage' are often recognized as the seminal articles on the RBV approach. In his article, Barney outlines the RBV framework specifying the source and conditions of both competitive advantage and sustainable competitive advantage. According to Barney,

> *"a firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy" (p. 102).*

A firm's resources (e.g., assets, capabilities, competencies, processes) are considered the source of both competitive advantage and sustained competitive advantage. Thus, compared to the traditional view, the RBV shifts the locus of competitive advantage from external forces (the industry) to internal factors (a firm's resources). At a later stage, Christine Oliver (1997) extended the resource-based view by combining it with (neo-)institutional theories. She proposed a model of firm heterogeneity which suggests that both resource capital and institutional capital are indispensable in obtaining a sustainable comparative advantage. The resource-based view and its consequences for university management are further discussed in the next chapter.

5.3.2   Key Concept: Embeddedness

Oliver's inclusion of institutional capital in the resource-based view is based on the observation that resource exchanges do not take place in a vacuum but instead are embedded in a specific context. The notion of embeddedness was coined by Polanyi (1944; 1957) and has more recently been extended into what is now termed the 'new economic sociology' (Swedberg, 1991). The notion of embeddedness brings back the social context in economic analysis and emerged as a reaction against the separation of society and economy and the assumption of the autonomy of markets (in the case of Polanyi) and later on as a reaction against the atomic view on economic behaviour applied by neo-classical economists (in the case of the economic sociologists since the 1980s).

Polanyi, in the use of the term embeddedness, starts by emphasising that traditional economic thought rests on the concept of the economy as an interlocking system of markets that automatically adjusts supply and demand through the price mechanism. The term embeddedness expresses the idea that the economy is not autonomous, but subordinated to politics, religion and social relations. According to Polanyi, classical economists envisaged a society in which the economy had been effectively disembedded, yet he insisted that they did not and could not achieve this goal: "our thesis is that the idea of a self adjusted market implied a stark utopia. Such an institution could not exist for any length of time without annihilating the human and natural substance of society" (Polanyi, 1944: 3). Polanyi postulated that:

> *"the human economy is embedded and enmeshed in institutions, economic and non-economic. The inclusion of the non-economic is vital. For religion or government may be as important for the structure and functioning of the economy as monetary institutions or the availability of tools and machines themselves that lighten the toil of labour" (Polanyi, 1957).*

In 1985, Granovetter argued for economists and sociologists to theorize economic action in ways that acknowledge its strong linkages to social structure. He argued that the economy is structurally embedded in social networks that affect its functioning. The concept of embeddedness, which is central to contemporary research in economic sociology (Smelser and Swedberg, 1994), is typically treated as synonymous with the notion that organisations and the economy are part of a larger institutional structure (Baum and Dutton, 1996). Granovetter (1985) uses the term in a more specific way to mean that economic action takes place within the networks of social relations that make up the social structure. In criticism of this narrow conception, DiMaggio (1990, 1994) has argued that economic action is embedded not only in the social structure but also in culture. Zukin and DiMaggio (1990:14-22) make further distinctions between different kinds of embeddedness, including cognitive (i.e., structured regularities of mental processes that limit the exercise of economic reasoning), cultural (i.e., the role of shared collective understandings in shaping economic strategies and goals), political (i.e., the role of social, political, and other non-market institutions in shaping economic institutions and decisions), as well as structural embeddedness (i.e., Granovetter's contextualization of economic exchange in patterns of ongoing interpersonal relationships).

In relating embeddedness processes with strategic management, Baum and Dutton (1996) detect three distinct levels of embeddedness. The first level – strategy as inter-firm context – focuses on how strategy affects and is affected by individual behaviour within the firm. The second level looks at how firm-level strategy is related to the broader socio-cultural context in which firms are embedded. The final and third level relates to the even broader question of embeddedness and its connection to strategy. What is addressed here is how patterns of interaction among firms' strategies are related to the broader socio-cultural context. In our study, we will address all levels of embeddedness. Embeddedness of organisations in their wider context, embeddedness within organisations of particular groups and individuals and the embeddedness of interactions and relations among organisations will all play a central role.

The behaviour of embedded organisations seeking sustained competitive advantage forms the core of the study of inter-organisational arrangements. We argue that obtaining sustainable competitive advantage is the ultimate objective of universities, but that, in the strategies pursued to arrive at this objective, a university has to take into account, or is at least affected by, its institutional heritage and broader socio-cultural context in which it is embedded.

5.4 Concluding Remarks: Strategy and Embeddedness in a Globalising Environment

The critique might be raised that our perception of the university might be too business-like and the view on cooperation too economically determined. Obviously, we acknowledge that a university is not a business but this does not mean that we cannot take the objective of sustainable competitive advantage as a starting point. It is not profit or turnover that determines the level of competitive advantage, but those aspects that are relevant in the eyes of the various stakeholders within and outside a university. In addition, due to the insecure financial resource base of universities and the pressures for efficiency and effectiveness of the stakeholders and society as a whole, economic rationales do have a significant impact on university behaviour. Not unlike other public sectors of contemporary society. Jessop (1999) illustrates this by claiming that:

> *"even domains or activities that remain primarily non-commercial in their orientation (due, for example, to social or political reasons) can still be distorted through the imposition of a secondary economic coding. This occurs in so far as choices among formally non-commercial activities are influenced by 'profit-and-loss' or at least economic 'cost-benefit' calculations. This tendency is reflected today in neo-liberal encouragement to educational, health, scientific, and other decision-makers to consider the financial impact of their activities on the individual, organizational, and institutional levels. This is reflected in careerism and the subversion of professional integrity; in the growing role of market proxies in non-commercial organizations; and in the subordination of a wide range of non-commercial institutions to the (perceived or discursively constructed) imperatives of a strong and healthy (internationally competitive) economy."*

Both the perspectives of the university as a maximiser of performance as well as a conformer to its institutional context have changed due to processes of globalisation. The view that the university – or any other organisation – has to optimise its resource base in order to obtain sustainable competitive advantage, gains new meaning because of processes of globalisation and regionalisation. First of all, resources that can be sources of sustainable competitive advantage in a nationalised environment can lose their relevance through globalisation, for example through the opening up of markets to other (foreign) providers or through geographical expansion of the focal organisation. Second, opportunities for resource acquisition have expanded due to technological progress and through an increasing mobility of individuals in general and of labour in particular. Finally, new markets are opening up and these new markets sometimes require other types and other mixtures of resources than the traditional markets, and the university needs to restructure its resource base accordingly.

Reaping the benefits of these increased (global and regional) opportunities however, can be impeded by the fact that organisations, in particular traditional organisations like universities, operate in a specific context and that decisions are influenced by prevailing norms and conventions and cognitive, social, cultural and political barriers. Although globalisation is seen as a process of disembedding (Giddens, 1984), we have also illustrated that this process triggers a process of re-embedding, where a renewed value is re-attached to social arrangements. These remnants of the past and the re-attachment to traditional values are also likely to become apparent when universities interact closely with each other, as in International higher education consortia. This duality of global opportunities and institutional embeddedness will be further analysed in the next chapter.

Chapter 6   The Paradox of Cooperation in Higher Education Consortia

Theoretical work on the phenomenon of International higher education consortia (HECs) is scarce. In our search for a starting-point for theory development we therefore need to relate to theoretical notions from previous work in other disciplines. Previous work on change in higher education does not provide a solid point of departure for theorising HECs. The studies in the internationalisation of higher education or international cooperation in this field do not offer substantive theories for the organisational aspects of these collaborative arrangements. Other work in the field of change in higher education often take either (national) policies as a point of reference or internal dynamics in the university. Theories on higher education consortia however, need to start with the notion that change neither comes from 'above' nor emerges solely within the organisational context of a particular university. The strategies and projects for cooperation in HECs are both formulated and implemented in an interactive and dynamic context. Fundamentals on cooperation in other fields within the public realm – e.g. cooperation between hospitals or schools – do provide us with insights on inter-organisational arrangements, but, as they take place within the national domain, do not pay attention to the inter-national component of HECs. Useful starting points, in which both the inter-active and the inter-national component are addressed, are offered by economic sociological and organisational theories and the strategic management literature on inter-organisational processes in international alliances. Although theoretical development in this area is still in a nascent state of development (see Adler, 1983; Parkhe, 1993a), the research in this field has brought forth a wide range of studies (for an overview, see Auster, 1994). We claim that these studies provide the best point of departure for our analysis. The research on international consortia, strategic alliances, networks and joint ventures offer basic concepts that can also be applied to higher education consortia. Naturally the precise elaboration of these basic principles needs to be 'translated' to the specific context of the university.

Strategic alliances have been defined in many ways and by many authors (for an overview see Douma, 1997). We have already placed strategic alliances on the continuous scale between free markets on the one side and total amalgamation on the other (Lorange and Roos 1992). Within this broad definition various specifications have emerged. By and large however, strategic alliances are commonly viewed not as a singular form of organisation but as a collection of possible hybrid arrangements with a strategic nature (e.g. joint ventures, R&D consortia, marketing partnerships etc.). An inclusive definition of international strategic alliances is given by Parkhe:

> *"global strategic alliances are relatively enduring inter-firm cooperative arrangements, involving cross-border flows and linkages that utilise resources and/or governance structures from autonomous organisations headquartered in two or more countries, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm" (1991: 581).*

This definition mirrors the dimensions identified in chapter four since it emphasises its long-term nature, the international aspect and the preservation of autonomy of the participating universities. A distinctive feature of the International higher education consortia that are the subject of this study is that they encompass a wide range of cross-border flows and linkages, covering multiple themes and disciplines. This is inherent to the fact that universities can be seen as 'loosely coupled systems' (Weick, 1976) with a high level of fragmentation in authority and in work specialisation. The consortia under investigation in this study are comprehensive institutional consortia or multi-point consortia, which means that the cooperation between the participating universities covers several links between faculties, schools and offices. The arrangements thus consist of a portfolio of projects, which preferably contribute to the overarching strategy of the consortium.

The remaining sections of this chapter map out the basic concepts and theoretical notions from the management and economic sociological literature and explore the implications of the basic concepts for International higher education consortia. In the first section, we will introduce the main problem addressed in this chapter: the tension between complementarity and compatibility in inter-organisational arrangements. The theoretical notions behind these concepts and their implications for our perspective on universities and inter-university collaboration are addressed in the subsequent two sections.

6.1   The Paradox in Consortia

An interesting paradox is that consortia, alliances or networks are based on compatibility as well as complementarity. Research indicates that resource complementarity is crucial to collaborative success (Harrigan 1985; Bleeke & Ernst 1991). Johnson et al. (1996) indicate that resource complementarity involves both uniqueness and symmetry. Complementarity determines the mix of unique and valuable resources available to achieve objectives (Killing 1983), thus enhancing the competitive viability of the network. On the other hand, complementarity implies strategic symmetry, in which a balanced share of unique strengths creates partner

interdependence (Harrigan 1985). Compatibility refers to the congruence in the backgrounds of alliance partners. There appears theoretical and empirical support behind the idea that organisational compatibility in various domains has a positive effect on alliance performance (see Sarkar et al., 2001).

When examining determinants of alliance performance, we focus on a unique aspect associated with the characteristics of partners involved in a consortium, namely inter-organisational diversity (Parkhe 1991). We suggest that performance is likely to be enhanced when organisations are able to manage the paradox involved in choosing a partner that is different, yet similar. Successful consortia thus require partners who process similar characteristics on certain dimensions and dissimilar characteristics on others. However, insufficient information about possible partners or inadequate attention to partner selection leads to unstable consortia that do not fall within this ideal-type. This does not mean that only perfectly matched partners can be sustainable in the long run. If this were the case, inter-organisational cooperation would be likely to fail as such an optimal match is unlikely. The essence of this study is that consortia need to manage this diversity, which on the one hand can lead to incompatibility but on the other hand, is often a source of complementarity and thus one of the basic reasons behind university cooperation. Both complementarity and compatibility are seen as prerequisites for sustainable cooperation. Without complementarity, cooperation would be useless or merely symbolic as the participating organisations have nothing to offer that is beneficial to the other partners. But even when a sufficient level of complementarity is apparent, the relationship between the participants needs to evolve in such a way that interaction is possible and not completely disabled through the differences in goals, practices, cultures etc. of the individual organisations. In a situation where complementarity and/or compatibility are insufficient, the consortium needs to intervene in order to re-establish a balance.

To emphasise the paradoxical relationship, we choose to use the terminology of type I and type II diversity (Parkhe, 1991: 580). Type I diversity includes the inter-organisational differences that the consortium is meant to exploit. These form the underlying motivations for establishing or entering into the network and dealing with the reciprocal strengths and complementary resources furnished by the network partners. This type of diversity actually facilitates the formulation, development and collaborative effectiveness of Consortia. Type II diversity, refers to the differences in partner characteristics that often negatively affect the sustainability and effective functioning of consortia (see figure 6-1). Parkhe (1991) also states that these two types are not static but dynamic and that they are differentially impacted by the processes of organisational learning and adaptation. The level of complementarity changes over time as capabilities or knowledge that originally existed in only one of the partner universities can eventually become internalised by another. The consortium should therefore continuously evaluate the level of complementarity and renegotiate interdependencies over the course of time. The consortium can also actively intervene in cases where incompatibility exists, by applying mechanisms to reduce its negative impact. The consortium therefore needs to adapt to changing circumstances. Ultimately, the arrangement would want to end up in a situation where there are ample opportunities for cooperation and the process of cooperation is not substantially hindered by the differences among the partners. The performance of the consortium as

a whole is dependent on the way the consortium manages this paradox, embodied by balancing the 'hard' aspects (complementarity) and the 'soft' aspects (compatibility) of cooperation. We will address this issue further in this part of the study.

Figure 6-1: The paradox in cooperation
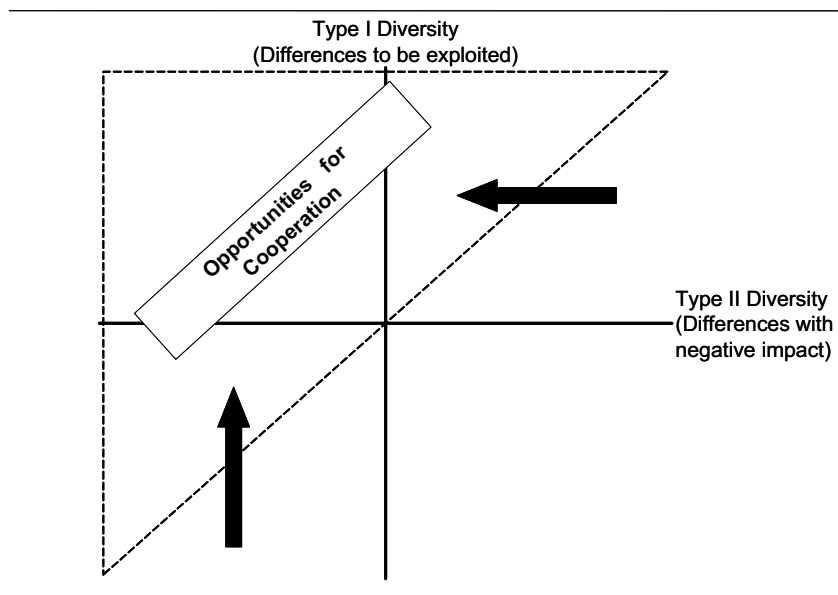
In summary, the following assumptions are used as the starting point for exploring the effectiveness of consortia:
- Higher education consortia are multi-point consortia involved in a multitude of activities.
- Cooperation between partners is based on intended rationality and thus aimed at the utilisation and exploitation of (the differences between) each others strengths.
- Cooperation is complicated by the different backgrounds of partners.
- Consortia will intervene when exploitation is insufficient or complications become too severe. In this case they will employ mechanisms in order to better exploit the type I diversity in the consortium and to alleviate the negative impact of type II diversity.

The composition of the consortium and the way it deals with diversity therefore form the central issues in this framework. The first issue is dealt with in this chapter and the latter is discussed in chapter seven.

6.2   Type I Diversity: Complementarity

6.2.1   *Theoretical Antecedents of Resource Complementarity in Strategic Alliances*

Resource complementarity, or the extent to which each partner brings in unique strengths and resources of value to the collaboration (Johnson et al., 1996), is crucial to the success of collaborative ventures (Harrigan, 1985). Harrigan (1988: 206) notes that significant asymmetries among parent organisations are expected to be a stabilising force when venturing into a relationship as partners each need what the other can supply. This perspective on collaborative arrangements finds its theoretical roots in the resource-based view (RBV) of organisations. In the RBV (Wernerfelt, 1984; Barney, 1991) organisations are seen as a bundle of resources. The RBV introduced an alternative perspective for the prevailing models of strategic management in the 1980's, where emphasis was placed on analysing a firm's opportunities and threats in the competitive environment (Caves and Porter, 1977; Porter, 1980, 1985). This external perspective implicitly adopted two assumptions (Barney, 1991). First, that firms within an industry are identical in terms of the strategically relevant resources they control and the strategies they pursue (Porter, 1981, Rumelt, 1984, Scherer, 1980). The second assumption is that, should resource heterogeneity develop in an industry or group (e.g. through entry of new providers), this heterogeneity will be very short lived as the resources firms use to implement their strategies are highly mobile. These assumptions effectively eliminate firm resource heterogeneity and immobility as possible sources of competitive advantage.

Following Barney (1991), the RBV substitutes these two assumptions for two alternative ones. First, it assumes that firms within an industry may be heterogeneous with respect to the strategic resources they control. Second, the perspective assumes that these resources may not be perfectly mobile across firms, and thus heterogeneity can be long lasting. It therefore suggests that a degree of heterogeneity tends to be sustained over time (Peteraf, 1993). Some resource characteristics that prevent firms from moving toward resource homogeneity have been identified as: imperfect mobility, imperfect imitability, and imperfect substitutability (Barney, 1991; Chi, 1994). These characteristics are not only essential for sustained resource heterogeneity, but are also instrumental in the formation of strategic alliances and consortia (Das and Teng, 2000). The argument made is that the less mobile, imitable, and substitutable an organisation's resources are, the more likely others will be interested in forming arrangements with this organisation.

Eisenhardt and Schoonhoven (1996: 137) see alliances as "cooperative relationships driven by a logic of strategic resource needs and social resource opportunities". Van de Ven (1976) also notes that the process of building inter-organisational relationships can be studied as a flow of resources among organisations. Wernerfelt (1984), in his introductory article of the resource-based perspective on organisations, refers to mergers and acquisitions as providing opportunities to trade resources or bundles of resources. These could include strengths or assets of the organisation that may be

tangible, such as financial assets or technology, or intangible, such as reputation, legitimacy or managerial skills. In essence, strategic consortia and alliances are about accessing and providing resources that a particular organisation does not already possess, but which are critical to improving its competitive position.

A key motive for entering into consortia is to combine the resources of the partners (Devlin & Bleackley, 1988). Strategic alliances and consortia have become an attractive alternative to mergers and acquisitions as a means to acquire resources, precisely because alliances usually are faster and cheaper ways for accessing resources (Lei, 1993). The resource-based view suggests that the rationale behind consortia is the value-creating potential of firm resources that are pooled together (Das and Teng, 2000). Reciprocal strengths and complementary resources, or a 'fit' between partners, are identified as a premise for successful consortia (Parkhe, 1991). A key implication of the RBV is that organisations will search for partners that will bring about some sort of fit or synergy between their resources and those of their targeted partner. In summary, the RBV considers strategic consortia or alliances and mergers/acquisitions as strategies that are applied to access other firms' resources, for the purpose of garnering otherwise unavailable competitive advantages and values to the firm. These resource complementarities can be used to develop new competitive advantages (March, 1991). Alliances that have the potential to create synergy by integrating complementary resources have the highest probability of producing value (Madhok and Tallman, 1998), and therefore resource complementarities (should) represent one of the most important criteria in selecting strategic alliance partners (Hitt et al., 2000).

6.2.2   *A Resource-based view of the University*

The RBV has proven to be a helpful perspective in the study of a firm's strategic behaviour (Barney et al., 2001), but in the light of this study the question can be raised whether it can also be applied to universities. We argue that it does. On the one hand, the resources identified in the RBV can also be found in the resource base of the university. On the other, changes in the current environment can clearly be related to the changes in the resource positioning of the contemporary university. Conceptualising universities as being in a competitive environment with other institutions can be considered appropriate given current realities. Institutions of higher education have to compete for scarce financial resources, top quality students and reputable staff. Competition emerged nationally but – as we argued in chapter two – according to the discourse of globalisation and regionalisation, this contest is increasingly extending to the international level. Furthermore, a culture of competition has also emerged because of rankings in various magazines. Finally, universities are confronting competition from new entrants to the higher education 'industry'. Thus, while academe may abstain from characterising itself as being part of a market or in competition in ways characteristic of for-profit organisation, the reality – or at least the perceived reality - is that the environment has become increasingly competitive.

Following up on Barney (1991), the resource-based view of the university can best be started by looking at the type of resources and the way in which they contribute to

sustained competitive advantage. University resources include all assets, capabilities, organisational processes, attributes, information, knowledge etc. controlled by the university that enables it to implement strategies that improve its efficiency and effectiveness. These can be classified into three separate groups: physical capital resources, human capital resources and organisational capital resources. Physical capital resources include the technology used (e.g. the universities ICT infrastructure and its digital learning environments), teaching and research facilities, laboratories, real estate and its geographical location. Human capital resources refer to training, experience and the knowledge- and professional networks of academics and non-academics. The organisational capital resources can include the university's formal operating structures, planning structures, budgeting systems, quality assurance systems, but also its relationships with industry, government and other parties in its environment. All these resources can, but not necessarily do, contribute to the competitive advantage of the university. Competitive advantage exists when the university is implementing a value creating strategy not simultaneously being implemented by any current or potential competitor. When other organisations are unable to duplicate the benefits of this strategy, one can talk of sustainable competitive advantage (Barney, 1991: 102).

If we remember the two assumptions of the RBV – heterogeneity of resources and the imperfect mobility of these resources – and relate them to the notion of competitive advantage, we can illustrate why this perspective has become more useful in describing the contemporary higher education environment. Sustainable competitive advantage can only be accomplished if the university obtains those resources that are not available to others and which are imperfectly mobile. Barney (1991: 105-106) argues that to have this potential these resources must have four attributes: they must be valuable, rare, imperfectly imitable and there must be a lack of strategically equivalent substitutes. Das and Teng (2000: 41) argue if organisations possess more imperfectly mobile, imperfectly imitable and imperfectly substitutable resources, it is more likely to engage in inter-organisational arrangements.

In the international context of higher education, some attributes of the university can be considered resources and thus become possible sources of competitive advantage. The most obvious are the geographical location of a university, or the native language related to this location. It appears that universities in the Anglo-Saxon world have exploited this advantage to recruit international students. Many non-English speaking countries now try to imitate this source of competitive advantage by providing courses in English. At the same time however, national governments value their linguistic heritage and therefore limit the use of English in universities. Many sources of competitive advantage are more directly related to the university. These might consist of the possession of high-grade equipment or facilities, advanced knowledge in the field of educational technologies, relationships with industry, enjoyable accommodation, effective management or budgetary systems, etc. Sources of competitive advances can also be related to methods or content of teaching and research. High quality and respected research can be one of the most important sources of competitive advantage. A specific teaching method (e.g. the case-study method in Harvard Business School) can give a school a good reputation. A specific stream of research might do the same for

research institutes (e.g. the Aston-studies in the field of organisational theory). Prestigious academics and the knowledge and personnel networks they bring along are also very important since they are immobile, inimitable, rare and valuable. Obviously many of these resources have always been of importance to universities. Many however, have become a source of competitive advantage due to the processes of globalisation and internationalisation. In particular those resources that relate to the national level (e.g. location, language, culture) have gained value due to the growing importance of international staff and student recruitment. Furthermore, resources (like the university's reputation) can be exploited more effectively due to the increasing mobility of students and staff.

The process of globalisation has affected the resource base of the university – which is its source of competitive advantage – in different ways. First, resources that in the past did not constitute a source of competitive advantage now do due to increasing flows of students (e.g. language and culture). Second, resources that used to be a source of competitive advantage in the national domain have – to some extent - lost importance in the global context (e.g. access to government officials or research funding agencies, relationships with domestic industries and national reputation). Third, both students and future employers attach other values to the existing resources within the university. In the interests of their future careers, students attach more value to international and multicultural oriented programmes (e.g. international business studies or European studies) or to opportunities for student exchange. The increasing emphasis on the international orientation in institutional strategies illustrates the university's response to these changing demands. Also, universities operating within the national domain, which in many countries used to be characterised by high entry barriers for newcomers, did not have a stimulus for creating competitive advantage. Universities were often rather identical in their resource base, which predominantly was provided by government. The decreasing resource dependency on governments and the entry of new international competitors (which consequentially have a different resource-base) in the form of foreign or corporate universities has forced universities to retain or regain their positions in their environment through changing their resource base. The contemporary university thus goes through significant changes in the composition and appraisal of its resource base due to processes in its environment. This makes the assumption of heterogeneity of resources valid for the contemporary higher education environment. To retain a viable position, the university has to constantly optimise its resource base and adapt it to its objectives.

6.2.3   *Complementarity of Resources in higher education consortia*

The resource base of universities will obviously not always be optimal. In order to gain access to important sources of competitive advantage, universities can try to buy or internalise these resources (e.g. through the market or through acquisition). Universities, unlike multinational firms, are still mainly national institutions operating in a governmentally regulated environment, and therefore acquisition is usually not feasible. Attaining resources through the market might fail due to national regulations or due to the fact that the physical, human or organisational resources are simply not mobile and can not be transferred from one (national, cultural or organisational)

context to the other. Developing the resources in ones own university might be impossible because of inimitability. The university can decide to do without them, but if seen as vital and if imperfectly substitutable, this would give the university a relative disadvantage. What universities can do in such situations where the required resources are vital, imperfectly mobile, imperfectly imitable and where substitutes are not available, is attempt to form a relationship with other universities that do possess these required resources and would benefit from those resources possessed by the university in need. The benefit of this inter-organisational arrangement is access to previously unavailable resources and the joint development of new ones through synergy created by the complementarity of both knowledge and resources. To develop and exploit a competitive advantage, universities must possess resources that can be used to create inimitable and rare value for its students and other customers (Ireland et al., 2002). The increasing complexity of markets, due to rapid and accelerating globalisation, makes it difficult for firms and universities to have all of the resources necessary to compete effectively in many markets (Ariño & de la Torre, 1998). This access to complementary resources is seen as the most important motivating factor behind organisations establishing collaborative arrangements (Glaister and Buckley, 2000). Franchising for example, has become a common way of exchanging valuable and inimitable resources with one university gaining access to markets, facilities and local expertise while the other gains access to high quality educational programmes (and often reputation).

International higher education consortia are another example of such collaborative arrangements, albeit more complex due to the multilateral and comprehensive nature. Bilateral exchange agreements are rather easy to lay down in contractual obligations and consequently universities know what contribution they are expected to render to the arrangement. Working with multiple partners, in multiple disciplines and fields, for an unspecified period of time makes these mutual obligations less clear and available opportunities for cooperation less transparent. This makes the choice for partners in HECs a hard one, since the various contributions they render to the network are difficult to compare. HECs are thus based more on voluntary contributions and cannot be assessed on a one-on-one basis since the contribution of a particular university to a particular activity can be reimbursed or compensated by another university's contribution in other areas. Exchange obligations are therefore less clear cut than in contractual arrangements, which make social aspects like trust, opportunism and forbearance important in the cooperation process (Axelrod, 1984; Oye, 1986; Parkhe, 1993a). These factors in turn are dependent on the compatibility between the partners.

6.3   Type II Diversity: Compatibility

6.3.1   *Theoretical Antecedents of Compatibility in Inter-Organisational Arrangements*

The argument that compatible partners will be more successful in collaboration is related to Evans' (1963) 'similarity hypotheses': the more similar the parties, the more likely a favourable outcome. The homogenisation or convergence thesis, often

postulated in studies on globalisation (Bell, 1973; Williamson, 1996; Meyer et al., 1997) would suggest these similarities are becoming increasingly real between nations as well as organisations. Giddens (1984) and other social theorists have developed arguments about the disembedding of economic and social activity. These arguments focus on shifts in the scale and sources of embeddedness, where embedding in wider global networks supplants and redefines the embeddedness in local or national networks. Globalisation is often regarded as a new round of disembedding (Jessop, 1999) after the disembedding of institutions such as family, neighbourhood and community in which pre-capitalist production was embedded (Polanyi, 1944). It constitutes a process that strips individuals and organisations from their local structures and allows for restructuring at a more global level (Dacin et al., 1999: 341). As well as the convergence or homogenisation thesis, this argument means that individuals and organisations will be less attached to their local or national context, and therefore one might reason that inter-national differences would pose fewer problems in collaborative ventures. Studies on the obstacles in international management (e.g. Adler, 1983; Adler and Graham, 1989) and in international cooperation in higher education (e.g. Beerkens & Van der Wende, 1999) show that this process of convergence and disembedding – if present – is far from accomplished. The cultural, legal, political and social differences between countries, but also between organisations, still raise significant obstacles in cooperation.

While the resource-based view propagates an economic rational perspective on organisational behaviour, other theories look upon the university as an institution embedded in powerful cognitive, normative and regulative structures (Scott, 1995). In neo-institutional and embeddedness theories, the social, political and cultural environment is included. Instead of using the internal capabilities as the focus of analysis, emphasis here is placed on formal and informal patterns of behaviour that are collectively shared and agreed upon. Much of embeddedness research seeks to demonstrate that market exchange is embedded in larger and more complex social processes. This builds on Polanyi's notion of embeddedness that puts forward a perspective on the economy as "an instituted process of interaction between man and his environment, which results in a continuous supply of want-satisfying material means". Granovetter (1985) extended the notion of embeddedness with the insight that it refers to the on-going contextualisation of economic activity in social structures. DiMaggio (1990) criticises Granovetter's narrow use of embeddedness since he includes only social relations and structures. In DiMaggio's view, action and organisation is also embedded in culture and in the sharing of norms and values. Zukin and DiMaggio (1990: 14-22), categorise embeddedness as cognitive, cultural, political and structural. The institutionalist's claim is that these cognitive, cultural, political and structural pressures develop in organisational fields or national societies and lead to organisational conformity.

Berger and Luckmann's (1967) argument that social reality is a human construct and by-product of repetitive interactions, supports this claim. Organisational activities thus become institutionalised over time. This perspective proved useful in studying processes of organisational change in a national context, including change in higher education (e.g. Huisman and Meek, 1999; Huisman & Beerkens, 2000). Prior work has demonstrated strong linkages between organisational action and institutional

infrastructure of a region, state, or society. This is not only regards locational differences, but also that these locations are infused with different social norms and practices (Dore, 1983; Romo & Schwartz, 1995). Relationships are embedded in a broader set of socio-cultural forces that shape the nature of collective activity, individual organisational action and also opportunities and constraints (Dacin et al., 1999).

Organisations thus are embedded in norms, rules, culture and laws that have emerged in and around them. Their institutional embeddedness provides opportunities as well as constraints for their behaviour. On the one hand the context they are embedded in provides them legitimacy, clarity, relationships with their stakeholders etc. On the other hand, it places organisations in an 'institutional straitjacket' or an 'iron cage' (DiMaggio and Powell, 1983). This is what Uzzi labels the paradox of embeddedness: the same processes, by which embeddedness creates a requisite fit with the current environment, can paradoxically reduce an organisation's ability to adapt (Uzzi, 1997: 57). In this way, traditional 'core competencies' have the potential to become 'core rigidities' that inhibit subsequent adaptation and success (Leonard-Barton, 1992). It is the embeddedness of institutionalised behaviour that increases its likelihood of being maintained without question. This issue may become especially salient if organisations start operating internationally, since a requisite fit with the national environment can pose problems when organisations are forced to adapt to the international context. But it is also valid for intra-organisational practices, the routines, procedures and attitudes to work that have become institutionalised within a particular organisation. Such practices, procedures, attitudes and routines have become embedded into the organisation and might now be taken for granted. Obviously, if these become too rigid, they may cause tensions in inter-organisational collaboration. If perfect compatibility does not exist between partners in an inter-organisational arrangement, and this is inevitable, it is likely to negatively affect the performance of this arrangement (Parkhe, 1991; 1993b; Sarkar et al., 2001). Inter-organisational differences that can frustrate the performance of the collaboration are frequently related to the historical conformance of organisations to their national institutional environment and to organisational structures, procedures and routines that have emerged and have become institutionalised in this national context.

6.3.2   *Embeddedness of and in Universities*

Since contemporary universities have developed in an environment dominated by national regulations, cultures, norms and organisational rules, the way this context has impacted on them can not be ignored when they engage in international collaboration. In general, the perspective sketched above assumes that the institutional environment determines the university's internal structure and the behaviour of the actors in organisations. In this section we will assess which institutionalised structures and patterns of behaviour are characteristic to the university. We will particularly focus on those features that can exemplify the differences between various universities (and their individuals) operating in different institutional environments. Institutional theory suggests that institutionalised activities are the result of interrelated processes at the individual, organisational and national level of analysis.

At the national level, pressures emerge from governmental regulations that express societal and regional expectations and from cultural pressures. At the organisational level, organisational culture, shared belief systems and authority structures, expressed in organisational rules, maintain institutional structures. At the group level, norms, habits and unconscious conformity to traditions, by both administrators, academics and other professionals, account for institutionalised activities. These three levels form the roots for the embeddedness of the university in wider structures, and therefore can cause friction in international inter-organisational collaboration.

First the majority of universities have evolved in national settings (Scott, 1998). This can be relegated to their relationship with government and its relation to (national) society as a whole. The relationship with government mainly refers to the level of autonomy that governments confer on their universities, ranging from full state agencies to completely private institutions. The level of autonomy is assessed on various dimensions such as the level and method of funding, regulations about appointment and employment status of faculty, quality assurance and assessment mechanisms. The embeddedness of the university in the national environment is not only based on regulatory frameworks but also depends on historically emerged etiquette, manners and protocols. This concerns factors such as power distance, masculinity, uncertainty avoidance, and individualism (Hofstede, 1980). Also, national ideas about the role of the university and perspectives on excellence and equality materialise in a national historical context.

Structures and belief systems can also cultivate within organisations. Structure refers to the formal decision-making structures, internal allocation structures and regulations for promotion and career advancement opportunities. The organisational belief system refers to collectively shared ideas on how the university should operate. What is the collective opinion on applied versus theoretical research, contribution to society versus independence, teaching versus research, undergraduate versus graduate education, and national versus international orientation? These are attributes of the organisational culture (see Hofstede, 1994). Often a distinction is made between organisational culture and organisational climate. Organisational climate is similar to organisational culture except that it is more concerned with organisational practices than organisational values and focuses on a particular point in time rather than a historical perspective (Hellriegel and Slocum, 1974; Denison, 1996). Questions related to this issue are diverse. What is the central level influence on research and teaching subjects or methods? How is (student and faculty) participation arranged in the university? What opportunities does the university offer for self-development and training?

The last level concerns the individual context. Here we are interested in how particular inter-personal relationships and patterns of behaviour have become institutionalised within the individual's immediate environment. Groups can refer to all kinds of professional clusters, such as faculties, schools, institutes or offices, but also to groups that exceed organisational boundaries, such as individuals that adhere to specific disciplines, research traditions, professional associations, etc. Members of a research group for instance might have developed a shared notion on which methodologies

should be used in particular science, or on what topics should be treated in an introductory course on sociology.

The individual context possesses its own dynamics and beliefs, but is also embedded in the wider organisational or national context. Individuals therefore have multiple institutional affiliations on different levels. This also highlights the ambiguous environment in which individuals operate, where in some aspects they relate their behaviour to their national citizenship while in other instances they act as a member of the university or as a member of a particular professional community. All have developed routines, norms, and patterns of behaviour in the course of time. An obvious assumption than is, that these routines, norms, and patterns can create obstacles when collaborative arrangements are established with nations, organisations and groups that are not compatible with these institutionalised practices and ideas.

6.3.3 *Compatibility in higher education consortia*

We identified a minimal level of compatibility as one of the preconditions for collaboration to succeed. Compatibility implies an institutional fit between the partners. It is frequently believed that differences in the societal culture, national context, organisational culture and organisation's operating characteristics negatively affect collaboration (Parkhe, 1991, 1993c). The influence of a society's culture has a widespread effect on all aspects of life and therefore can affect cross-cultural interactions in many ways, especially if close individual collaboration is required to accomplish particular projects. Cultural differences can have a severe impact on crucial alliance processes such as problem solving, conflict resolution and negotiations. Direct behaviour and open confrontation in inter-personal interaction is less appreciated in cultures where 'loss of face' and embarrassment is to be avoided. In international business literature, many comparative and single-culture studies have appeared on the cultural implications of management behaviour in various countries (see Adler and Graham, 1989). Many of these studies supported the previously mentioned similarity hypothesis of Evans (1963). Another major obstacle in interpersonal communication is language (Graham and Andrews, 1987).

Incompatibility in national regulatory systems can affect international cooperation in higher education in several ways. Particularly in student and staff mobility many problems arise such as differences in educational systems, and in the legal position of students and staff (Beerkens, 2000; Van de Bunt-Klokhuis, 2000). Legal problems in the field of faculty appointments may also arise when separate organisations are established within consortia. Government restrictions on the establishment of new programmes can frustrate the launching of joint programmes. In this respect, when quality assurance indicators are set on a national level, international differences in quality standards can play an obstructing role. Also, differences in programme funding might hamper cooperation. Regulations on funding and differences in the financial leeway for universities can also play a role if particular facilities are shared or when joint investments are needed for new facilities. Not only legal factors can create incompatibility due to the national context. Universities are also embedded in a wide network of social and pragmatic relationships with intermediary organisations,

businesses, and other educational institutions. Universities have created a pattern of inter-organisational relations and have adjusted their conduct to suit the norms and values of administration and governance. Also, beliefs about equity and authority have developed through interaction with government organisations, intermediary organisations and other universities. Universities developed in such a context and adjusted their structures and also cultures to conform to these relations and beliefs.

The diversity of university structures and cultures can have an obstructing and moderating effect on the collaboration process. Some may be perceived as bureaucratic, others as collegial or as political (Baldridge, 1971) and even perceived dissimilarities of universities along these lines can cause friction. If members of bureaucratic partners collaborate with their colleagues who are members of more flexible universities, this might cause irritation. The same claim can be made for universities with dissimilar authority structures, where some of the individuals in the collaboration process have the authority to take decisions while others first need to report back to their superiors. University cultures have developed over the course of time and have their own history, perspectives and values. Often the university's culture is seen as a singular characteristic of a higher education institution. Bergquist (1992) however proposes a mixture of various cultures in universities, where a particular culture may be dominant but other cultures are always present and interact with the dominant culture. Over the course of time specific characteristics start to lead a life of their own and gain a form of common identity for the universities members. Managers, administrators and academics also have to some extent been socialised in such cultures and structures and consequently, dissimilarities in these can initiate conflict or misunderstanding.

However, studies have shown that a firm's overall organisational culture is not able fully to homogenise values of employees (Laurent, 1983), an argument which is especially relevant for academics in a professional organisation such as a university. Academics in particular, are also very much shaped by professional and disciplinary insights, norms and values. Even when cooperation in a particular field seems complementary at first sight, differences in sub-specialisation, theoretical orientations and methodological considerations may be incompatible in the actual process of collaboration. In addition, academics may well have completely different ideas about education methods and contents, which can cause friction in cooperation on the programme level. Individual academics however are not only organisationally and disciplinary embedded individuals, they are also distinctive individuals (Kogan, 2000). All have their own unique history and posses their own networks, which may but not often do coincide with the network of the university as a whole. When choosing partners institutions cannot take into account all individual international networks that the individual academics have established. If a personal network coincides with the university's network, the prospect for compatibility is likely to be more positive. Another point that needs to be mentioned here is that certain aspects of universities have always been international. This has led to a wide variety of dense international networks in which academics, administrators or university leaders are embedded. If such networks overlap with the institutional consortia, the university-level cooperation is likely to be compatible with the individual networks.

The above shows a wide variety – though all but exhaustive – list of examples of embedded structures, relationships, behaviour and beliefs that can cause friction in the process of collaboration due to incompatible partner features. We do however contend that not all dissimilarities will cause friction to such an extent that cooperation becomes impossible. As stated before, in many cases dissimilarities that seam to produce incompatibility can even be a cause for complementarity. Furthermore, networks can be managed and various mechanisms can be employed in order to cope with these incompatibilities.

6.4   Summary and Propositions

The levels of complementarity and compatibility have been proposed as the decisive factors in determining the performance of International higher education consortia. We have assumed that a university makes decisions on the acquisition of resources and that these decisions can be characterised as economically rational within the constraints of limited information, cognitive biases and causal ambiguity. According to this perspective, the university rationally identifies and acquires resources that are valuable, rare, imperfectly imitable and imperfectly substitutable in order to perform on an above-normal level (Barney, 1991, Peteraf, 1993, Amit and Schoemaker, 1993). On the other hand we observed that these universities and their members are embedded in a specific regulatory, social and cultural context. At the national level, public and regulatory pressures and sector-wide norms influence this context. At the university level, organisational culture, climate and politics make up this context; and at the individual level the context includes norms, values and professional and academic standards and routines.

In cooperation, these perspectives on the university can lead to tension between complementarity and compatibility between partners. In order for cooperation to be useful, partners need to be complementary in their resource bases, while, in order to successfully implement cooperative activities, universities need to have compatible backgrounds. This leads to the formulation of two basic propositions that are evaluated in the empirical part of the study:

Proposition 1:
> *The higher the level of complementarity between partners in a consortium, the higher the level of performance of the consortium.*

Proposition 2:
> *The higher the level of compatibility between partners in a consortium, the higher the level of performance of the consortium*

Chapter 7   Managing Cooperation in Higher Education Consortia

7.1   Two Perspectives, One University?

In the preceding chapter we have used both the resource-based view and embeddedness perspectives to explain organisational behaviour. Does this imply we are dealing with two different universities operating in different ways? Obviously it does not. We do not see the perspectives above as mutually exclusive. We argue that one university operates in different ways because it is situated in an ambiguous environment. Decision-makers take 'cognitive short cuts' (Johnson 1987: 45) or existing models that have a rhetoric legitimacy as their point of departure (Nohria and Gulati, 1994) and therefore decisions will not always turn out to be optimal. We do not abandon the assumption of intended rationality but argue that rational choices are based upon rational deliberations, balancing various (and sometimes contradictory) demands. For universities in the contemporary environment – typified by tight budgets and diverging demands in relation to effectiveness and efficiency – rational considerations include an assessment of the existing situation and the deviance of the proposed change with this existing situation.

Rationality based on efficiency and effectiveness therefore remains the foundation of the decisions. But, if projected changes diverge from existing structures, practices or norms, a reassessment will take place of the balance between the expected profitability and the level of congruence with existing practices. Decisions about effectiveness and efficiency on the one hand and congruence or 'fit' on the other, are like two sides of the same coin. If the anticipated change in the resource portfolio of a university is expected to deviate from the institutional environment in which it is embedded, strong resistance is likely, which in turn will undermine the effective and efficient use of such resources.

In addition for 'value-laden' institutions like universities, competitive advantage is not only about efficiency and effectiveness but also about legitimacy. Due to ambiguous and imprecise indicators for efficiency and effectiveness, the perceived legitimacy and social acceptance are valuable assets in attracting high-quality students, reputable staff and necessary funding. The congruence – or 'fit' – is particularly important for 'bottom-heavy', professional organisations such as universities. Decisions therefore come about through rational deliberation between expected advantage and expected resistance. The one side is emphasised by the resource-based view, the other by the embeddedness and neo-institutional perspectives.

Expected advantage in efficiency and effectiveness however is a factor that, especially in the for-profit sector, can be supported by various economic models and marketing research. Expected resistance is harder to capture in models and formula's and therefore is hard to estimate. If the assessment is inadequate, institutional pressures will mount. This point is lavishly supported by implementation research, also in the field of higher education (e.g. Cerych and Sabatier, 1986, Van Vught, 1989; Bartelse, 1999). It is assumed however that universities choose their partners on the basis of what they can offer, that is, on the basis of what resources are needed and who possesses such resources. The formal goals, missions and strategic plans of higher education consortia can support this (see Wächter, 2000).

This does not imply that complementarity is perfect and fixed. Limited information, cognitive biases and causal ambiguity cause sub-optimal complementarity and changes in the resource bases of participating universities lead to shifting balances over time. The compatibility-consideration however, seems to be less carefully incorporated in the decision to cooperate. These considerations are often based on rather elusive arguments such as locational similarities (e.g. all universities are located in the EU, all universities are located in capitals, all universities are located in a particular region) and/or abstract organisational similarities (e.g. all members are traditional universities, all members are innovative universities, all members are reputable research universities). In the evolution of these consortia, the crucial question than becomes: how does a lack of complementarity and incompatibility affect collaboration between partners and how can negative consequences be dealt with or avoided?

7.2   Strategic and Institutional Coping Mechanisms

Oliver (1997: 697) argues that a firm's sustainable advantage depends on its ability to manage the institutional context of its resource decisions. A firm's institutional context includes its internal culture as well as broader influences from state, society, and inter-firm relations that define socially acceptable economic behaviour. We can extend this argument for HECs by stating that a consortium will attempt to manage the institutional context of its resource decisions. Even so, the resource decisions are not fixed. The resources to be shared in HECs are expressed in the portfolio of activities and projects agreed upon by a consortium. When discrepancies emerge, coping mechanisms need to re-establish the complementarity in the consortium. If in the implementation and use of projects, partners characteristics appear to be incompatible, the consortium

needs to apply institutional coping mechanisms in order to reduce, avoid or solve problems due to dissimilarities, after which the endeavour to perform can proceed.

As we stated before, we assume that universities seek collaboration as a means to obtain strategic resources that it doesn't possess itself. Viable alternatives for obtaining those resources are to acquire them on the market, or in other words buy them, or to develop them – or alternatives for these resources – within the own university. These are not viable options in the case of strategic resources. They cannot be bought as they are immobile or too valuable, they can not be developed as they are inimitable and there is no alternative as they are not substitutable. When there are no further strategic assets or resources exchanged in the collaboration, complementarity disappears and new opportunities for exchange should be explored. If activities or projects are decided upon where there is ample opportunity for collaboration due to a complementarity between the partners, the parties involved can commence with the activity concerned but sources of *in*compatibility may appear on the scene. If this is the case, the consortium can react to these sources through employing institutional coping mechanisms. Such mechanisms are meant to solve problems that arise due to incompatibilities. This does not imply that differences that cause incompatibility need to be eliminated, but rather that the tensions that these differences produce need to be removed or alleviated. This, however, is where the diversity-paradox becomes apparent, since many sources of incompatibility are related to sources of complementarity. As seen previously, these are two sides of the same coin and therefore the nature of the game is to cope with incompatibility without corroding complementarity. The simple fact that other universities are embedded in other institutional environments is a major reason for universities to cooperate as the resources sought in cooperation have themselves developed in these particular environments.

The types of instruments that can be employed as strategic and/or institutional coping mechanisms will be explored in the empirical part of our research. Through means of a detailed analysis of the development of consortia over time we will try to identify different types or categories of strategic and institutional coping mechanisms. What we can say about coping mechanisms is that the necessity to employ them becomes apparent in the implementation phase. The approach to cooperation in this study means that full compatibility and complementarity *should* be aimed for in partner choice, formulation of objectives, establishment of the project portfolio and in during the implementation phase. However, it was also assumed that *total* compatibility and *total* complementarity would never exist in practice and therefore coping mechanisms need to be employed in order to increase performance. This sequential process is illustrated in figure 7-1: after objectives and projects have been established, these will be implemented. Inevitably in this phase, sources of incompatibility and incomplementarity will come to the fore and strategic and institutional coping mechanisms should be employed in order to enhance performance. Strategic coping mechanisms are then meant to solve the problems that arise due to incomplementarity, while institutional coping mechanisms should deal with obstacles that arise through incompatibility of the institutional backgrounds of the partners.

Figure 7-1: A sequential model of collaboration and coping mechanisms
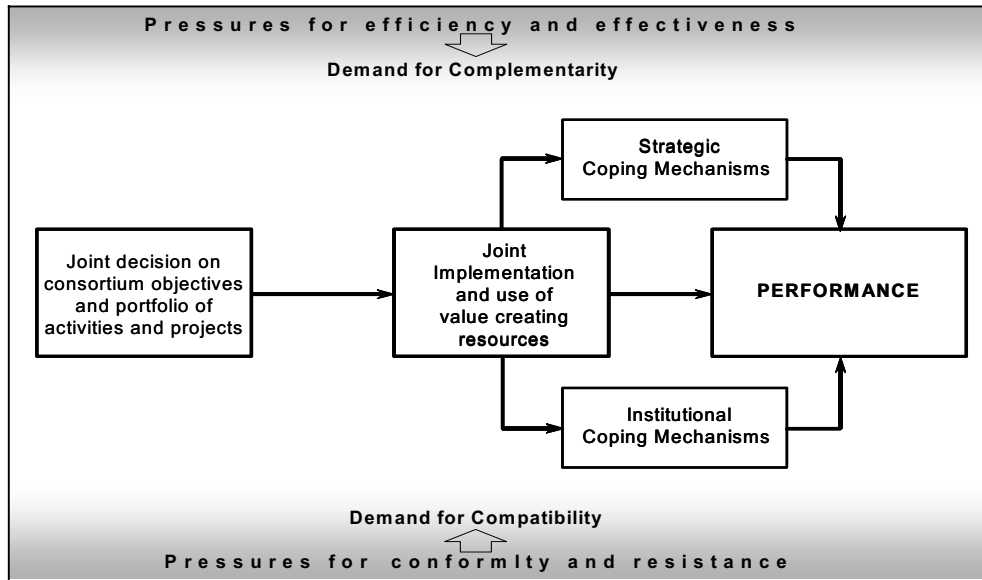
The inclusion of coping mechanisms in the model provides us with two additional propositions. The employment of coping mechanisms is meant to positively affect performance and therefore the propositions are formulated as follows:

Proposition 3:
> *In case of insufficient complementarity, consortia will employ strategic coping mechanisms in order to enhance performance.*

Proposition 4:
> *In case of insufficient compatibility, consortia will employ institutional coping mechanisms in order to enhance performance.*

These propositions are of an exploratory nature and we do not yet know what types of mechanisms are used in order to increase complementarity and compatibility in consortia. It is however expected that consortia are actively managed and that the consortia apply instruments to increase performance. It is this feature that distinguishes consortia from loose informal collaborative relations.

   If propositions 1 and 2 of chapter 6 are combined with propositions 3 and 4, we arrive at the explanatory model depicted in figure 7-2. The figure illustrates the positive relationship that we proposed between complementarity and compatibility on the one hand and performance on the other. The previous chapter however, added the notion of coping mechanisms. These mechanisms are assumed to intervene in this complementarity-compatibility-performance relationship.

Figure 7-2: An explanatory model of collaboration and coping mechanisms
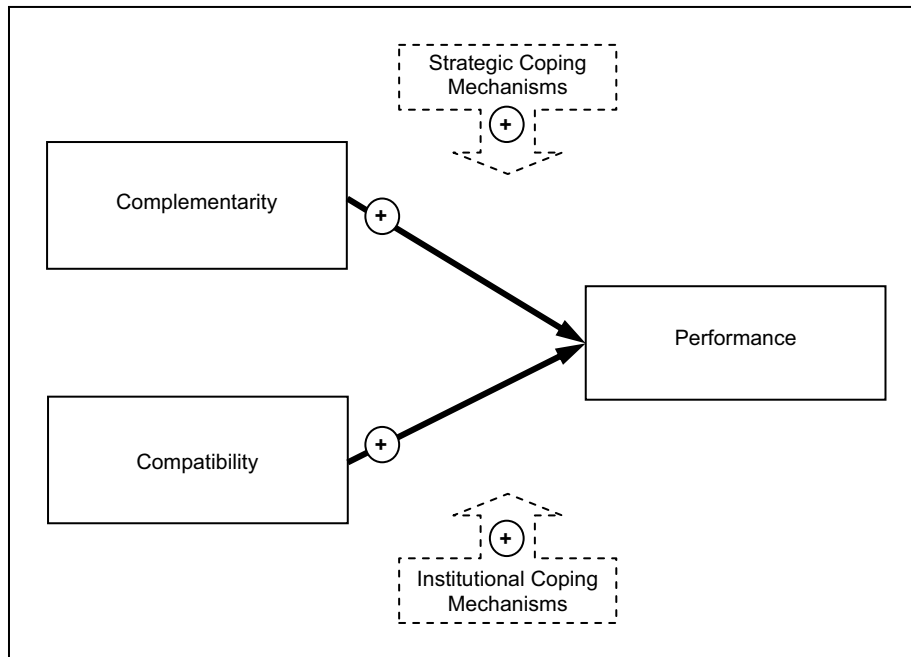
The propositions of chapter six and seven and the models presented in this chapter provide a 'lens' through which the process and performance of cooperation in higher education consortia is analysed. The following part of the study will explain the methodology of the empirical analysis and the way the variables in the models are operationalised.

PART III: OPERATIONALISATION & METHODOLOGY

Chapter 8   Research Design

8.1   Methodology

8.1.1   *Positioning of the Study*

In general, three purposes for social science research can be identified: description, exploration and explanation (e.g. Babbie, 1995). A study can, and usually does, have more than one of these purposes. We will shortly discuss these approaches since this study applies all three purposes, although the main objective is to explore and explain.

Descriptive studies are concerned with the characteristics of a particular situation or phenomenon. This approach generally does not predict hypothesised relationships between independent and dependent variables but describes a population or phenomenon on the basis of particular variables. In descriptive research, the questions that need to be answered usually begin with what, when where or how. We have applied this approach in chapter ten in order to specify our case studies.

The core of this study combines both explanatory and exploratory research. While descriptive studies observe particular situations, explanatory research addresses the question of *why* a particular outcome is observed. This type of research tests a theory by applying it to specific observations. Its main objective is to find relationships between variables. The findings of such a study will either support or contest specific hypothesised relationships between dependent and independent variables. Exploratory research on the other hand "is typical when a researcher is examining a new interest or when the subject of study is itself relatively new and unstudied" (Babbie, 1995: 84). If the objective is to explore a particular population or situation, one does not try to test previously established hypotheses but to develop them. The researcher wants to detect

relationships between variables, give them meaning and formulate a theory that is assumed to be valid for the entire population.

As stated in chapter 1, this study consists of five parts. The first is descriptive in the sense that it describes the current environment in which the study objects have emerged. In the second part we presented a theory on consortium performance related to partner characteristics. The theoretical model presented at this point will be tested in the fourth part of the study. We did however acknowledge that this theory, which draws from studies outside of higher education research, is provisional. The objective of the theory is therefore twofold. First, it provides us with hypothesised relationships between complementarity, compatibility and performance, which are later evaluated. The second function of the theory is to provide us with a lens through which the relation between the composition of a consortium and its performance can be explored. We thus want to explain and explore the concepts of compatibility and complementarity and see how and when they influence performance. But just as important is that we want to explore the instruments or coping mechanisms that consortia can employ to mitigate particular influences of composition on performance. This then provides us with a more thorough theory on cooperation in International higher education consortia that claims validity for the entire population.

8.1.2   A Comparative Case Study Approach

After having determined the purpose of the research, the next step is to decide on the way or method the study will be conducted. We are looking at cooperative activities of universities within consortia. In order to determine our research strategy, two main questions need to be answered: what is our unit of analysis and what method should be used to analyse this unit. The first question leaves us with two possibilities: analysing consortia or analysing universities (in consortia). The second question also has two distinct possibilities: analysing a (sample of a) population or analysing case studies.

The unit of analysis of this study is the consortium as a whole. This in fact is a logical consequence of our research question. If a choice was made in favour of taking the university as the unit of analysis, the emphasis would have been on internal process related to international inter-organisation cooperation. It was specifically stated that we want to detect the instruments available on the consortium level for improving performance of these consortia. The choice to look at the consortium as a whole enabled us to look at both partner characteristics and coping mechanisms employed by the consortium.

With regard to the methodology, we follow a case study approach combined with a comparative methodology. In chapter eleven, we will conduct in-depth case analysis of the four consortia. For these consortia we will test the propositions of whether higher levels of complementarity/compatibility actually lead to higher levels of performance. In these case studies the types of resources that constitute the most important sources of complementarity and the major sources of incompatibility are explored and we will look at how these relate to the performance of the consortia concerned. Also, we will analyse the development of the consortia in order to detect the application of strategic

and institutional coping mechanisms. The four case studies should provide preliminary answers to the research question, i.c. those features that are responsible for success or failure in higher education consortia. In chapter twelve, we will perform a comparative analysis of the four consortia. We will explore similarities and differences in performance, complementarity and compatibility and in the employment and success of coping mechanisms and compare them with the different contexts in which the consortia operate. This enables us to identify contextual variables that explain the similarities and differences in the consortia and/or the success and failure of specific coping mechanisms. The aim of this comparative analysis is to refine the propositions on the relationships between performance, complementarity and compatibility. This provides us with answers to questions such as: why do specific sources of complementarity lead to higher performance in some consortia and not in others? Why are similar coping mechanisms more successful in some consortia than in others? In what type of consortia are legal obstacles most problematic? Et cetera.

By using a case-study approach, a researcher can focus on both the phenomenon and the context in which it exists. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researchers have used this research method across a variety of disciplines. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. Yin (1984: 23) defines a case-study as "*an empirical enquiry that: investigates a contemporary phenomenon within its real life context; when the boundaries between the phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.*"

Using a case study approach rather than surveying a sample of a population has several advantages. Case studies enable us to capture reality in a detailed manner. Furthermore the approach is useful for developing and refining concepts for further study and it enables us to relate context to process and outcome, without having to predetermine all relevant aspects of this phenomenon. Shortcomings of the approach are that it can not generalise findings statistically and the researcher has no control over independent variables. Often, the terms 'case study research' and 'qualitative research' are used interchangeably. According to Yin (1981) this is related to the frequent confusion regarding types of evidence (e.g. qualitative or quantitative) and research strategies (e.g. experiments or case studies). The case study method allows for the inclusion of a variety of data sources. Through the use of case studies, the subjects of the research are investigated within a real-life context (Yin, 1984). Case study research does not provide the means to prove ideas or test hypotheses so much as it allows for exploration of "one or two issues or processes that are fundamental to understanding the system being studied" (Feagin, Orum and Sjoberg, 1991: 153). In this study we will follow a comparative case study approach. We will compare four higher education consortia and analyse how the composition of the consortia in terms of complementarity and compatibility is related to the performance of the consortia.

8.1.3   *Selection of the Case Studies*

Our first and foremost criterion for the selection of case studies is that the consortia fall within the scope of the dimensions identified in chapter four. All consortia need to have restricted membership and exist of three or more universities (and only universities); they should be engaged in activities on multiple themes and in multiple disciplines; and these activities should have an indefinite life span. These dimensions formed the basis of the first selection of arrangements, made on the basis of literature (e.g. Wächter, 2000) and web sites. The other dimensions are less apparent from the outside. The criterion that the consortium should be based on coordination (as opposed to informal cooperation on the one hand and amalgamation on the other) was applied by only incorporating arrangements that were based on official agreements and had an extra administrative layer above the universities. The actual intensity of cooperation is something that will arise from the in depth analysis of the cases, the possibility that the consortia would ultimately vary on this dimension was accepted (although within the limits of informal cooperation versus amalgamation). Another selection criterion is also hard to observe without a more in depth analysis: the representation of interests. This dimension distinguished consortia from associations in our typology. We concluded that the missions of the selected consortia should at least include objectives that related to individual interests (instead of solely on collective interests of for instance universities in general, specific types of universities, specific disciplines, etc.). It was also accepted that there would be a possibility of variation on this dimension, where some consortia might ultimately seem to have more additional collective interests than others. We have also deliberately chosen for a variety in the amount of members.

One additional criterion was related to location. Europe has developed a rich tradition in higher education cooperation since the first European programmes of the 1970's. It was therefore decided to take the European region as a focus. However, to avoid a full European bias one consortium from another region was included. In addition to the criteria listed above, the level of political regional integration formed another criterion. Since ASEAN is a successful example of regional integration (see chapter three) Southeast Asia was chosen as an additional region. Additional practical criteria were that the secretariats or offices had to be willing to participate and provide the necessary information.

This ultimately led to the selection of four consortia: the ALMA network, consisting of four universities in the Meuse-Rhine Euregion (a region covering parts of Belgium, Germany and the Netherlands) and established in 1990; the European Consortium of Universities, consisting of ten Western European universities and established in 1997; The Coimbra Group, consisting of 39 universities from the whole of Europe (including Central and Eastern European countries), established in 1987; and the ASEAN University Network, consisting of 17 universities from all ASEAN member countries, established in 1995. Members of the consortia are listed in Appendix I and a more elaborate description of the consortia is given in chapter ten.

8.2 Data Collection and Response

8.2.1 *Data Collection and Population*

The study makes use of three types of data collection: documents, interviews and questionnaires. Documents and interviews are used for tracing developments on the consortium level. Through surveys we have tried to uncover the perceptions on the consortium and its activities from the viewpoint of a wide variety of university employees involved in the consortium activities.

Documents were used to describe the consortia and their activities and their changes over time. The documents that are analysed can range from newsletters, strategic plans, yearbooks, websites and other official documents from the networks concerned (for a list of the documents used: see Appendix VII).

Interviews were semi-structured, meaning that questions were asked about a small number of specific topics. This gave the interviewees ample time for elaboration on specific topics they considered relevant. The interviewer only intervened when further details were required or new topics needed to be addressed. The persons interviewed were one or two people from each consortium, who could provide a broad overview of the activities and changes within the consortia. These persons held a central position in the consortium, such as chairman of the board, central coordinators, director, or head of the secretariat. The main condition was that they occupied a position that could be seen as formally independent from a particular university, but associated with the consortium as a whole. The main focus in the interviews was on the changes that had occurred in the consortia since their founding and the measures taken on the consortium level to solve particular problems related to incompatibility or incomplementarity.

For the survey, determining the targeted population was more complex because the exact magnitude and composition of the population was not known in advance. The intention was to approach all possible members of a participating university that were or had been involved in the consortium activities. To find this population, different sources were used, in cooperation with the respective secretariats of the consortia. Lists provided by the secretariats and by central coordinators of consortium activities were used and supplemented through secondary sources like documents or web sites.

The use of web sites and documents, but also the lists that were provided, brought about a risk with regards to the response rate. Since every person that was listed either in a database provided by the consortium or on a document or web site of the consortium was approached, there was a considerable possibility that the response rate would be relatively low for two reasons. First, the lists or documents did not always state to what extent a person was involved in the activity or activities concerned. Second, not all lists and documents were up to date, so people might already have left the institution in question. Since it was not feasible to verify the involvement of all persons and because we wanted to reach a maximum number of persons, we decided to circulate the survey among as many people as possible and take into account that this could result in a rather low response rate.

The sources used differed for the various networks, depending on the availability and comprehensiveness of the acquired databases. In the case of ALMA we gained access to the address database of the ALMA Office in Maastricht. From this database we extracted all addresses of members of the four participating universities and disseminated a questionnaire to all persons (persons of third parties like chambers of commerce, political institutions, business and public institutions were excluded). For ECIU we, in cooperation with the ECIU Secretariat in Aalborg, contacted all local representatives of the ECIU Universities and asked them to provide a list of persons involved in ECIU activities. Because most lists we received only contained a few names for each university, we have tried to expand the list through exploring documents and websites of ECIU and through the web sites of the member universities. All names we came across in these documents or web sites were sent a questionnaire. Although ECIU had 11 members at the time the questionnaire was issued, only ten have been incorporated in this research since one university was not willing to participate. A similar approach was used for the Coimbra Group, although the initial list here came from the Brussels Office of Coimbra. This – already comprehensive list – was again supplemented by names that appeared in documents and web sites. For the ASEAN University Network we also received a list with the name of key persons in the network. Furthermore, the AUN Secretariat provided a database with all people involved in AUN activities since its foundation. Through searches of web sites of the participating institutions we have checked whether persons were still employed by their universities. In cases where it was clear that they were no longer a member of that university we have removed them from the list. Since parts of the database were over five years old, we have anticipated a lower response rate for the ASEAN University Network. These databases were used to survey the entire population of persons involved in ALMA, AUN, ECIU and Coimbra activities, a population estimated at 654 persons. Therefore, 654 questionnaires were distributed over 68 universities dispersed over 30 countries. The distribution over the consortia is given in table 7.

Table 8-1: Dissemination of questionnaires and interviews

Network	# universities approached	# sent questionnaires	# interviews
ALMA Network	4	98	2
ASEAN University Network	17	214	3
Coimbra Group	37	216	1
ECIU	10	126	2

8.2.2 *Response to the Questionnaire*

All questionnaires were first circulated in October 2002 and a reminder was sent in November 2002. The respondents were given the opportunity to return the questionnaire until January 17th, 2003. In the reminder, people were also asked to send a letter or email if they didn't consider themselves the right person to respond and provide an explanation for this. As from of February 1st 2003, we received a total of 188 completed questionnaires and 75 letters or emails explaining why they had not filled out

the questionnaires and letters returned because the person concerned was no longer a staff member of the university.

The question is then why the other 391 did not return the questionnaire. Since from the 75 returned letters or emails, only 5 were actually part of the research population[10], it is plausible to say that a substantial part of the non respondents did not return the questionnaire because they were either no longer active in the university or in the consortium concerned, or that they were not in the right position to fill out the questionnaire. This means that at least 70 names from the database of addresses were not appropriate for the study, so the actual population would be at most 654 minus 70 or 584. The return of 188 questionnaires would then mean a response rate of 188 of 584 or 32.2%. However, looking only at the actual respondents, it might be said that 70 out of 263 (188 plus 75) or 26.6% of the address database was outdated. If we would extrapolate that for our total population of 654, this would mean that the 26.6% of the database was outdated as well, which means the actual population would be only 73.4% of 654 or 480. In that case our response rate would be 188 out of 480 or 39.2%. It is therefore safe to say that our response rate is at least 32.2%, but will probably be more in the range of 40%.

If the dissemination method of the questionnaires is taken into account, this response rate could be sufficient in terms of a reasonable representation of reality, as long as the response rate is not biased and unevenly spread over the consortia. The respondents however were evenly distributed over the four HECs, as can be seen in table 8.

Table 8-2: Response to the questionnaires

Network	ALMA	AUN	Coimbra	ECIU	TOTAL
Questionnaires disseminated	98	214	216	126	654
Respondents	27	55	64	42	188
Returned message - non population	19	19	14	18	70
Returned message - population	2	1	1	1	5
Minimum % of database outdated	19,4%	8,9%	6,5%	14,3%	10,7%
Minimum response	34,2%	28,2%	31,7%	38,9%	32,2%
Likely % of database outdated	39,6%	25,3%	17,7%	29,5%	26,6%
Likely response	**45,6%**	**34,4%**	**36,0%**	**47,3%**	**39,2%**

8.2.3 Interviews

Although the questionnaires focused on the experiences from the perspective of the partner universities, the interviews concentrated on the consortium level. The interviews had two major objectives: to fill in the gaps in information from the documents analysed and to explore the coping mechanisms employed by the consortia.

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[10] These five did not return the questionnaires because of a lack of time, a lack of interest, etc.

The people interviewed therefore needed to be in a position that would provided them an overall view on the consortium instead of being a representative from a particular partner university. Due to the different structures of the four consortia, different people were interviewed. In the case of ECIU we interviewed the former Chairman of the Executive Board who held that position from 1997 until 2002. Also, we interviewed the former coordinator of the ECIU Secretariat. Coimbra has a central office in Brussels where the Coimbra activities are coordinated and organised and the director of the Office was interviewed. ALMA operates from a central office as well, located in Maastricht. We interviewed both the current ALMA coordinator and the former ALMA coordinator who held office until 2000. AUN's secretariat is located in Bangkok in Chulalongkorn University and has been led by the same person since the establishment of the network. We interviewed the Executive Director of the secretariat and also the former chairman of the Board of Trustees of AUN who occupied that position from 1997 until 2001. In addition, we interviewed a senior officer responsible for AUN at the Bureau for Functional Cooperation of the ASEAN Secretariat in Jakarta. All interviews lasted about one to one and a half hours.

8.3   Data Analysis

As previously stated, the purpose of this study is both explanatory and explorative. We will conduct 'within case' analysis as well as 'cross case' analysis. The explanatory part mainly concerns the evaluation of the compatibility and complementarity propositions while the explorative part is focused on the exploration of coping mechanisms that can be employed in consortia. To provide the reader with the necessary information on the consortia and their contexts, we first provide a description of the four HECs in chapter ten.

In the 'within case analysis', performed in chapter eleven, we will focus on the four HECs separately. Here we will take a closer look at the complementarity-compatibility-performance relationships for each consortium and whether different consortia are based on different sources of complementarity and compatibility. Also in this chapter we will attempt to detect the mechanisms employed by consortia to manage incompatibility or incomplementarity and see how they can be applied in general and to what extent they are context specific.

These within case analyses provide the input for the comparative analysis. In the comparative analysis of the four cases we will compare the levels of performance, complementarity and compatibility for the four consortia and identify explanations for the differences in the relations between these concepts. Also we will look at the different ways in which coping mechanisms have been employed and what factors account for the effectiveness of such coping mechanisms.

Chapter 9   Operationalisation of the Core Concepts

9.1   Introduction

The propositions and theoretical models we presented in the previous part of the study contains four basic variables: performance, complementarity, compatibility and the employment of coping mechanisms. In the empirical part of the study we evaluate the validity of the four propositions and analyse the applicability of the models pictured in figures 7-1 and 7-2. The dependent variable in our research is the performance of higher education consortia. In the studies of consortia and alliances in the business sector a wide range of performance indicators have been used to express the success or failure of such arrangements. In the next section these approaches will be explored and our performance indicators will be presented. In the two subsequent sections we turn to the concepts of complementarity and compatibility. In these sections we will first indicate how we will measure the level of complementarity/compatibility for the consortia. Then we will indicate how we further explore these concepts, in order to see what sources of complementarity/compatibility mostly affect performance for what type of groups within the university. In section five we will specify how to identify coping mechanisms. In every section we will relate the variables to the questions we posed in the questionnaires that were issued to participants of the four consortia. Section six will present the other control variables in the study and the final section will present an overview of the variables and their measurement.

9.2   Consortium Performance

9.2.1   Measures of Consortium Performance

Establishing performance measures for inter-organisational combinations can be approached from various ways. In the field of (international) business, various measures have been applied in assessing performance such as survival (Killing, 1983; Geringer, 1991), duration [Harrigan, 1985; Kogut 1988) or instability (Gomes-Casseres, 1987). In several studies, researchers have also applied financial and/or other quantitative objective measures. According to Geringer and Hebert (1991), such financial and objective measures embody potential limitations that are critical to the evaluation of performance of joint ventures, alliances or consortia. Often such results are not available since they are not reported. Also they frequently fail to adequately reflect the extent to which a consortium has achieved its short- and long-term objectives. For the case of higher education consortia, both these objections apply as well. In addition, measurement is further complicated because these groups are usually multi-point consortia, with many partners involved in a wide array of activities. Another important objection against using objective data is that these consortia have very different goals and strategies, which makes comparative research difficult or impossible. Different consortia can not be compared with each other on the basis of objective quantitative measures (e.g. number of students or staff exchange, number of shared facilities, number of joint programmes or publications) if they operate in different segments of the field of international higher education. For instance, the number of students exchanged between partners in a consortium that is heavily focused on educational cooperation can not be compared to the number of joint research publications in a research focused consortium.

To sidestep these problems, perceptual measures of parent satisfaction can be used. These can be determined through single-item measures (e.g. to what extent has the network met the expectations of your university?) or they can be based on multiple questions on a limited number of individual dimensions of the network. The choice between using objective or subjective criteria depends mainly on the research context and on pragmatic conditions. For the case of business combinations in the US, Geringer and Hebert (1991) have established a significant correlation between objective and subjective performance measures. Whether this is likely to be the case for higher education consortia is difficult to say and will not be measured in this study. Since this study will be comparative in nature and since the consortia have a strategic long-term scope[11] with a multiplicity of objectives that can not be evaluated on the basis of common objective measures, we have decided to evaluate a consortium on the basis of multiple subjective performance measures. An additional reason for this choice is that we are also interested in the different perceptions of different groups within the university. Measuring perceptions for different groups enables us to analyse the influence of an actor's position on the evaluation of performance.

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[11] Measurement on the basis of definite results is problematic for these networks, since they are relatively young compared to the timeframe of many of their objectives.

9.2.2   *Subjective Performance Measures*

Even after the choice between objective or subjective measures is made, consortium performance can be established in different ways. We have chosen to use different measures since the literature on alliance performance displays a high level of disagreement on what effective network performance means. In a review of alliance literature, Das and Teng (2002) find two distinct loci of alliance performance: the alliance itself and the partners forming the alliance. We have tried to make this distinction by discriminating between *the attainment of consortium goals* as a measure of consortium performance and the *impact on the individual partner universities* as a measure of performance for each partner of the network. Another measure for network performance is neither associated with the partners nor the network but with relational attributes (Das and Teng, 2000). We looked at four attributes expressed in relational performance: communication, division of authority and responsibility, coordination and commitment. The level of satisfaction of the respondents with these four items was measured for both internal relations (relations within the university) and external relations (relations between the universities). Consortium performance, partner performance and relational performance are all based on the assessment of various variables by actors involved in network activities.   This produces three types of performance indicators: consortium performance; individual performance and relational performance.

Consortium performance measures the performance for the consortium as a whole. For this indicator, we evaluate the importance and the attainment of the formal goals of the network concerned. Since these multi-point consortia have formulated a wide range of objectives, which may vary in importance, we have weighted the values according to the priority assigned by the individual respondents. These weights range on a five point scale from 0.2 for low priority to 1.0 for high priority[12]. The attainment of the objectives is measured on a five point scale ranging from 1 (not satisfactory) to 5 (very satisfactory). In order to measure Consortium Performance, we weighed 'goal attainment' (ga) according to 'goal priority'. Consortium Performance is thus the product of (gp) and (ga). First, this product is calculated for each individual respondent for the total amount of goals of the consortia in which he or she is active. The Overall Consortium Performance for the consortium as a whole represents the mean of the value of the individual respondents (see equation 1).

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[12] We have chosen to use a range of 0.2 to 1.0 (rather than 1 to 5) since this provides us with Consortium Performance as a performance indicators with a maximum of 1 x 5 = 5 (rather than 5 x 5 = 25). By attaching these weights, all our core variables will have a possible maximum of 5. This makes it easier to compare the variables, but it also enables us to compare Beta Coefficients in regression equations.

Equation 9-1: (Overall) Consortium Performance

$$\text{Consortium Performance (CP)}_j = \frac{\sum (gp_i * ga_i)}{O}$$

$$\text{Overall Consortium Performance} = \frac{\sum CP_j}{N}$$

CP_j = Consortium Performance according to respondent J

gp = goal priority [0.2....1.0]

ga = goal attainment [1...5]

i = objecvtives (1,...,n)

O = number of consortium objectives

N = number of respondents for Consortium

A fictitious example for the Coimbra Group could then be that respondent X rates objective number one ("Facilitation and stimulation of student mobility within Europe") as having a high priority (1.0) and also thinks that the objective has developed very satisfactory (5). For this particular objective the performance score for this respondent would be 5.0. If this is repeated for all eight objectives of the Coimbra Group, the mean would indicate the Consortium Performance according to respondent X. If again the mean is taken for all 64 respondents of the Coimbra Group, we get the Overall Consortium Performance for this consortium as perceived by the respondents.

The problem with this performance indicator is that it is composed on the basis of consortium-specific objectives: each consortium has its own type and number of objectives. For the 'within case analysis' this does not constitute a problem. The comparative analysis of the case studies however needs a performance indicator that allows for comparison to be made between the consortia. The overall CP enables us to do this, but it would take away the underlying information on the scores for different types of objectives. In order to be able to compare consortium performance on the basis of different types of objectives we have classified the objectives of each of the consortia into four groups: objectives related to education, objectives related to research, objectives related to community services and external relations, and objectives related to organisation and management of the universities. The level of performance of for instance education related objectives would than be the mean of the performance levels for the objectives that fall within that category. The categorisation of objectives is given in appendix II.

The second measure - 'Individual Performance' – is based on a number of pre-established areas that may be affected by the cooperation. Individual here refers to the individual university cooperating within the consortium. In order to obtain a general idea about the way cooperation affects the university, several areas that are seen as core activities of the university have been identified. The university in this sense can be seen both as a social educational institution and the university as an organisation that – like

any other organisation – needs to deploy its resources in an optimal way. We will first look at what are generally considered the three core functions of universities: knowledge transmission (teaching), knowledge creation (research), and knowledge application (public service or outreach) and assess the influence that cooperation in the consortium has had on these three functions. Several studies have shown that internationalisation indeed does have an impact on teaching and education, for instance on teaching methods (e.g. Griffiths et al., 1998) or on curricula (Van der Wende, 1996). Van der Wende however also points out that the relation between quality and internationalisation can be congruent, but that also tensions can emerge (Van der Wende, 1999). According to De Wit (2002: 96), international cooperation in research is already mainstream and internationalisation is already integrated in research. One can thus also expect that the quality of research will be influenced by consortium membership. The third core function relates to the outreach to the regional (in narrow terms) community. Here it is harder to place a direct link between consortium cooperation and this function. The immediate university community is however a target group in (some activities in) some of the consortia in this study and therefore the impact on outreach activities and the benefits for the region will also be assessed.

The selection of the other five areas is based on previous studies on internationalisation and international cooperation and the impact on universities. The first is the impact of cooperation on the organisation and management of the university. De Wit (2002: 97) presents the argument that internationalisation can strengthen the core structures and activities of an institution. Thullen et al., (2002) even find that international education administrators or international relations offices play a crucial role in the change of an institution's identity and in the shaping of strategic plans. It is therefore also likely that membership in international consortia will in some ways have an impact on the organisation and management of the university. Another organisational attribute that can be affected by international cooperation is the university's reputation and status. In an Australian study, Pittaway et al., (1998: 68) find that a broad base of international students improves and spreads the reputation of the university. Also De Wit (2002: 97-98) and Davies (1995: 12) identified a relation between international cooperation and the profile or externally perceived image and identity of the university. Although this does not have to be an objective quality indicator, it is obviously an issue that is (subconsciously) important in the minds of many students, staff and external stakeholders in the university.

An area that has probably been most studied in this respect, is the impact of internationalisation on the competencies of graduates. These studies mainly focus on the effect of studying abroad (e.g. in the framework of ERASMUS) on competencies or early careers (e.g. Maiworm & Teichler, 1996; Opper, Teichler and Carlson, 1990). Even though we can only ask about the impact on the competencies of graduates from the perception of staff, this impact should be taken into account. The membership of a consortium or the engagement in other inter-university arrangements can also affect the input side, through increased (or decreased) student enrolments. Consortium membership and the accompanying 'international allure' could benefit the attraction of fee paying students. A final affected area is the university's access to funding sources. According to Davies (1995: 9), internationalism raises many questions for university

financial management and may generate income from a wide range of international sources such as project grants, overseas consultancy, research projects and technology transfer. The chance of participation in such projects often increases if one tenders together with international partners. In many cases, international networking is even a requirement to be eligible for the granting of such projects.

On the basis of the arguments and studies above, we have established the following areas that are likely to be affected by international cooperation:
- [aa_1] The quality of teaching: how has the consortium affected the quality of teaching within the university?
- [aa_2] The quality of research: how has the consortium affected the quality of research within the university?
- [aa_3] The socio-economic development of the region: how has the consortium affected the socio-economic development of the region in which the university is located?
- [aa_4] The quality of organisation & management: how has the consortium affected the organisation and management of the university?
- [aa_5] The competencies of the graduates: how has the consortium affected the competencies of the graduates that leave the university?
- [aa_6] The reputation of the university: how has the consortium affected the reputation of the university?
- [aa_7] The enrolment of students: how has the consortium affected the number of students enrolled in the university?
- [aa_8] The university's access to funding: how has the consortium affected the university's access to funding resources?

For each of these affected areas ($aa_{1...8}$), the respondents were asked how cooperation has affected this area in their university (assigning a value between -1 for negatively affected and 1 for positively affected, on a five point scale). The measure of Individual Performance is the mean of the assessment of the effect of cooperation on these eight areas. This again constitutes the Individual Performance according to each of the respondents. The Overall Individual Performance is the mean of all respondents of that particular network (equation 2).

Equation 9-2: (Overall) Individual Performance

$$\text{Individual Performance (IP)}_j = \frac{\sum aa_i}{8}$$

$$\text{Overall Individual Performance} = \frac{\sum (IP)_j}{N}$$

$(IP)_j$ = Indvidual Performance according to respondent j

aa_1 = affected areas (1...8)

N = number of respondents for Consortium

In addition to measuring the effects of the cooperation, one could claim that the satisfaction with the relations in the consortium is also a measure for performance. Human factors appear to have remained unconsidered or, at worst, dismissed in the alliance research tradition (Cartwright and Cooper, 1989). Many alliances and consortia fail to meet expectations because little attention is given to nurturing the close working relationships and interpersonal connections that unite the partnering organisations (Hutt, et al., 2000). In order to assess relational quality Relational Performance is measured by four aspects of interaction: communication, division of authority and responsibilities, coordination and commitment. The quality and extent of communication is seen as an important determinant of relational quality in inter-organisational arrangements (e.g. Hutt et al., 2000; Mohr and Spekman, 1994). To realise the potential benefits of collaboration, effective communication between partners is crucial (Cummings, 1984). Communication is deemed to be a key indicator of the partnership's vitality (Mohr and Spekman, 1994, p.139). Communication also plays a role in the clarification of the different roles and responsibilities that partners in a consortium have. It is likely that a relation improves when people know what to expect from each other and know in which field the other has authority. Coordination is important to relational quality since it enables management in the rather ambiguous authority structures of consortia. As discussed in chapter four, this additional coordinating unit operating 'above' the member universities is what distinguishes consortia from informal cooperation. The fourth item, commitment, refers to the willingness of the partners to exert effort on behalf of the relationship (Porter et al., 1974; cited in Mohr and Spekman, 1994: 137). This extends beyond the formal agreements and incorporates an emotional bond into the success of the consortium.

Although above we discussed the relational items for inter-organisational processes, these processes are also apparent in intra-organisational processes. The extent of communication about activities, the clarity in the division of responsibilities, the effectiveness of coordination and the level of commitment are all assessed both for the interaction within and between the universities. This provides us with eight relational indicators:

- (ri_1) Communication within the university (on consortium strategies and activities).
- (ri_2) Communication between the university and the partners (on consortium strategies and activities).
- (ri_3) Clarity of the division of labour and authority within the university (on consortium activities).
- (ri_4) Clarity of the division of labour and authority between the university and the partners (on consortium activities).
- (ri_5) Effectiveness of the internal coordination of consortium activities.
- (ri_6) Effectiveness of the coordination of consortium activities on consortium level.
- (ri_7) Strength of commitment on consortium activities within the university
- (ri_8) Strength of commitment on consortium activities of other partners

The level of relational performance will be established by the means of these individual levels of performance. Also here, the Overall Relational Performance is calculated for the means of all respondents of one particular consortium (equation 3).

Equation 9-3: (Overall) Relational Performance

$$\text{Relational Performance (RP)}_j = \frac{\sum ri_i}{8}$$

$$\text{Overall Relational Performance} = \frac{\sum (RP)_j}{N}$$

$(RP)_j$ = Relational Performance according to respondent j

ri_i = relational indicators (1...8)

N = number of respondents for Consortium

9.3   Measuring Complementarity

According to the resource-based view, resource heterogeneity among organisations can be sustained over time because strategic resources are imperfectly mobile, imitable and substitutable. We look at such resources in participating universities and try to identify to what extent participants perceive a 'resource fit' among the different partners in a network. The focus is on resources or characteristics that comply with the criteria of imperfect mobility, imitability and substitutability and that can be accessed through alignment within an international, inter-organisational setting. Hunt and Morgan (1995) view resources as the tangible and intangible entities that enable a firm to efficiently and/or effectively produce a product that has value for some market segment or segments. In addition to tangible and intangible resources, we will look at one extra category. Because of the inter-national character we will also look at specific locational or national resources such as the proximity of the partner universities (in relation to the focal university), the country in which the partner university is located, the language used in the partner university, and the student market served by the partner university. These characteristics are not so much situated in the university but are attributed to that university because it is situated in a specific location. Tangible resources that have been taken into account include physical resources (infrastructure and facilities), technological resources (level of ICT use) and financial resources of the university. For intangible resources we have selected the quality of human resources (expressed in quality of teaching, of research and of management) and organisational resources such as the external relations of the university and the reputation of the university. Summarising, twelve sources of complementarity will be assessed:

- r_1 Proximity of a partner university
- r_2 Country of a partner university
- r_3 Access to new student markets
- r_4 Language of instruction in a partner university
- r_5 Financial resources of a partner university
- r_6 Physical infrastructure and facilities of a partner university
- r_7 Academic quality in research of a partner university
- r_8 Academic quality in education of a partner university
- r_9 Management and leadership quality in a partner university
- r_{10} The existing external relations of a university
- r_{11} The reputation of a partner university
- r_{12} Standard of the use of ICT in a partner university

Measuring complementarity is based on the assessment of two related questions: the importance of the resources identified above and the extent to which these resources are available in the network. Importance of resources (ir) constitutes a weight for the presence of resources (pr) in the consortium and is measured on a five point scale ranging from 0.2 (not important) to 1.0 (very important). The presence of resources is measured on a five point scale, ranging from presence within none of the partner universities (1) to presence within all of the universities (5). The level of complementarity for each of the resources for each of the respondents is than given by the product of (ir) and (pr). In a case where very important resources are amply present, complementarity for that resource would be 5.0 (1.0 x 5). For a case where the resource has mediocre importance (ir = 0.6) and is moderately present (pr = 3), the value of complementarity would be 1.8. The level of complementarity for all of the resources is then given by the mean of these products and Overall Complementarity will be assessed on the basis of the mean for all the respondents in a consortium (equation 4)

Equation 9-4: (Overall) Level of Complementarity

$$\text{Complementarity (Cpl)}_j = \frac{\sum (ir_i * pr_i)}{12}$$

$$\text{Overall Complementarity} = \frac{\sum (Cpl)_j}{N}$$

$(Cpl)_j = $ *Level of complementarity according to respondent* j

ir_i = *importance of resource i*

pr_i = *presence of resource i*

$i = $ *resources (1...12)*

$N = $ *number of respondents for consortium*

In the comparative analysis, apart from looking at the overall level of complementarity of the consortia and its relation with performance, we will also explore the various sources of complementarity. We will explore whether different sources of complementarity are used in different consortia, whether organisational resources are differently assessed as locational resources, or whether different groups within the universities value resources in different ways.

9.4   Measuring Compatibility

In our elaboration on the importance of the compatibility of partner backgrounds on cooperation, the term embeddedness played a crucial role. The fact that universities have not evolved in a vacuum but are embedded in a particular context, causes possible sources of conflict when they surrender part of their autonomy through cooperation with other universities. On the other hand, universities have never acted solely within their national and organisational boundaries, and therefore are already embedded in a network of international inter-organisational relations. Because of these considerations, two measures of compatibility are used. For the first – which can be termed 'institutional fit' – it is assumed that if a partner is very much embedded in its own national and organisational context then this partner is likely to be less compatible with other partners with different backgrounds and therefore performance of the whole consortium will be lower. For the second measure of compatibility – 'relational fit' – we assume that if a university was previously embedded in a social network with the partners or partner countries, this will have a positive impact on performance of the consortium as a whole.

Institutional compatibility is measured through the embeddedness of the universities in their institutional context. Neo-institutional organisational theories confirm that organisations are embedded in their institutional context. A recent attempt to classify institutions was developed by Ingram and Clay (2000) and extended by Ingram and Silverman (2002). Ingram and Clay claim that in neo-institutional thinking one can distinguish three classes of actors: individuals (or groups of individuals), organisations and states. Ingram and Silverman added 'civil society' as a fourth class. While institutions are typically categorized as formal or informal (North 1990, Nee & Ingram 1998), Ingram and Clay (2000) use a more fine-grained categorization based on two dimensions: who makes the rules (public or private entities) and how are they made and enforced (in centralized or decentralized fashion). On the basis of these two dimensions, they identify three types of institutions (excluding the possibility of public decentralised institutions. Ingram and Silverman recently extended these types by including the latter. On the basis of these two dimensions, they arrive at four types of institutions (figure 9-1).

Figure 9-1: A typology of institutional forms (Ingram and Silverman (2002)

	Decentralised	*Centralised*
Private	Archetypical form: **norms** Chief actor: social groups Representative theorists: - Homans (1950) - Granovetter (1985)	Archetypical form: **rules** Chief actor: organisations Representative theorists: - Williamson (1975) - Greif (1994)
Public	Archetypical form: **culture** Chief actor: civil society Representative theorists: - Meyer and Rowan (1977) - DiMaggio and Powell (1983)	Archetypical form: **law** Chief actor: states Representative theorists: - North (1990) - North & Weingast (1989)

Although this typology provides a useful classification, the four types and actors should not be seen as independent from each other. For instance, national laws affect social norms and organisational rules, while the socialisation of new norms can put pressure on organisations or states to adapt their rules and regulations. Also norms, which originate from within a specific group (e.g. managers, academics, or physicists), can be influenced by the broader concept of culture.

This typology shows substantial overlap with Parkhe's types of institutional diversity in international alliances (Parkhe, 2003: 308-310). Parkhe makes a distinction between external diversity and internal diversity. The first category is based on diversity in societal culture and national contexts. Societal *culture* refers to the way that different persons have different patterns of behaving or, in the words of Hofstede (1994), "the collective programming of the mind which distinguishes the member of one group or category of people from another" (p.5). National context includes the surrounding organisations and institutions and the governmental *laws* and regulations. Internal diversity can refer to both diversity in corporate culture and diversity in operational-level variables. The former includes those *norms* and values that characterise particular organisations, or in our case, universities. The latter refers to management styles and organisational structures that exist across organisations and that constitute the *rules* within which people within such organisations operate...

On the basis of these typologies it is evident that several items can create sources of incompatibility. For the domain of '*norms*' we will look at the conception of academic work and its organisation. For '*rules*' we will look at three factors: the division of authority within the university, the formal organisational procedures and the character of the university (exemplified by its size, scope and age, which we regard as a source of diversity in university operations). '*Culture*' as an archetypical type of institution is

accounted for through the issue of national culture and '*law*' as a type of institution by the issue of national legislation and the organisation of the national higher education system.

- Heterogeneity of *legislation* on higher education and the national higher education systems
- Heterogeneity of *national culture* of the countries in which the universities are located
- Heterogeneity of *conceptions of academic work* and ideas about how academic work should be organised
- Heterogeneity of the *division of authority* between government / universities / faculties / academics
- Heterogeneity of *formal organisational procedures* of the universities
- Heterogeneity of the *character* of the universities; based on
    - Diversity in scope (comprehensive versus specialised universities)
    - Diversity in size (large versus small universities)
    - Diversity in age (old, traditional vs. recently established universities)

First, we will look at how these contexts can impact cooperation, or in other words, whether a different background on that particular item has a negative or positive effect on cooperation (this variable – impact of differences (id) – is measured on a five point scale assigning values of -1 to +1)[13]. Subsequently, respondent were asked to assess the heterogeneity in the consortium (hc) on the basis of these items (also on a five point scale ranging from 1 for homogeneous to 5 for heterogeneous). If for instance differences in the legal context has a strong negative impact on cooperation (id= -1.0) and these legal contexts of the partner universities is very different (hc= 5), then the level of institutional fit is minimal (IF = -5.0). If specific differences have no effect (id = 0), then the level of institutional fit is neutral (IF = 0). Our assumption is that, for differences with a positive effect, the more heterogeneous the network the better the performance, and vice versa for differences with negative effects. The following formula is used to establish institutional compatibility:

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[13] One respondent indicated that some differences had positive as well as negative effects on cooperation and therefore assessed the question with '0'. Although this was indicated only once, the is may have been the case for other respondents as well. The rating for these items [$id_{1...6}$] should therefore be read as the net impact on cooperation.

Equation 9-5: (Overall) Institutional Fit

$$\text{Institutional Fit (IF)}_j = \frac{\sum (id_i * hc_i)}{6}$$

$$\text{Overall Institutional Fit} = \frac{\sum (IF)_j}{N}$$

$(IF) = \textit{Institutional Fit according to respondent } j$

$id_i = \textit{impact of difference } i$

$hc_i = \textit{herterogeneity of consortium (on the basis of i)}$

$i = \textit{institutional differences (1...6)}$

$N = \textit{Number of respondets for consortium}$

Besides being embedded in the national context, universities and their members can also be embedded in a network of international relations. If a respondent's personal network overlaps with the countries and universities of the consortium, then this enhances the compatibility between the partners. This measure for compatibility, 'former cooperation' (FC), measures the extent to which persons involved in consortium activities have been working with colleagues from the countries or universities involved in the consortium before. Respondents are asked whether they have worked before with those countries and how often (measured on a five point scale from "1" for never to "5" for frequently). This will give us a measure of both 'former inter-*national* cooperation' (nc) and 'former inter-*organisational* cooperation' (oc) and the average of both will be our measure of former cooperation.

Equation 9-6: (Overall) Former Cooperation

$$\text{Former Cooperation (FC)}_j = \frac{\sum (nc_x) + \sum (oc_y)}{C + O}$$

$$\text{Overall Former Cooperation} = \frac{\sum (FC)_j}{N}$$

$(FC)_j = \textit{History of former cooperation of respondent } j$

$nc_x = \textit{former international cooperation with country } x$

$oc_y = \textit{former interorganisational cooperation with university } y$

$C = \textit{number of partner countries represented in the consortium}$

$O = \textit{number of partner universities in the consortium}$

Both measures – Institutional Fit and Former Cooperation – are compatibility measures and are assumed to correlate positively with performance measures. Except for this overall compatibility, we will again look whether the perceived sources of incompatibility differ for different groups or for different institutional types.

9.5   Identifying Coping Mechanisms

The concept of 'coping mechanism' is more problematic. The identification of effective coping mechanisms is an explorative exercise. Since we are not yet aware of the types of mechanisms that can be applied in higher education consortia, respondents of the questionnaire were given the opportunity to state the measures that have been taken for the various problems encountered in cooperation (question nine). The identification of coping mechanisms is also the major goal of the interviews conducted with people involved on the consortium level. In a later stage (section 12.4), the identified coping mechanisms are analysed and classified into different types of coping mechanisms as instruments for consortium management.

Mechanisms of interest here fall into two broad categories. First there are the strategic coping mechanisms. These are mechanisms that are applied in order to find or exploit sources of complementarity. The second category is institutional cooping mechanisms, mechanisms that are employed in order to increase compatibility between the partners. After a consortium is established, obstacles due to institutional contextual factors can emerge. The measures taken to deal with these obstacles are institutional coping mechanisms.

9.6   Control Variables

Since this research is partly explorative in scope, we have also included various other, control variables in the questionnaire. These variables enable us to explore the relations between the core variables for different groups. The control variables for which questions were asked in the questionnaires were (numbers correspond to table 9-3 in the next section): position of the respondents (i); amount of time spent on network activities (ii); type of consortium activities that respondents were involved in (iii); spatial scope of the respondents' regular activities (iv) and professional network (v); perceived importance of internationalisation (vi) and the importance of different international linkages (vii). In the stated propositions, the influence of these variables on performance was not addressed. Nevertheless, we analysed whether significant changes between consortia arise when we control for these groups.

Many of these variables will only be used to describe the population for each consortium since the variables proved to have a very uneven distribution, which made them inadequate to use as a relevant control variable. For example, the importance of internationalisation and the importance of different types of linkages were so heavily skewed towards positive assessments that they became unfit as a control variable. For the scope of activities and professional networks there was an overrepresentation of

respondents with European/ASEAN or Global scope, making the other groups empty or too small too include as a control variable. All these variables (iv, v, vi and vii in table 9-3, and their sub questions) which were rated on a five point scale, had medians of 5 and means of over 4.2 and higher. The same argument goes for the amount of time spent on activities. Nearly 85 % of the respondents spend less than ten hours per month on consortium activities[14]. This overrepresentation of the first two options, and the under representation of the other three categories made it unfit for a control variable. Control variable (i), the position of the respondents, is used in the study but is recoded into two groups: non-academics and academics[15]. The descriptive statistics for the control variables are reported in Appendix III.

9.7 Summary

In chapter six and seven we have discussed the relations between performance, compatibility and complementarity and coping mechanisms. This chapter enables us to further refine the explanatory model that we presented in chapter 7 (figure 7-2). This refined model with the proposed directions is graphically represented in figure 9-2.

Figure 9-2: Refined explanatory model of performance in consortia

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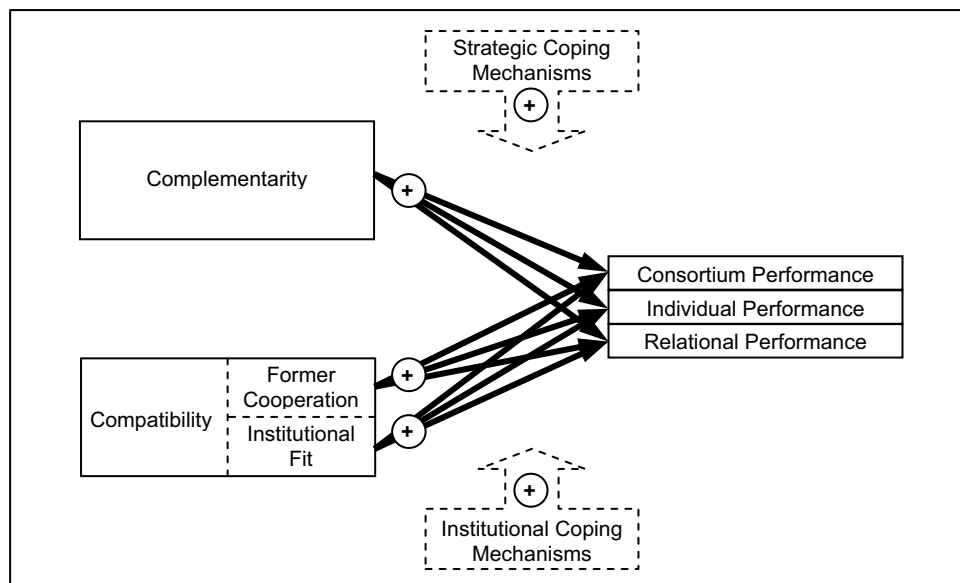
[14] Respondents were given the opportunity to answer for five categories: < 5; 5-10; 10-20; 20-40 and > 40 (average hours per month spent on consortium activities on an annual basis).

[15] Respondents were given the opportunity to answer for seven categories: "Rector / President / Vice-chancellor", "Local coordinator of Consortium Activities", "Staff member of International Relations Office", "Dean", "Administrator / Manager", "Professor" or "Other academic". The first five are categorised as non-academics, the latter two as academics. Most results given in chapter eleven and twelve are reported 'subdivided by position' in Appendix IV.

All variables discussed above were measured through questionnaire responses. The table below list the primary variables (table 9-1) and the questions in the questionnaire, to which they are related. Table 9-2 shows the derived variables that measure our concepts of complementarity, compatibility and performance and their relation with the primary variables. The last table (table 9-3) shows the control variables and the related questions in the questionnaire. The questionnaire can be found in Appendix V. The questions were asked to persons as member of one of the partner universities. The perspective from the network as a whole was explored through interviews with persons that take central positions in the network. These can be persons that are actually employed by the network as a whole or persons that, in addition to their position within one of the partner university, occupied a central position within the network (e.g. as chairman).

We have divided the variables into three categories. First there are the *primary variables*. These are directly measured and constitute the basis for our second category, the *core variables*. The core variables represent the core concepts of the theoretical model presented in chapters six and seven: performance, complementarity and compatibility .The third category consists of the control variables that we addressed in the previous section.

Table 9-1: The primary variables and related questions

Variables		Questions
$gp_{(1)...(n)}$	Goal priority	4a (i) … 4a (n)
$ga_{(1)...(n)}$	Goal attainment	4b (i) … 4b (n)
$aa_{(1)...(8)}]$	Affected areas	5 (i) … 5(viii)
$ri_{(1)...(8)}]$	Relational indicators	8 (a…d) / (i)…(ii)
$ir_{(1)...(12)}$	Importance of resources	2a (i) … 2a(xii)
$pr_{(1)...(12)}$	Presence of resources	2b (i) … 2b(xii)
$id_{(1...6)}$	Impact of institutional differences	6a (i) … 6a (viii)
$hc_{(1...6)}$	Consortium heterogeneity	6a (i) … 6a (viii)
$nc_{(1...c)}$	Former inter-national cooperation	7a (i) … 7a (c)
$oc_{(1...o)}$	Former inter-organisational cooperation	7b (i) … 7b (o)

Table 9-2: The core variables and their relation to the primary variables

Core Variables		Relation
Performance Indicators (Dependent variables):		
CP	Consortium Performance	$\dfrac{\sum(gp_i{}^*ga_i)}{n}$
IP	Individual Performance	$\dfrac{\sum aa_i}{8}$
RP	Relational Performance	$\dfrac{\sum ri_i}{8}$
Complementarity (Independent variable):		
Cpl	Complementarity	$\dfrac{\sum(ir_i{}^*pr_i)}{12}$
Compatibility (Independent variable):		
IF	Institutional Fit	$\dfrac{\sum(id_i{}^*hc_i)}{6}$
FC	Former cooperation	$\dfrac{\sum(nc_x)+\sum(oc_y)}{c+o}$

Table 9-3: Control variables and related questions

Control Variables	Questions
i) position of the respondents	10b
ii) amount of time spent on network activities	10e
iii) involvement in network activities	3a
iv) spatial scope of regular activities	1c (i)
v) spatial scope of professional network	1c (ii)
vi) importance of internationalisation	1a
vii) the importance of international linkages	1b

The identification of coping mechanisms was addressed in question 9 of the questionnaire but the primary sources for identifying coping mechanisms were the interviews and the document analysis. In the interviews and document analysis, the evolution and the development of the consortium was the main focus. Interviews were conducted with central persons in the consortia that could provide a perspective from the consortium as a whole. The interview guidelines are included in Appendix VI.

PART IV: EMPIRICAL ANALYSIS

Chapter 10   Introduction to the Case Studies

10.1 Introduction

In this chapter we will present brief descriptions of the four consortia under investigation. For each of the consortia we will take a closer look at their organisational structure, at their objectives and at the way each consortium has evolved since their founding. A list of members of the four consortia is provided in Appendix I.

10.2 Alma Network

> *"The universities are aware of the particular and unique character of their geographical site and their mutual connections, and on these grounds, they want to create and to maintain particular forms of cooperation between the universities, as well as to offer specific opportunities in the field of education and continuing training, and in the sector of the services to the community."[16]*

10.2.1 Structure

ALMA is a cooperative network between four universities in the Meuse-Rhine Euregion. This region forms the intersection between the most southern part of the Netherlands, the eastern part of Belgium and the western part of one of the German Länder, Nordrhein Westfalen. The network was launched in 1990, and at that time consisted of the University of Maastricht, the Rheinisch-Westfälische Technische Hochschule in Aachen (Aachen University of technology) and the University of Liege in French speaking Belgium. A year later, the Limburgs Universitair Centrum (LUC) from Dutch speaking Belgium joined the network.

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[16] ALMA agreement, November 1990

The ALMA network consists of two main bodies: the Rectors Meeting and the ALMA Office. The Rectors Meeting is the decision making body which meets twice a year and consists of the four Rectors, the four heads of international departments, four academic representatives and the ALMA Office. The chair of the Rectors Meeting rotates among the rectors of the four member universities. The ALMA Office is the coordinating unit of the network and also functions as a centre for Euregional expertise as well as a lobby centre. The office assists university members and project leaders in establishing Euregional contacts, both within and outside the academic community. Also, it advises on Interreg proposals and bundles the activities of the four members within the European Interreg framework. In the field of staff and student exchange, the office is involved in projects focusing on the removal of mobility obstacles in the Euregion. For this, it is supported by one contact person within each university. In the late 1990s there has been an attempt to create another body in order to relief the burden of the four rectors and because it was hard for the rectors to speak on behalf of the whole university. A management team needed to bridge the gap between more strategic central-level decision making and the stimulation and implementation on the work floor. This Management Team was established in 2001 and meets 2-4 times a year. The team functions as a communication platform between the Rectors Meeting and the faculties of the ALMA universities. The role of the Management Team members is twofold: on the one hand, they will help decide on the orientations of ALMA, on the other hand, they will act as contact persons and intermediaries between the ALMA office/the Rectors Meeting and the faculties. In this way, ALMA should become better embedded in the faculties.

Since the establishment of ALMA, much financial support comes from the Interreg programmes. This together with the annual financial contribution from the member universities, forms the structural funding of the network. A substantial financial injection was given by the Dutch Cross Border Policy in the late 1990s. This however was funding of a temporary nature. Other EU sources of funding such as ERASMUS and SOCRATES are administered by the individual member universities.

10.2.2 Objectives & Activities

ALMA's main objective is to enhance cooperation in the field of education, research and services to the community. The ALMA agreement of 1990 states that "*the universities are aware of the particular and unique character of their geographical site and their mutual connections, and on these grounds, they want to create and to maintain particular forms of cooperation between the universities, as well as to offer specific opportunities in the field of education and continuing training, and in the sector of the services to the community*" (ALMA, 1990). From the start the universities were well aware of the differences and commonalities of the universities within the network. Although they were all based in a common location – the Meuse-Rhine Euregion – the linguistic and cultural nature of the universities was diverse and also with regards to academic orientation all universities had their own 'core businesses'. Furthermore, the members range from technological universities to comprehensive universities and from large to small universities. By a mutual exploitation of the different educational profiles

and research facilities, the members search for an expansion of learning, teaching and research opportunities within the region.

The general objective of the network is further subdivided into more operational goals for cooperation in education, research and services. Educational cooperation focuses on classical issues like student and staff exchange, joint curriculum development and language programmes. Research cooperation is mainly based on information exchange and stimulation of networking. Cooperation in the field of services to the community is, in the ALMA Agreement, very much internally focused, meaning that it deals with issues like library cooperation, and communication and information exchange on the educational opportunities in each of the four universities. This list of objectives has remained roughly the same throughout the 1990s. Early in the implementation process, the obstinate nature of cooperative activities between universities soon came apparent. In later years however, especially the 'services' part of the cooperation shifts more to the regional community in a broad sense. But also in the field of educational and research cooperation, specific activities entered a stage of more complex integration of activities. The activities carried out by ALMA are of two types. There are activities that can be labelled as ALMA activities and those that are carried out under 'the umbrella' of ALMA. The first type are directly initiated and funded by the ALMA network or the ALMA office. The second type of projects are initiated by members of the ALMA universities and supported by the ALMA office

The ALMA activities in the first few years of its existence were mainly focused on the development of an adequate base for further cooperation. In 1993, partly subsidised through Interreg, an ALMA Office was established at the University of Maastricht. In these starting years, a lot of effort was being put in the establishment of a wide network of relations in sectors outside education. For the funding of its activities, ALMA was very much dependent on funding from the Interreg I Programme. One of the projects in this period was ETRA, or the Euregional Transfer Agency. This project entailed the cooperation between the four offices for knowledge transfer of the four universities. Another project – 'Mines et Mineurs' – was an interdisciplinary research project that studied the impact of the mining industry on the region. Two projects that have now gained a permanent character are the Jaques Delors Chair (focusing on social, cultural and legal aspects of cross border cooperation) and the first cross-border study programme in Knowledge Technology, offered jointly by the University of Maastricht and the LUC in Flanders. The biggest project – in financial terms – in the 1990s was ELECTRA (Electronic Learning Environment for Continual Training and Research in the ALMA universities), which aims at the introduction and application of new technologies in higher education.

More recent activities that are still in progress are the International Management and Economics Programme (IMEP) and the ALMA MBA. The IMEP programme offers students from the faculties of economics of the four universities the possibility to follow this programme at their own university but also attend courses at one of the partner universities. The ALMA MBA is a 15 month MBA programme in European Business Studies which grants an MBA Degree from the ALMA network, instead of the individual universities. The various phases in the programme are conducted in different locations

and, apart from the first phases which are taught in English, courses are offered in English, German or French. In addition to these major projects, ALMA also carries out several smaller activities such as student exchanges, guest lectures, summer courses, seminars and conferences.

Ahead of broader European developments in the creation of a European Education Area, the Ministers of Education in the Netherlands, Flanders, Niedersachsen, Nordrhein Westfalen and Bremen signed a letter of intent to create such an area in their border regions. The funding that came available through this programme[17] provided ALMA with the opportunity to improve communication and dissemination and materialise joint educational projects. In the second batch of this programme, funding was also received for two existing initiatives: IUS COMMUNE (joint programme for training graduates to become researchers in European Comparative Law) and EURON (European Graduate School of Neuroscience). These are not official ALMA Projects since participation in the activities is not restricted to the four member universities. One other development that has received a push through the Cross-border Cooperation Programme is the establishment of the Transnational University of Limburg, a joint venture of the University of Maastricht and the LUC. Although this is formally not part of ALMA, the establishment of the mutual relations within the ALMA framework, cannot be totally disconnected from the establishment of this transnational university.

10.2.3 Development

ALMA emerged in the 'Euphoria' of the early 1990s, a phenomenon that – through the Maastricht Treaty – especially was seized as an opportunity by the University of Maastricht. The UM was therefore also the initiator of the ALMA Network. In this phase, the complementarity between the universities was explicitly stated as the basis for cooperation between the universities. At the start, the network was very much focused on the mobility of students in the region. At an early stage however, it became clear that mobility within the Euregion was not popular among students. Even in a time when internationalisation became more and more a priority area for universities studying at 'neighbouring' universities seemed far less popular than more exotic, far-away places. This was one of the reasons why in the beginning many projects focused more on collaboration in research than in education. Another reason for the orientation on research was the dependency on Interreg subsidies. Projects eligible for Interreg needed to have a socio-economic impact on the region and collaboration in research seemed to be more successful in this respect than programmes focusing on mobility. An important task of the ALMA Office at that time was its coordinating function for Interreg related projects of the member universities. Through the Dutch Programme on Cross-border cooperation in 1997, the network received a financial boost to develop projects outside the Interreg framework.

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[17] Regeling Stimulering Grensoverschrijdende Samenwerking Hoger Onderwijs 1997-2000 (Programme for the Stimulation of Cross Border Cooperation in Higher Education 1997-2000). This was a project of the Dutch ministry. Although similar initiatives from the ministries of the counterparts were anticipated, these did not materialise, at least not as substantive in financial terms as the Dutch Programme (see Beerkens & Van der Wende, 1999).

Due to a lack of interest in mobility from students, the network has sought opportunities for exchange based on the complementarity in programmes of the universities. Instead of being a part of the internationalisation strategy of the universities, mobility within ALMA became more based on the substance of the courses on offer at the partner universities than on the international experience obtained by students through exchanges. This focus on complementarity also becomes apparent through the shift towards the exploitation of differences. The location of the universities in different cultural, political, legal and linguistic areas forms the basis of new joint programmes like the ALMA MBA. Another result of the low interest for student mobility is the shift towards cooperation in research. The research collaborations, such as those in the neurosciences and European Law, are not strictly ALMA projects but do function under the ALMA umbrella and receive assistance from the ALMA Office.

In 2000, together with the transition from Interreg II to Interreg III, also a change took place in the leadership of the ALMA Office. After that the organisational foundations of ALMA were laid down in the first years and cooperation in education and research materialised in its first ten years, more attention is now given to the broader community and focused on socio-economic issues, such as employability.

10.3 ASEAN University Network

"Given that globalisation propels the world along the trajectory of increasing interdependence and interconnectedness, identifying our common interests and broadening our relationships, will be the defining elements of twenty-first century communities."[18]

10.3.1 *Structure*

The ASEAN University Network is an arrangement between 17 universities in the ten ASEAN countries. The AUN is composed of a Board of Trustees (BOT), the participating universities, and the AUN Secretariat. The Board of Trustees consists of one representative from each of the ASEAN Member Countries, the Secretary-General of ASEAN, the Chairman of the ASEAN subcommittee on Education (ASCOE) and the Executive Director of the AUN. The BOT has the task of formulating policies, approving project proposals, the allocation of budgets and coordinating implementation activities. The board makes decisions on these activities on the basis of consensus. The participating universities have the task of implementing the AUN programmes and activities. When AUN was founded in 1995, it consisted of thirteen universities from seven countries. Due to the inclusion of Myanmar, Laos and Cambodia in ASEAN, the network grew to 17 members (for a list of the members, see appendix I). Although numerous applications for membership have been received, it was decided to only admit universities from the new member countries. Non members from the region however, are invited as observers on a regular basis. The AUN Secretariat is involved in the planning, organisation, monitoring and evaluation of AUN activities and also in the development of new ideas and the acquisition of funding. The permanent office of the Secretariat has been established in 2000 and is located on the campus of Chulalongkorn

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[18] AUN Newsletter, Volume 1, Nr. 1; 2000

University in Bangkok. The operating costs of the secretariat are (at least until 2005) allocated by the Thai Government.

The financing of AUN activities comes from either cost sharing between the participating universities or from the external 'dialogue partners' of ASEAN. The dialogue partners are the EU, China, South Korea, Japan, India and Russia. The meetings within the AUN Framework are financed by the hosts and travel expenses by the (universities of the) participants, or by universities from the richer countries for the poorer countries.

10.3.2 Objectives & Activities

The main objective of the AUN is to strengthen the existing network of cooperation among universities in ASEAN by promoting collaborative studies and research programmes. Furthermore, the AUN attempts to promote cooperation and solidarity among scientists and scholars in the region and to develop academic and professional human resources as well as to produce and disseminate scientific knowledge and information among the universities in the region.

In order to realise these objectives, a wide range of activities have been organised within the AUN framework. The initiative for AUN activities can be located with different actors. Member universities can request to put a particular activity on the agenda. Also initiatives can be proposed by the AUN Secretariat or by the ASEAN Secretariat. Finally, the Dialogue Partners can initiate activities. The Board of Trustees decides on the actual initiation of the proposed activities. In the course of its existence, the BOT has agreed upon a variety of activities which are both very diverse in content as well as in ambition and feasibility. In the early stages of AUN's existence, activities were largely focused on four priority areas: student and faculty exchanges, ASEAN Studies, collaborative research and information networking. After the establishment of the permanent AUN secretariat, various other activities emerged, both within the region as well as with the dialogue partners.

The ASEAN Studies Programme has been one of the instruments to realise a regional awareness and identity. The objective is to realise an ASEAN Studies curriculum for all member universities in order to provide students with knowledge about societies, economies and politics in the ASEAN countries. As a start, in 1998 an ASEAN Source Book was compiled with a bibliography on a wide range of ASEAN subjects. On the basis of the source book and after several joint workshops, six core courses were identified and course syllabi for the postgraduate level were compiled. At a later stage, all course information was placed on the 'ASEAN Virtual University' web-site[19]. This virtual university should ultimately evolve into a joint degree granting programme for ASEAN Studies.

The student and faculty exchange programme contains three separate activities: the AUN Educational Forum, the Distinguished Professors Programme and the Student

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[19] http://aunvirtualu.dlsu.edu.ph/

Exchange Programme. The annual educational forum covers a two week gathering of both students and staff of member universities. In this period, lectures and presentations are given on a particular theme and also several cultural activities are organised. The first educational forum has been held in 1998 with around 25 participants. Participation has gradually increased and for the 2003 forum, 50 participants are expected. Financially, the educational forum is based on the principle of cost sharing where the host arranges the activities and accommodation and the students or their universities pay for transport expenses. In addition to the educational forum there is also a student exchange programme. In fact, structural student exchange was the option preferred at a meeting of Vice Rectors for Student Affairs in 1997. However, the rather rigid curricula of the member universities, with limited space for optional courses, and very diverse academic calendars, only left a two week period per year for joint activities. This was why the option of the educational forum was proposed.

Student exchange now takes place on a more ad hoc basis and is only offered by limited number of universities. In 2003, scholarships for students (and staff) of member universities are offered by the member universities from Singapore, Malaysia, Brunei, Thailand and the Philippines. The obstacles observed above, inflexible curricula and differences in academic calendars, pose problems for exchange, but also the differences in educational systems and the medium of instruction, which is often the native language of the university concerned. Another problem is that, due to the uneven level of development in the ASEAN countries, exchange is frequently a one-way activity, with more advanced educational systems like Malaysia and Singapore functioning as a recipient of students and staff from other countries. Also, structural exchange programmes or scholarship programmes have not yet materialised because of financial reasons due to the financial crisis of 1997/1998.

The third activity related to exchange is the Distinguished Professors Programme. This programme provides opportunities for faculty members to visit other member universities. The participating professors give lectures, advise students and get involved in collaborative development of courses or teaching materials at their host university. The exchange is financially supported by the ASEAN Secretariat or the ASEAN Foundation and in some cases it is based on cost sharing between the host university and the visiting professors' university. Until the end of 2002, some forty visits had taken place. In the field of collaborative research, initiatives emerged already in a workshop in 1997, but have not yet materialised sufficiently. At present, the main progress in this field has been through the collection of research data of the participating universities and compiling institutional profiles in the field of research. These activities have not yet led to concrete matching of research areas for possible cooperation within AUN.

The AUN has also started to target other groups than traditional students. In the ASEAN executive development programme, the AUN aims to train professionals from business and management. Due to the 1997 financial crisis, this programme was postponed but at a later stage, the Asian crisis was used as an opportunity by AUN. In 1999, the network planned a two-week executive programme that focused both on the provision of tools to handle the consequences of the crisis and to prepare the business community for the further economic integration in the region and the ASEAN Free Trade Area. Even though the deans of the Business Schools concerned met twice, the programme has not yet materialised. Pre-occupation with the repercussions of the

financial crisis is seen as the main reason for the fact that the programme has not yet been realised. Another activity in the field of Business Administration is the AGBEP Programme (ASEAN Graduate Business/Economics Programme), which aims at student and staff exchange and research cooperation on business and economic issues in the region. Cooperation within AGBEP, based at Gajah Mada University has led to student exchanges on a small scale and to symposia and joint publications since its establishment in 2000.

Many of the activities above are of a disciplinary nature and mainly aimed at exchange and joint curriculum development. A more recent and profound initiative is the AUN Quality Assurance, which has the aim of promoting the development of a common quality assurance system. On the long term this should function as an instrument for the improvement of teaching, research institutional academic standards of AUN member universities while recognising and respecting the differences among member universities. The ultimate goal of this initiative is the harmonisation of educational systems and standards of universities in ASEAN. The first step of this initiative was a workshop held in 2000 at Chulalongkorn University and which has led to the Bangkok Accord. In the framework of this document, a Chief Quality Officer (CQO) has been appointed by each member university to coordinate the implementation. The CQO's meet twice a year at one of the member universities. Currently this priority AUN activity is primarily based on the sharing of information and the creation of 'minimal standards' (which still can be considered high standards for some of the member universities).

   Another activity that crosses disciplinary boundaries is the cooperation on new technologies. The programme focuses on the establishment and development of systems for information exchange between the member universities. The first phase of this programme was mainly the development of an AUN homepage through which all member universities were linked. The second phase comprises the further development of the concept of an ASEAN virtual university and is led by De La Salle University (Philippines). The programme is being gradually developed and the first recommendations of AUN experts in the field have been integrated in the ASEAN Studies Programme (see above). In the future, further technological cooperation in library services and standardisation of formats for information dissemination are planned to be developed.

In addition to the activities that have been developed and carried out by the member universities, the AUN also developed activities in cooperation with its 'dialogue partners', namely the European Union, South Korea, Japan, India, China and Russia. With the European Union[20], two joint activities have been set up. The most recent is the ASEAN-European Engineering Exchange. This programme aims to promote the exchange of students and staff between the European Union and ASEAN through study, research and internships. At present however, this programme is very modest in numbers. A more comprehensive project is the ASEAN-EU University Network Programme (AUNP). AUNP both promotes cooperation between higher education in the two regions and a further regional integration in the ASEAN region. The AUNP

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[20] The European Union cooperation is limited to the 9 ASEAN Countries that are signatories to the EC-ASEAN Cooperation Agreement (ASEAN excluding Myanmar)

consists of two major projects: partnership projects and network initiatives. Under the partnership projects, two calls for proposals were launched by the European Commission in 2002 and in 2003 in order to improve cooperation between higher education institutions in EU Member States and ASEAN, as well as to stimulate collaboration in higher education within ASEAN. The types of projects that are eligible for funding in this framework are cooperation in applied research, in human resource development and in curriculum development. Activities that fall under the so-called network initiatives are the organisation of two rector conferences and four annual round tables for representatives of ASEAN and EU higher education institutions and relevant public authorities, which will focus on the further development of EU–ASEAN higher education cooperation[21]. Another activity eligible is the sharing of knowledge between the two regions on issues like credit transfer systems, initiatives for student and lecturer mobility, initiatives promoting joint research, and convergence of curricula. The AUNP programme is managed by the Programme Management Office, with a European and an ASEAN co-director, which is based in Bangkok. The total budget for the programme is almost eight million Euros, of which around 90 % comes from the EU and 10 % from AUN. At the time of writing, the proposals are under evaluation.

Links with South Korea emerged from the interest that the Korean Association of Southeast Asia Studies (KASEAS) expressed to work together with the AUN. The cooperation between AUN and KASEAS led to a conference in 1999, which again resulted in two publications jointly produced by South Korean and ASEAN scholars. In 2001 a second programme was proposed by KASEAS, which was approved in early 2002 by the ASEAN Secretariat and resulted in a workshop and a conference in that same year. The second part of the 2001 Academic Exchange Programme is in progress and entails a joint research project, and a fellowship exchange scheme. Another South Korea-ASEAN activity was initiated by the Korean Science and Engineering Foundation (KOSEF) and focuses on the post-doctoral level. The ASEAN Post-Doctoral Fellowship Programme promotes cooperation in science and technology within the ASEAN region by providing ASEAN scientists opportunities for research exchanges with South Korea. The programme provides research scholarships for 11 ASEAN scientists or researchers for a period of 6-24 months in Korea. The preparation for scholarships for a two-year stay in Korea for a new batch of 10 Ph.D. holders is in preparation. Recently, also a scheme has started for regular students. This scheme funds ten ASEAN students to study for one or two semesters in Daejoen University in South Korea.

Cooperation with Japan is based on two projects. The first is based on the sharing of experiences and has been set up by the Keizai Koho Centre. For this programme, a group of educators from ASEAN visited Japanese universities and governmental and private organisation in Japan. These 'educational trips' were organised annually from 1998 until 2000. A more substantive project is the AUN/Southeast Asian Engineering Education Development Network (AUN/SEED-Net), an initiative of the Japanese Government. This network is aimed at promoting both Japan-ASEAN cooperation in engineering education as well as the internal ASEAN cooperation. Activities under this

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[21] The first AUNP Round Table Meeting was organised in Bangkok in November/December 2003.

network are in the field of research, graduate education (both short courses and full Masters programmes) and the exchange of staff and students. This sub-network network was established in 2001 and currently consists of nineteen universities from both Japan and the ASEAN region (mainly, but not exclusively, members of AUN).

Collaborative activities with India are mainly in the sphere of human resource development. The ASEAN-India joint HRD collaboration initiative will also function as a coordination mechanism for the various ongoing institutional and bilateral collaborative activities in the HRD domain, in order to bring these activities under a broader regional framework.

The ASEAN –China Academic Cooperation and Exchange Programme was initiated by a joint effort of the AUN and the Ministry of Education of the People's Republic of China in 2001. The activities under this programme include the ASEAN-China Rectors conference, grants for joint research and training and an exchange programme for academics in order to strengthen the network between ASEAN and Chinese scholars. Recently, AUN has also proposed activities for a further cooperation with Russia. At present these activities are in the stage of seeking funding for collaborative activities.

10.3.3 Development

The ASEAN University Network emerged from a highly ambitious idea of the ASEAN leaders and the ASEAN Subcommittee on Education (ASCOE) to establish an ASEAN University. A year after this idea was launched, it became clear that this would present too many problems concerning funding, location and leadership[22]. Therefore, in 1994, it was decided that the founding of a network of existing institutions would be more feasible. In its early years (1995-1999), the AUN focused mainly on the sharing of knowledge and experiences and on small-scale student and staff exchange. As from 1999, the collaborative activities became more complex with programmes like joint curriculum development, cooperation in ICT and the establishment of sub-networks. This is not only the case for intra-ASEAN cooperation but also for the activities with the dialogue partners.

This also led to the establishment of a permanent secretariat in Bangkok in March 2000. Although there existed a secretariat since 1997, this secretariat was temporary. With the permanent office also came an increase in structural funding for the secretariat. In addition to the operating costs for the AUN secretariat, also the financial support for AUN activities increased substantially since 1999. In addition to a growth in financial terms, projects also became more comprehensive. In particular, the AUN Quality Assurance programme has very ambitious goals with consequences that transcend the disciplinary boundaries. This can also form a turning point in the sense that through such projects all members of the participating universities will be affected. Many of the current activities are focused on particular individuals of the universities, and many other students and staff that are not involved in activities are not familiar with AUN and its activities. Most exchanges and gatherings for instance, although successful, have been modest in its impact on the universities as a whole. An explanation for this lies in the top-down character of the activities, with a high

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[22] This pessimism was based on the experience with the establishment of the Bangkok-based Asian Institute of Technology

involvement of the university's central level (and in some countries the ministry level) and only modest involvement of the faculties.

10.4 Coimbra Group

"We live perhaps in revolutionary times for our Universities because of the elimination of borders, easy communication and the massive impact of new learning technologies. But these are also difficult times because of restricted resources and increased pressures from outside. We must try to consider all these factors as challenges rather than obstacles. And the best, or only, way to meet these challenges successfully is to work together."[23]

10.4.1 Structure

The origins of the Coimbra Group lie in a meeting held in 1985 at the Catholic University of Louvain where twelve universities from the old European university towns gathered to discuss the possibility of establishing strong cultural links. The participants in this meeting realised that, along with cultural links, common activities in the field of student and staff mobility might be particularly fruitful. This belief was strengthened by the subsequent creation of the ERASMUS programme by the European Commission. The Coimbra Group Charter was drawn up and signed by 19 participating universities in September 1987 during a general meeting at the University of Pavia. By 2003, the number of members has increased to 39 universities, now also including universities from Central and Eastern Europe (the member universities are listed in appendix I). The Charter lays down the criteria for membership along with the general aims and purposes of the Group.

The supreme decision-taking body of the Coimbra Group is the *General Assembly of Rectors*. Every year the General Assembly gathers in one of the member universities, to report and reflect upon the activities carried out during the past year and to discuss plans for the future. On this occasion the Rector of the hosting university takes up the Presidency of the Group for the coming year. The *Steering Committee* is the main executive body and is composed of six members who are elected by the General Assembly. This committee assembles several times a year and also takes initiatives between the annual General Assemblies. The Steering Committee is supported by the Coimbra Office. It was the Oxford General Assembly of 1992 that decided to set up the *Coimbra Group Office* in Brussels. The role of this office is threefold. First, the Office assists the Steering Committee and its Chairman in the execution of their tasks. Secondly the Office is responsible for the information exchange and communication, for the coordination of meetings of various other official Coimbra bodies. Finally, the Coimbra Group Office is also actively involved in the coordination of a series of EU-funded projects.

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[23] Coimbra Group Newsletter; nr. 20 / Winter 2002-2003

In addition to these three central bodies, the Coimbra Group also is organised around several task forces, working parties and committees. *Task Forces* are formed by decision of the General Assembly and can have a fairly wide field of activities. They may both develop policy proposals and organise concrete activities and report to the Steering Committee. Every Task Force has a particular contact person within the Steering Committee. *Working Parties* are also set up on decision of the General Assembly for specific activities of short duration. These working parties might eventually become a Task Force after having carried out a feasibility study. *Committees* are semi-permanent entities created by the General Assembly for the execution of a specific task. The Coimbra Group has a Standing Committee of Advice for Latin America (SCALA), a Membership Criteria Committee and a European Cultural Committee. One special committee, the *Administrative and Financial Committee* works together with both the Steering Committee and the Office on revenues, expenditures and administrative matters. It is mainly an advisory body and has four members.

10.4.2 Objectives & Activities

The objectives stated in the Charter of the Coimbra Group very much resemble the aims of the increasing cooperation in European higher education in the time of the ERASMUS Programme. Much emphasis is placed on staff and student mobility. The Coimbra Group explicitly states that the facilitation of mobility is one of its priority areas. Derived objectives are the provision of education to students of the member universities free from tuition, the recognition of study periods and the establishment of joint mobility programmes. In addition, the activities of the Coimbra Group are also aimed at expanding the opportunities for non European students to attend courses at the member universities. Furthermore, joint research projects will be promoted and activities with a cultural character and are encouraged.

The activities of the Coimbra Group are organised around its Task Forces, Committees and Working Parties. In the 2003 General Assembly in Granada, it was decided that this structure needed revision and simplification. Basically, this led to a reduction of official bodies through the merger of various working parties and committees into Task Forces. The earliest Task Forces were established in 1992 but explicit regulations on the functioning of Task Forces were decided upon in the General Assembly in Groningen in 1994. Even though not all Task Forces are composed of representatives of all the member universities, all members of the Coimbra Group are entitled to have a seat in every task force. A Task Force determines its own method of operation although they will have to provide regular information to all members of the Coimbra Group, and not just to the members of the Task Force. By 2003, activities are organised in eight Task Forces:
- Task Force for Africa, Caribbean and Pacific Countries (ACP; established in 1992);
- Task Force for Mediterranean Countries (MED; established in 1992);
- Task Force for Cooperation with Central and Eastern European Countries (CEEC; established in 1992);
- Task Force for European Programmes for Education and Training (EPET; established in 1993);

- Task Force for E-learning (established in 1999 as the Task Force for Open and Distance Learning, Life Long Learning and Continued Education);
- Task Force for Latin America (SCALA; established in 1999);
- Task Force for Culture (established in 2003);
- Task Force for Doctoral Studies and Research (First established in 1992 as the TF Research, but discontinued after 1995; re-established in 2003).

The ACP Task Force for cooperation with universities in ACP countries was set up in 1993 at the Budapest General Assembly. This Task Force focuses on activities to reinforce contacts and activities between the Coimbra Group and universities in ACP countries. The underlying rationale was that for these countries, no programmes similar to ERASMUS or TEMPUS existed. The Task Force started of with an inventory of all bilateral contacts of the member universities with universities in ACP countries. In 1999, the basis of future cooperation was laid down in the 'Cotonou Workshop'. In this workshop, funded by the European Commission (DG VIII Development), a long term strategy for cooperation was discussed. Ultimately this led to the signing of a service contract with the EU in February 2002 to carry out a preparatory study for a Higher Education Cooperation Programme between the EU and ACP countries. The contract had an initial duration of eleven months (later on the contract was extended with 4.5 months) and its objective was to provide the European Commission with a number of recommendations in order to implement a framework for cooperation. On the basis of this contract, a call for experts was launched among the Coimbra Group universities. After selection, 34 experts carried out 21 field missions in the ACP region in September and October 2002. On the basis of the 21 mission reports a final report was presented to the European Commission in May 2002.

The Task Force on Mediterranean countries was set up in 1992, with the aim of sharing experiences and expertise with Mediterranean countries outside the EU. The main objective of the Task Force is to promote cooperation with these countries. Frequently the projects were related to EU programmes, like for instance MED CAMPUS[24]. It's activities have gained a new impetus through the extension of the TEMPUS Programme of the EU to the Mediterranean countries. On 27 June 2002, Tempus was extended from Central and Eastern European Countries to include the Mediterranean countries of Morocco, Algeria, Tunisia, Egypt, Israel, Jordan, The Palestinian Authority, Syria and Lebanon.

Another region for which a Task Force has been established is Central and Eastern Europe. The first initiatives for the Task Force for Cooperation with Central and Eastern European Countries (CEEC) were taken in 1989 and it was officially established in 1992. The mission of this Task Force was to help to strengthen and develop the academic potential and performance in CEEC through partnerships and to reintroduce the values and norms of the European academic world as well as to help these universities to re-enter the European university networks from which they had been separated during the communist era. From the very start this Task Force was very active in the EU Tempus

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[24] The purpose of MED-Campus was to upgrade the human resources of Mediterranean countries outside the EU by encouraging cooperation between universities in the EU and these countries. It covers social and economic development, company management, management of the environment and cultural exchanges involving 450 universities and colleges.

Programme. Student and staff exchanges, curriculum development, management training programmes and other activities allowed several Central and Eastern European universities to reintegrate into the mainstream of European academic life. Cooperation within and outside EU programmes are differentiated depending on the particular socio-economic and political circumstances in the different countries. Although much emphasis was placed on the EU accession countries[25], more recently also programmes for other European countries were established. As one of its major instruments for these programmes, the Task Force launched the Hospitality Scheme in 2000. The Hospitality Scheme offers short-term visits to scholars from countries in South Eastern Europe, the so-called non-accession countries (Albania, Bosnia-Herzegovina, Croatia, Macedonia, Montenegro, and Serbia). The main aim of this scheme is to enable scholars to undertake research in which they are involved in their home institution and to help them to establish academic and research links with Coimbra Group universities. Another major project of the Task Force was the Coimbra Group Winter School 'Negotiating a Common Future for South-East Europe: Regional Cooperation and European Integration', which was held in Split in February 2003. Another Winter School is planned for 2004.

The EPET Task Force (European Programmes for Education and Training) mainly aims at the organization of activities which strengthen the internal cohesion within the Coimbra Group. Membership of this Task Force is open to representatives from member universities who are actively involved in the field of European education and training programmes. It is tightly involved in European developments in higher education (e.g. the Bologna process) and relates to many European initiatives such as ERASMUS and SOCRATES. Finally, the Task Force is involved in projects relating to joint masters programmes (e.g. the EUA project Joint Masters). At the Pavia General Assembly in 1999, a Task Force was set up for Open and Distance Learning (ODL), Continuing Education (CE) and Lifelong Learning (LLL). In 2002, the Task Force merged with the Advisory Committee on New Technologies in Education (ACONTE) and the name was changed into the E-learning Task Force. It was established in order to support the Coimbra Group universities in their development of the use of Information and Communication Technologies (ICT) in traditional teaching and learning and for ODL in the areas of Continuing Education and Lifelong Learning. The aims and objectives of this Task Force are the acquisition of funding for the development and dissemination of ICT projects at the member universities and the facilitation of cooperation between Coimbra universities in the field of ICT.

10.4.3 Development

In its existence of over 15 years, the Coimbra Group has strongly held on to its identity of a traditional, comprehensive academic community and has stuck to its objectives of facilitating and promoting intra-European mobility of students and staff. In its early years, its policies were very much geared to the upcoming and ambitious European schemes. The Group has played an important role in this pioneering stage of European

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[25] Leading for instance to the Coimbra Group membership of Tartu University (Estonia), Charles University (Czech Republic), Jagiellonian University (Poland) and Eötvös Loránd University (Hungary).

integration in the field of higher education. The Coimbra Group universities were very active in the development of the Erasmus Inter-University Cooperation Programme (ICP). In the early nineties Coimbra Group Universities were involved in the coordination of 15% of all European ICP projects (Coimbra Group, 1991). An interest for countries and regions outside the European Union has also existed since the early years of Coimbra. After the iron curtain disappeared, the Coimbra Group became active in the Tempus Programmes and contributed to the creation of two of the largest Joint Education Programmes within this framework (for Modern European Languages and for Economics and Management). In the 1990s, various projects emerged that were not directly related to EU programmes, like the Coimbra Lectures Project and several research projects.

Like its activities and objectives, also the organisational structure of the Coimbra Group has remained rather unchanged through its existence. Although the consortium has grown from 19 universities in 1986 to 39 in 2003, the lines of communication and the division of authority have remained unchanged. In its existence, the General Assembly remained the highest body, the Steering Committee has been responsible for the daily procedures and actual cooperation took place in Task Forces, Committees and Working Groups. In this structure, the delegation of responsibilities and authority to the Coimbra Group level was minimal. It was not until 2003, that a stronger role for the Group as a whole was envisaged through a stronger operational leadership of the Steering Committee (renamed the Executive Board in 2003) and a concentration of tasks within the Task Forces. To keep the consortium manageable, it will be very restrictive in the admission of new members, especially towards universities of the Western European and Mediterranean countries. Admission will be more probable for universities from the accession countries, but the Group will remain selective, taking into account former relations and the reputation of the applicant universities.

The Coimbra Group has effectively made use of the programmes that emerged on the European level, but in later stages also became more actively involved in the process of Europeanisation. The Groups stance vis-à-vis the process of European integration is rather ambiguous. On the one hand it is an active promoter of European cooperation and exchange of students, staff and information and has sometimes been actively involved in policy preparation on the EU level. The members of the group however clearly stated that they see national governments as the true responsible authorities for governing higher education in European countries.

10.5 European Consortium of Innovative Universities

> *"As in all international consortia, cooperation has resulted both in successful activities, such as the increased level of networking among staff from the respective institutions, and in less successful activities arising from the tensions between international cooperation on the one hand and national rules and regulations and local university cultures on the other."*[26]

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[26] Press release "ECIU – 5-year Anniversary and New Chairman" available at http://www.eciu.org/press.php

10.5.1 Structure

At a meeting of the European Rectors Conference (CRE) in 1996, the rector of the University of Twente at that time took the initiative to assemble a group of 'like-minded' universities to establish a consortium. This consortium should give the member universities an opportunity to position themselves strategically vis-à-vis their European and international environment. After consecutive meetings in Twente in September 1996 and in Warwick in April 1997, this ultimately led to the signing of a charter in Dortmund in November 1997, where ten universities decided to commit themselves to the European Consortium of Innovative Universities (ECIU; member universities are listed in appendix I). Six years after its establishment, the consortium has ten full members and one associate member. Soon after the formal establishment of ECIU, the Universitè de Technologie de Compiègne (France) joined ECIU, while in 2003, Chalmers University (Sweden) resigned as a member. The members are all from Western European countries[27]. The associate member, Monterrey Tech University, is from Mexico. Although numerous requests for membership have been submitted, the consortium is determined to remain small and exclusive. For the future, enlargement will be limited to one or two additional institutions. Outside of Europe, ECIU will look for cooperation with other alliances and networks, in the form of associate members. The current associate member (Monterrey Tech) is in itself a network of higher education establishments. A former associate member, Hong Kong Polytechnic University was part of the International Strategic Technology Alliance. This university however withdrew its associate membership. In the future, ECIU will also seek for relations with alliances and networks in the United States. The consortium uses the membership fees (10,000 Euros for each full member, 5,000 for associate members) for funding the Secretariat and for the Executive Board and General Meetings. The cooperative projects within the ECIU framework, are funded by the participating universities.

The central bodies in ECIU are the General Meeting and the Executive Board. The General Meeting is convened on an annual basis and functions as a forum for discussion for both academic and administrative staff. This forum is intended to provide input for the Executive Board. Each member institution has one representative in the Executive Board, which meets twice every year, with one meeting being held simultaneously with the General Meeting. In addition to the Board members, universities can also send their local ECIU coordinators to the Board Meeting. Decision making in the Executive Board is based on the principle of one university, one vote. Associated partners are excluded from voting procedures. The Executive Board is the responsible body for the decisions regarding new projects, for budget planning and for the allocation of funds. The Board also has a secretariat that is situated at one of the member institutions.

The ECIU Secretariat has responsibilities in three areas. First of all, it is responsible for the financial administration of ECIU. It does the day-to-day bookkeeping, provides the treasurer of the board with financial information and prepares draft accounts for the Board. It also supports the Executive Board through the organisation of meetings, the preparation of agendas and it reports on the meetings. The secretariat also functions as

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[27] Finland, Denmark, United Kingdom, Netherlands, Germany, France, Portugal and Spain.

an intermediate between the consortium and the member universities. This is done mainly through the organisation of activities, the provision of information through the website and by close contacts with the local coordinators. The local coordinators, based at each university, are the institutional contact persons for the ECIU Secretariat. The local coordinators are also responsible for the promotion of ECIU activities within their institutions and for the facilitation of staff and students that want to initiate and develop cooperative activities within the ECIU framework. In addition to these bodies, student organisations of the participating universities have established the ECIU Student Wing. This body also occupies two seats in the meetings of the Executive Board in order to provide input from a students' perspective. The Student Wing also participates in other ECIU projects and it facilitates outgoing students and supports incoming students in the framework of the ECIU Student Exchange Programme.

Bodies of a more temporary nature are the Thematic Working Groups: committees that address issues of importance to the member institutions. A working group on student mobility is set up in order to make use of available means such as Socrates and Erasmus, and furthermore to look into how the ECIU institutions can support increased student mobility in general. Another working group is involved in similar activities related to Staff mobility. Previously the ECIU had a working group for EU research programmes, but this group has developed into a more focussed group dealing with activities in the area of innovation and entrepreneurship. A final working group, the ECIU PR working group consists of PR officers from the member universities. The main objective of this working group is to assist the Executive Board and the consortium in the information provision about ECIU activities internally to the staff in the universities and to external partners. The group also markets the consortium to students, the business sector and to political actors.

10.5.2 Objectives & Activities

The composition of the ECIU is based on common characteristics shared by the members: their innovative and entrepreneurial nature. These characteristics are also expressed in the objectives of the consortium. Other characteristics that the members have in common are that they are relatively young, they have their academic strengths in engineering and social sciences and that they all have close ties to industry and to their surrounding region. These distinctive characteristics of the member universities were taken as the basis for the goals and activities in the ECIU. In the charter signed in 1997, the consortium commits itself to a range of concrete objectives. The charter mentions the design and advancement of international programmes in education, research and regional development as the objective for cooperation. These international programmes should include the development of joint masters in the field of innovative management, the development of European doctoral programmes and of advanced technological short courses. Furthermore joint research projects were planned, that related to the existing European Framework Programmes and joint regional development schemes between universities and small and medium enterprises we envisaged. Also cooperation should be established in the recruitment of non-European students (ECIU, 1997). In 1999, a strategic plan was developed which redefined the ECIU strategy as laid down in the charter. This strategic plan was meant to serve as a

framework for the development and assessment of operational projects. The plan formulates "the management of a European universities consortium which appears as a coherent and dynamic unity within areas such as education, research, IT, permanent education, social benefits, regional impact and service functions" as its superior goal (ECIU, 1999). This goal is further divided into goals for five different areas: education, research, regional development, institutional management and public relations.

Cooperation in *education* is seen as a core activity of ECIU. In this field it aims at being distinctive in content as well as methodology, meaning that it aims at developing programmes in innovative areas and delivering them through innovative means and methods. In this framework, the consortium wants to develop flexible programmes at the undergraduate and graduate level as well as in the continuing education sector. The main focus however will be on the development of joint master programmes. Standardisation in admission criteria should enable students to take courses in different member universities without loss of time or credits. Continuing education programmes on the postgraduate level will be developed by subsets of the consortium's member universities, which match in specific research competencies. Also, the development of entrepreneurial modules for engineering programmes and social sciences are envisaged in the strategic plan. In addition to joint programme development, the consortium planned to broaden the scope of student mobility. Here the members want to develop a mobility scheme for undergraduate and graduate students as well as Ph.D. students. The use of ICT and virtual mobility of staff should broaden the opportunities for exchange. International mobility will not only be pursued in regular courses, but also in internships in industry. The promotion of language education will be used as an instrument to stimulate student mobility. With respect to new methods, the consortium wants to facilitate the sharing of initiatives in the use of ICT in education and create platforms for information exchange. A final goal for the field of education is the establishment of the ECIU Quality Review System.

In reality, these goals have resulted in several concrete activities. In the case of joint master programmes, a master in 'management of innovation and entrepreneurship' was partly developed in 1999 by the universities of Warwick, Twente and Aalborg. This programme was intended for persons with a Bachelor degree in business, economics or engineering that already had a minimum of three years of professional experience. In the end, the programme was cancelled due to a lack of participants. Other joint programmes planned in 1999, neither evolved as ECIU masters programmes, although some have continued as bilateral joint programmes (e.g. the masters programme in Industrial Design and Manufacturing, a joint programme of the universities of Dortmund and Twente which started in September 2001). On the Ph.D. level, joint projects have also proven to be difficult to realise. Projects like the ECIU Doctorate, the ECIU Doctoral Programme and the ECIU Graduate School have failed to materialise. The high ambition of this project is exemplified by the conditions required for this project. According to the consortium, for the development of joint Ph.D. programmes agreement should be reached on issues like selection procedures, curricula, quality standards and assessment methods. The diversity in systems, regulations and procedures of the different countries has proven to be too large to create concrete collaborative structures. Another planned initiative in the area of doctoral education

was the establishment of an 'ECIU Graduate School'. One possibility for this venture was a graduate school in the form of an administrative framework for exchange of information and students and for administration of recognition procedures. A more ambitious option was the establishment of graduate schools that structure doctoral programmes in a particular field of study, more or less like the Dutch 'onderzoeksscholen' (research schools) or the German Graduierten Kollegs.

In 2003 however, new life was breathed into the ECIU Graduate School, be it in another form than intended in the late 1990's. While the first ideas of an ECIU Graduate School (EGS) were based on providing an organisational framework for doctoral education, the new concept offers Master programmes and aims to develop new joint degree courses. The goal is to attract new international students and to support the further development of the European higher education and research area. At the time of its establishment, 28 master programmes are offered, which all possess a strong international character, are taught in English and are rooted in the respective universities' research activities. The EGS is a joint venture of nine of the ten members of ECIU[28]. Although EGS at the time of its founding serves primarily as a portal to the supply of international master programmes in strategic scientific field of the other participants, it intends to move towards further collaboration. In the future, representatives from the member universities will work on the development of joint master programmes, either on the basis of a combination of strengths and best practices of the existing programmes or by developing new programmes in new strategic field of study, that relate to the innovative nature of ECIU. Students enrolled in the EGS should eventually conduct their studies at two different member universities and possibly at a third institution through distance learning. The main body in the organisational structure of the EGS is the Steering Committee, which is composed of three EB members plus a representative of the ECIU Web Supported Learning (see below) project and the Graduate School Project Manager. The Steering Committee is responsible for the overall project development. There is also a Project Team that gives input for improvement, is responsible for the operational planning and for the implementation of the decisions of the Steering Committee and the ECIU Executive Board. Its nine members (one from each university) maintain the relations with academics and local co-ordinators in their university.

Two other major activities in the field of educational innovation are the Web Supported Learning Project (WSL) and the ECIU Quality Review (EQR). The WSL Project has been running since September 2001 and consists of four pilot projects, organised around four workshops. The first part has as its objective to define guidelines for a house style and pedagogical standards that are compatible with the participating universities' standards. Through these guidelines, learning materials from other universities should become available to students from the home university through their own learning environments. Learning platforms of the ECIU universities do not need to be made uniform, but the participating universities can still use their own learning platforms. The second part, the 'transition to university' module, aimed to develop web supported study material to support students in the transition stage between secondary school and university. The third pilot, the 'web based informatics module', concerned the technical

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[28] The university of Warwick is not a participant in this project

details of web supported learning and resulted in a set of examples. In the context of this project an interactive, web-based module for the education of Informatics on beginner's level is to be developed. The final pilot is a Master level course in 'effective e-moderating'. The online course was created to provide teachers with a new range of skills. Its purpose is to prepare professionals capable of planning, designing and moderating online communities. These pilots have been finalised in late 2002. It is yet unclear whether and how the experiences from the WSL pilots will ultimately be used in undergraduate education. The expertise acquired in the pilots will be used in the further development of joint courses in the ECIU Graduate School.

In the context of the ECIU Quality Review (EQR), the consortium takes the role of an accreditation agency, and is involved in organising and conducting external quality reviews, leading to the recognition of study programs. The ECIU Quality Review Council (QRC) is an autonomous body, separate from the ECIU Board. The QRC formulates the EQR criteria and procedures, which are then subject to ECIU Board approval. The ECIU quality review process includes a structured self-evaluation and site visit. The site visit includes a review of instructional materials and student work; meetings with administrators, faculty, and students; observation of classes in session, demonstrations, if appropriate, and observation of the facilities and working environment. An EQR cycle normally occupies a period of 8 to 9 months. In 2000, a first pilot accreditation has been performed at the Faculty of applied mathematics at the University of Twente. After this first accreditation, the project remained to exist, but no more applications for accreditation had been received and entered into a stage of dormancy.

A more traditional initiative is the ECIU Student Mobility Group. The objective of the working group is to look into ways of improving student mobility between ECIU members and also to propose new and innovative ways of dealing with mobility. One such example is the ECIU Student Exchange Programme. ECIU created its own student exchange programme, in which a study abroad period is combined with an internship at a foreign enterprise. The minimum duration of the study period is three months. The same applies to the internship, which normally follows the study period. Where possible, scholarships are provided for participating students from the Socrates/Erasmus and Leonardo da Vinci programmes of the European Union. Efforts will also be made to find paid internships for students. Students who have successfully completed both a study period at another ECIU university and an internship at an enterprise based in the host country will be awarded a special ECIU Certificate signed by the Rectors of the participating universities. Students will not be charged any tuition fees at the host university. All the universities participating in the ECIU Student Exchange Programme[29] have International Offices offering quality services for both incoming and outgoing students.

Cooperation in *research* is another core activity of the ECIU. As explained above, the ambitious objectives of an ECIU Doctorate or an ECIU Research School did not materialise. Other activities envisaged in the ECIU Strategic Plan were the

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[29] All ECIU member universities participate in the ECIU Student Exchange Programme, except for the University of Warwick.

establishment of a system for joint investments in research, laboratory facilities and ICT equipment. Also cooperation within specific research fields and especially new multi-disciplinary research contexts is an objective of the ECIU. To provide starting points for the latter, a research survey was conducted to make transparent all research schools and themes in the participating universities. The matching of interests is also facilitated by the local coordinators, especially in the framework of EU research programmes. A recent activity in the field of research is the ECIU Young Researcher Prize. Every two years, three researchers from member universities will receive this prize. Research excellence is an important but not the only criterion for winning the prize. In order to become eligible for the prize, also communication and presentation skills are considered. The prize was first awarded in the summer of 2002 on the theme of 'research for a sustainable society'. Other priorities of ECIU are cooperation in regional development, institutional management and in public relations and cooperation with external partners. Where possible, these priority areas are connected to the activities in education and research.

10.5.3 Development

Roughly, the development of ECIU from 1996 until 2003 can be divided in three phases. The start-up phase, running from 1996 until 1999, was mainly marked by the preparation of ECIU and the search for suitable and eager partners. The core of ECIU at that time (Twente, Warwick and Dortmund, and to a lesser extent Aalborg and Barcelona) displayed a high level of trust between the leaders and managers. In this phase, the main areas for strategic cooperation were identified. The foremost reason for cooperation for the participating universities was the establishment of a strategic position vis-à-vis their external environment and was less based on internal exchange of staff and students. The first opportunities for cooperation that were identified at that time, were of a strategic nature and very ambitious.

In 1999, the need for a firmer internal organisation of ECIU was felt for translating the charter into more concrete goals and for achieving these goals. In the General Meeting in Strathclyde it was therefore decided to establish an Executive Board and build a stronger role for the Secretariat. The rector of the University of Twente became chairman of the board, and the secretariat was relocated from its temporary location in Twente to Aalborg. This meant that the meetings now took place on the highest level and on a yearly basis (in general: rectors and LC of the institutions). It was also decided that the Secretariat would receive structural financial support. In this time, also a PR 'campaign' was carried out and ECIU got more exposure outside the network. However, after the start of the Bologna process, and the related shift to a more internal orientation of the member universities in order to implement the new three cycle structure, the external exposure of ECIU also declined. The strategic plan for 2000-2002 that was developed in 1999 was not a change of direction but in the plan the total collection of activities was brought back to manageable proportions and several priority activities were selected. Also, there was a shift from highly ambitious to more realistic objectives. A final change that took place was the shift from external strategic positioning to a mix of external and internal activities. In this second phase in the

development of ECIU, from 1999 until 2002, many of the planned activities were realised, like the ECIU Quality Review, the Web Supported Learning Pilots, and the Research Survey. In the operational phases, where consortium-wide implementation of such projects should take place, the consortium became exposed to problems due to different legislation in different countries and due to different and shifting levels of commitment.

More recently, from 2002 on, a third phase has commenced. Also, the chair of the Executive Board changed from the University of Twente to the University of Strathclyde. In this phase, the ECIU Graduate School, improvement of student and staff mobility and university-industry interaction will become the future focus points of ECIU. This followed the decisions from the 2003 Executive Board meeting to focus on fewer activities and to sharpen the profile of ECIU. Other activities involving a more limited number of ECIU members will continue.

Chapter 11   Analysis of the Consortia

11.1   Introduction

Now that the different consortia have been introduced, we will turn to a more detailed analysis of structure, performance and change in the consortia. In this chapter we will further analyse the main concepts that were introduced in chapter six: performance, complementarity, compatibility and coping mechanisms. We first analyse the four case studies of the consortia described in chapter ten. Each of the consortia will be evaluated based on the perceptions of the respondents to the questionnaire, and we explore the concepts of performance, complementarity and compatibility for each consortium. Here we will also look whether there are significant differences between different groups within the university[30]. We will explore the relationships between the performance indicators and complementarity and compatibility on the basis of the correlations between them. In order to test the simultaneous effect of complementarity and compatibility on performance, regressions were done on the effect of the three independent variables on each of the three performance indicators[31]. Finally we will analyse what kind of coping mechanisms have been employed by each consortium. The objective of this chapter is to test the propositions on the complementarity-

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[30] Tables with descriptive statistics shown in this chapter are also shown in Appendix IV where they are controlled for the different groups within the university (non-academics vs. academics). Where means between these groups show a statistically significant difference, they will be mentioned in the text.

[31] One condition for performing regression analysis is that the dependent variable is measured at least on an interval scale. Our three performance indicators for all four consortia are calculated from several primary ordinal variables and therefore have a limited set of outcomes. Due to the multitude of outcomes however, it is justifiable to consider the performance indicators to be at an interval scale. A second condition is that the dependent variables in the regression analysis are distributed normally. To test this assumption of normality, we perform a one-sample Kolmogorov-Smirnov Test for each consortium.

compatibility-performance relations that we posited in chapter six and to explore the validity of the models presented in chapter seven (figure 7-1 and figure 7-2). We will do that for each network separately. The results provide the input for the comparative analysis of chapter twelve.

11.2 Alma Network

11.2.1 *Introduction*

The questionnaire issued to people involved in ALMA activities received a response of 27 persons[32]. Of all respondents in the ALMA network, those from the University of Maastricht were most represented with 40.7 % of all respondents. The LUC returned the least number of questionnaires (11.1 % or 3 out of the total of 27 ALMA respondents). These respondents have been involved in one or more activities that were executed under the umbrella of ALMA[33]. If we look at the types of activities that the respondents are involved in, we see that joint research and student mobility are the internationalisation activities that many of the respondents were involved in. Cultural activities, ICT related issues and library cooperation are less mentioned among the respondents. Rather surprisingly, only four respondents are involved in regional activities. This is rather low considering the regional outlook of the ALMA network.

Most of the respondents were involved in ALMA activities for only a small proportion of their total working hours. A majority of 85% spends only one to five hours each month on ALMA activities (average on an annual basis). Only one respondent spends more than ten hours each month on ALMA activities (this excludes the members of the ALMA office, who were not sent a questionnaire since they represent the consortium perspective rather than the perspective of a member university; see section 8.2.3). Looking at the different position of the respondents, we can see that almost half of the respondents are academics (37% are professors, 11 % are other academics). The other half is composed of rectors, managers, international relation officers and the coordinators of ALMA activities within the universities (Appendix III: table 3). The data also point to the fact that a majority of the respondents sees international cooperation as important for all levels in the university and also for the processes of teaching and research (Appendix III: table 4). The types of international linkages that are most important to the respondents are the individual relations. After this, priority is given to links of the faculty. The links of the university as a whole are seen as important by only a small majority of the respondents. Over three quarters of the respondents perceive both the spatial scope of the content of their work and their network of relations as being European or global. Relatively many respondents characterise their work and network as being Euregional in scope. This is in line with the Euregional focus of the ALMA network.

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[32] Minimum response 34.2%; Likely response 45.6% (explained in chapter eight; table 8-2).
[33] All descriptive statistics for section 11.2.1 are reported in Appendix III.

11.2.2 *Performance*

As indicated in chapter eight, we have looked at three indicators for performance: consortium performance, individual performance and relational performance. For the first indicator, respondents were asked to assess the extent to which the ALMA objectives are achieved. Since the importance of the various individual objectives is likely to differ in the eyes of the respondents, we asked the respondents to attach a weight to the objectives according to the priority of the objectives. These weights were assessed on a five-point scale and varied from 0.2 for low priority to 1.0 for high priority (see section 9.2.2). The descriptive statistics for the priority, attainment and performance of the ALMA objectives are listed in table 11-1. The results are sorted according to the mean levels of performance awarded to each of the objectives. The table shows that the attainment of most goals in the ALMA network is on average assessed as slightly negative, with means (and also medians) between 2 and 3 on a five point scale. The performance on the basis of the ALMA objectives is best for the traditional internationalisation activities, such as student mobility and joint research and also for cooperation in education and continued training. The latter objective closely connects to the Interreg Programmes on which ALMA depended heavily for financial resources.

If we take the distribution of the assessment into account, we observe that only 25 % of all respondents passed a positive overall judgement on the attainment of ALMA objectives (score of >3 on the mean of attainment of all objectives). The lowest rated objective in terms of attainment – Euregional integration of educational programmes – received a positive assessment (score >3) by 5 % of the respondents. This is somewhat unexpected considering the fact that some educational programmes are now offered jointly, although not all joint programs are offered within the ALMA framework. Some are offered in the framework of the Transnational University Limburg. The most important objective in the eyes of the respondents – the encouragement of student mobility – was seen as successful (score >3) by 17.4 % of the ALMA respondents. The low success in the area of student mobility is also acknowledged on the ALMA level: "*This* [mobility; EB] *was somewhat disappointing due to a lack of interest on the side of the students*"[34] and also in later stages "*Euregional mobility did not have priority for both students and staff*"[35]. This supports results from earlier studies on Euregional mobility (e.g. Beerkens & Van der Wende, 1999; Beerkens, 2000)[36].

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[34] ALMA Interview respondent 1
[35] ALMA Interview respondent 2
[36] The latter study however, showed that Euregional mobility received more support in the field of vocational education

Table 11-1: Consortium Performance of ALMA (N=27)

ALMA Objectives:	Priority*		Attainment**		Performance***	
	Mean	*SD*	Mean	*SD*	Mean[37]	*SD*
The encouragement of student mobility	0.80	0.23	2.52	0.99	2.07	1.12
Euregional cooperation in education and continued training	0.64	0.30	2.78	1.13	1.99	1.36
Euregional cooperation in research	0.74	0.23	2.50	0.86	1.98	1.05
Creation of new educational programmes with Euregional partners	0.70	0.25	2.45	1.10	1.93	1.20
Joint Euregional scientific projects	0.58	0.28	2.71	0.99	1.92	1.32
Stimulation of language courses	0.63	0.26	2.65	0.99	1.89	1.17
Systematic exchange of information on research within the Euregion	0.67	0.28	2.57	1.20	1.84	1.30
Euregional integration of educational programmes	0.71	0.23	2.20	0.89	1.72	1.05
Cooperation with Polytechnics and intermediary organisations	0.61	0.26	2.60	1.10	1.65	1.09
Euregional cooperation in information and publication activities	0.55	0.28	2.44	0.98	1.52	1.21
Euregional cooperation in services to the community	0.52	0.23	2.44	0.96	1.36	1.04
Overall Consortium Performance[38]					1.85	0.81

*   *0.2 = low priority; 1.0 = high priority*
**   *1 = not satisfactory; 5 = very satisfactory*
***   *Performance = Priority x Attainment (corresponding with equation 9-1)*

Controlling for the positions of the respondents (being non-academic or academic; see appendix IV, table 1), we only find a significant[39] difference for the mean priority attached to the 'Creation of new educational programmes with Euregional partners',

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[37] Note that in this table 'performance' does not exactly equal 'priority' x 'attainment'. Equation 1 (chapter nine) shows that 'priority' and 'attainment' are multiplied for each respondent separately. The mean in this column thus is not the product of the means of 'priority' and 'attainment' but the mean of all individual products of 'priority' and 'attainment'. This calculation then provides scores for Consortium Performance for every single respondent of the consortium, of which the mean is stated in this column. The same argument is valid for tables 11-4, 11-6 (section 11.2: ALMA), 11-10, 11-13, 11-15 (section 11.3: AUN), 11-19, 11-22, 11-24 (section 11.5: Coimbra) and 11-28, 11-31, 11-33 (section 11.4: ECIU).

[38] The mean for overall consortium performance is not the 'mean of the means' but is calculated for each respondent separately as illustrated in the equations in chapter nine. The same argument is valid for all tables with descriptive statistics in this chapter.

[39] Where it is stated that differences between non-academics and academics are significant, this is based on a on an independent samples t-test for all items. Levels of significance are given in the corresponding tables in Appendix IV.

which academics assess higher than non-academics. In general, academics show a higher rating for Consortium Performance than non-academics, meaning that they perceive the consortium to be more successful. This difference is however not statistically significant.

The results of 'individual performance' (the performance measured in terms of the impact on each individual university in the consortium), are shown in table 11-2.

Table 11-2: Individual performance within ALMA (N=27)

Area affected:	Mean*	SD
Impact on the reputation of university	3,45	0,69
Impact on the access to international funding opportunities	3,33	0,97
Impact on the regional socio-economic environment of the university	3,28	0,57
Impact on the quality of teaching	3,22	0,80
Impact on the quality of research	3,11	0,74
Impact on organisation & management within the university	2,94	0,66
Impact on the competencies of graduates	2,94	0,94
Impact on enrolment in the university	2,88	0,89
Overall Individual Performance**	3,27	0,58

* 1 = negative effect; 5 = positive effect
** corresponding with equation 9-2

Most areas are slightly positively affected by cooperation within ALMA, although most values are close to 3 and therefore close to neutral. The highest scores are for the impact on the university's reputation and the increased access to international funding opportunities. The latter impact can be explained through the funding received in the framework of the Interreg programmes and the financial impulses through the Dutch Cross-border cooperation program. The positive impact on the reputation is shared by 40 % (score ≥ 4) of the respondents, while 95 % assessed the impact as neutral or positive (score ≥ 3). Few respondents observed a negative impact of cooperation on core university activities like education and research (13 respectively 15.8 % of the respondents assessed the impact as negative). The cooperation is perceived to have only a minor (negative) effect on the number of enrolled students or on the ultimate competencies of graduates that graduate from ALMA universities. The same goes for the impact on the organisation and management of the universities, although a breakdown by position (Appendix IV: table 2) shows that non-academics rate this impact significantly more positive than the academics (for $p<.05$). Also, the effect on the university's reputation is assessed significantly more positive by non-academics than by academics (at a significance level of $p<0.1$).

The final performance indicator – Relational Performance – expresses the way the respondents perceive the process of cooperation in the implementation phase. Questions here refer to cooperation between the different universities, but also the process of cooperation within the university (table 11-3).

Table 11-3: Relational performance of ALMA (N=27)

Relational Items:	Mean*	*SD*
The coordination of ALMA activities on ALMA level has been effective	2.71	*1.27*
The division of labour and authority between us and our partners (on ALMA activities) has been clear	2.60	*1.08*
Other ALMA partners are strongly committed to ALMA Activities	2.56	*1.04*
Communication between us and our partners (on ALMA strategies and activities) has been sufficient	2.36	*1.04*
The division of labour and authority within the university (on ALMA activities) has been clear	2.35	*0.98*
The internal coordination of ALMA activities has been effective	2.35	*0.98*
Communication within my university (on ALMA strategies and activities) has been sufficient	2.27	*1.04*
There is strong commitment on ALMA activities within my university	2.17	*0.96*
Overall Relational performance**	2.42	*0.71*

* *1= strongly disagree; 5 = strongly agree*
** *corresponding with equation 9-3*

In general, the process of cooperation among universities is assessed less negative than the processes within the partner universities. This is especially the case for the RWTH Aachen and the Université de Liège, the two larger universities in the ALMA network. Only the coordination by the ALMA office and the commitment of the partner universities were assessed as neutral or positive by a majority of the respondents (61.9 % respectively 55.6 % gave a score of ≥ 3). All other items were assessed negatively by a majority of the respondents. Yet, non-academics seem more satisfied with the relational items than academics are (Appendix IV: table 3). This is especially the case for the transparency of the internal division of authority and responsibilities and the coordination on the ALMA level. This result for the former item is rather obvious, since the non-academics (for instance from international relations officers or local coordinators) are likely to be the ones that have the best overview on this division of labour. For the latter item, the result might point to the fact that relations between the ALMA Office and university members run via rectors or international relations offices rather than directly to the academics on the work floor. This problem has earlier been recognised by the ALMA network, but the creation of a management team has yet to produce an adequate solution (see section 2.1 in chapter 10).

11.2.3 *Complementarity*

From the start, the member universities recognised that they were very different in nature. They stated explicitly that the deployment of complementary of resources and capabilities could lead to mutual advantages resulting from cooperation (Kockelkorn,

1999). We have measured the level of complementarity on the basis of twelve possible sources for complementarity and asked respondents to assess the importance of the resources and whether the composition of the ALMA network was positive with respect to these sources. For ALMA this resulted in the data given in table 11-4).

Table 11-4: Level of complementarity in ALMA (N=27)

	Importance of resources*		Presence of resources**		Complementarity of resources**	
	Mean	SD	Mean	SD	Mean	SD
High quality in research	0.86	0.16	3.96	1.14	3.46	1.26
High quality in education	0.85	0.19	3.84	1.11	3.30	1.24
Proximity of the partner	0.66	0.28	4.29	0.91	2.81	1.45
Language of instruction at partner	0.78	0.22	3.56	1.23	2.81	1.29
Reputation of partner	0.81	0.18	3.36	1.19	2.70	1.18
Quality of management in partner university	0.75	0.15	3.54	0.83	2.68	0.85
Positive country characteristics of partner	0.59	0.28	3.87	1.01	2.27	1.45
Physical infrastructure/facilities of partner	0.69	0.17	3.17	1.09	2.24	0.98
The partners' access to student markets	0.65	0.24	2.79	1.10	1.87	1.04
Existing external relations of the partner	0.61	0.20	3.17	1.05	1.84	0.69
ICT-standards of the partner university	0.64	0.18	2.78	0.85	1.80	0.74
Financial resources of partner university	0.58	0.19	2.79	1.06	1.60	0.77
Overall Complementarity	0.70	0.08	3.49	0.76	2.52	0.65

*   *0.2 = not important; 1 = very important*
**   *1 = not present; 5 = abundantly present*
*** *Complementarity = Importance*Presence (corresponding with equation 9-4)*

The most important characteristics respondents stated they looked for in possible partners for cooperation are the quality of education and research and the reputation of the partner. These, together with the proximity of partners and the language of instruction in the partner universities constitute the main sources of complementarity in the ALMA network. Additional sources of complementarity that were mentioned by the respondents related more to the interpersonal instead of the inter-organisational aspects of cooperation. It was mentioned that the "*human quality of the partners*" and the existence of "*long-term personal contacts*" were important factors in partner choice[40].

If we control for position (Appendix IV: table 4), we observe that for complementarity in research quality, the level of complementarity in the network is significantly higher for academics than for non-academics. A total of 92.3 % of the academics perceive the research quality of their partners as positive for most of the member universities, while this is the case for two thirds of the non-academics. The proximity of the partner institutions is a characteristic of ALMA that is especially valued by non-academics (71.4 % thinks this is an important advantage in the cooperation, a view shared by only 16.7 % of the academics). However, as was mentioned by one

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[40] Direct citations from the questionnaires are reported in "*italics*". If citations come from the interviews, this is referred to in footnotes

respondent, proximity is only useful in case there is "*easy access in terms of infrastructure and public transport*".

In chapter six we proposed a positive relation between complementarity and performance. Table 11-5 relates performance to complementarity.

Table 11-5: Relation between complementarity and performance

	Complementarity	
	Pearson R	Significance (1-tailed)
Consortium performance	-0.213	0.164
Individual Performance	-0.226	0.144
Relational performance	0.002	0.497

The results from table 11-5 do not support our proposed relationship between complementarity and performance. Although the correlation for Consortium Performance and Individual Performance is negative, these correlations are not statistically significant. For the data of ALMA, there is no statistically significant relation between the level of complementarity and performance and, contradictory to our proposition, complementarity does not seem to explain the variation in any three of the performance indicators. This is also the case if we control for position (Appendix IV; table 5). The lack of correlation between complementarity and performance might be caused by the fact that the focus here is on 'Overall Complementarity' and therefore variations between different sources of complementarity are neglected. If we look at the relationship between the performance indicators with the different sources of complementarity we see that only for specific sources a statistically significant relation with performance can be observed. This is the case for the relation between Consortium Performance and Complementarity in educational quality (R = -0.395; p<.05), Individual Performance and the country characteristics of the partner (R = -0.365; p<.05) and Relational Performance and the proximity of the partner (R = -0.456; p<.05).

Contrary to the proposition, we only observe negative relationships between these sources of complementarity and the performance indicators. Although there need not be a causal relation between the items, reasons for the negative relation can be suggested (but not proved!). The perceived presence of high quality in education at the partners for instance, is negatively related to the attainment of consortium objectives (R = -0.395). An explanation for this can not be stated with certainty but, in the context of ALMA, it can be the case that educational quality of the partners constitutes an obstacle for attaining (Euregional!) consortium objectives since cooperation with high quality partners tends to be pursued in wider European or global networks. The negative relation between Individual Performance and 'positive country characteristics of the partner' (R = -0.365) is mainly related to a perceived negative effect on enrolment[41]. It

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[41] This was observed by calculating the correlations between 'positive country characteristics of the partner' and the various effects on the individual universities ($aa_1...aa_8$; see equation 9-3).

could be the case that respondents do value the partner countries but that the Euregional scope of the cooperation presents a negative image for the university (an image of a 'regional university' instead of a 'truly international university') and that respondents believe that this is not in line with current demands from students. The negative relation between proximity and relational performance (R = -0.465) is also surprising, since one might expect that proximity makes communication and coordination[42] between partners easier. It might be the case that, because of the proximity of the partners, expectations about coordination and communication are set too high. When this falls short in the process of cooperation, respondents might tend to emphasise this in their assessment of communication and coordination. In general we can conclude that a positive relation between complementarity and performance can not be observed for the case of ALMA.

An interesting point comes forward if we look at the correlations separately for non-academics: all are negative (but only significant at the $p<0.1$ level for Consortium Performance). As we noticed before, the universities are very different in ALMA, and these figures might suggest too much differences or 'overcomplementarity', meaning that the resources or characteristics of the universities are too far apart, resulting in a lack of starting-points for cooperation. The assumption that non-academics take the whole of the university into account when they look at the partners, while academics look at the partners from their own disciplinary perspective, might explain the existence of negative correlations for non-academics.

11.2.4 Compatibility

For compatibility, we put forth two indicators. Institutional Fit expresses the level in which the institutional contexts in which the partners operate are compatible with each other. Where differences in these institutional contexts are seen as an obstacle for cooperation, these differences are believed to have a negative influence on cooperation. The second indicator – Former Cooperation – expresses the level in which the relations within the consortium correspond with the existing relations of a respondent.

Institutional Fit between the ALMA partners is illustrated in table 11-6. Table 11-6 suggests that most differences in the institutional contexts in which the universities operate seem to have a negative impact on cooperation. This goes especially for differences in the legal environment of the universities. According to two thirds of the respondents, these have a negative impact on cooperation. Also, legislation is perceived as very diverse in the ALMA network by a majority of the respondents (79.2 %). The difference in the character of the university (in terms of age, size and scope) is not seen as negatively affecting cooperation. These differences are very obvious in ALMA. The RWTH Aachen for instance is the largest technological university in Germany with 28,000 students and was established in 1870, while the LUC in Flanders (established in

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Correlation between 'positive country characteristics of the partner' and the 'effect on enrolment' was -.703, which is significant for $p<.01$.

[42] Calculating correlations between proximity of the partner and the various relational items ($r_1...r_8$) shows that the strongest negative relations are between the coordination on the ALMA level (R = -.588; $p<.01$) and communication *between* the partners (R = -.404; $p<.05$).

1973; 2043 students in 2003) and the University of Maastricht in the Netherlands (established in 1976; over 11.333 students in 2002) are only recently established, relatively small universities offering programmes in sciences as well as social sciences. Still these differences are perceived to have very little effect on cooperation.

Table 11-6: Institutional Fit in ALMA (N=27)

	Impact of differences*		Heterogeneity in consortium**		Institutional fit***	
	Mean	*SD*	Mean	*SD*	Mean	*SD*
Differences in the character of universities	0.07	0.37	3.87	0.76	0.41	1.52
Differences in national culture	-0.02	0.53	3.50	1.10	-0.15	1.98
Differences in conceptions of academic work	-0.04	0.59	3.67	1.05	-0.15	2.16
Differences in organisational procedures	-0.17	0.48	3.86	1.01	-0.78	1.95
Differences in the division of authority	-0.24	0.54	3.68	1.17	-1.04	2.29
Differences in legislation	-0.48	0.45	4.21	0.98	-2.19	2.24
Overall Institutional Fit					-0.63	1.16

*   *-1 = negative impact on cooperation; +1 = positive impact on cooperation*
**   *1 = homogeneous; 5 = heterogeneous*
***   *Institutional fit = Impact * Heterogeneity, where a higher score means a better fit*
         (see equation 9-5).

A lack of institutional fit is especially apparent in the so-called centralised institutional forms (see section 9.4): legislation, division of authority and organisational procedures. If we control for the position of the respondents (Appendix IV: table 6) we observe a significant difference between academics and non-academics for institutional fit in terms of the division of authority (based on an independent samples t-test for all items for $p < .05$). Incompatibility in terms of the division of authority is especially perceived by non-academics. One reason for this may be that the decision making competencies within the universities are differently distributed in the countries involved. In Germany for instance, chair-holders have more power than in the Netherlands, where power is more concentrated at the central levels of the university. One respondent however added that the institutional contexts for "*the Netherlands and Germany are more similar than for Belgium and Germany*".

In general we can observe a rather low assessment of Institutional Fit in ALMA. Overall, two thirds of the respondents perceive the institutional contexts of the partners as incompatible with each other (Overall Institutional Fit < 0). The standard deviations however show that there are large differences between individual respondents.

Table 11-7: Former Cooperation in ALMA (N=27)

	Mean*	SD
Former cooperation with partner countries	3.05	1.27
Former cooperation with partner universities	2.12	1.06
Overall Former cooperation**	2.59	1.06

*   *1 = never; 5 = frequently*
**   *Corresponding to Equation 9-6*

'Former Cooperation', the second indicator for compatibility, is measured on the basis of the frequency of former cooperation with the partner university as well as the frequency of former cooperation with the countries in which the partners are located. The assumption here is that experience and familiarity with the context of the partner universities and partner countries and the existence of earlier personal relations positively affects cooperation. The data for Former Cooperation in the ALMA network are given in table 11-7. The table shows that cooperation with both the partner countries and the partner universities have occasionally taken place outside the ALMA framework. Academics have slightly more experience in cooperation with the neighbouring countries than non-academics. Differences however are not substantial enough to be statistically significant (Appendix IV; table7).

The compatibility proposition claimed that the level of compatibility would positively correlate with performance. This implies that there is a positive relation between Institutional Fit and Former Cooperation on the one hand and the performance indicators on the other. Table 11-8 displays the correlations between our performance indicators and our indicators for compatibility. The table shows two significant correlations. The first is between consortium performance and the institutional fit between the partners.

Table 11-8: Relation between compatibility and performance

Performance Indicators:	Compatibility Indicators:			
	Institutional Fit		Former Cooperation	
	Pearson R	Sig. (1-tailed)	Pearson R	Sig. (1-tailed)
Consortium Performance	.424*	.020	.244	.126
Individual Performance	.220	.145	-.086	.341
Relational Performance	-.246	.113	.418*	.017

* Correlation is significant at the 0.05 level.

The results indicate that a lower level of Institutional Fit between the partners corresponds to a lower level of perceived performance of the ALMA objectives. We can conclude that the correspondents who perceived the consortium partners to be incompatible, in general perceive cooperation as less successful. This positive relation between Institutional Fit and Consortium Performance is especially observed with the academics cooperating within ALMA (Appendix IV: table 8). This subdivision by position also illustrates another significant correlation for Institutional Fit: the coefficients point to a negative relation between institutional fit and relational

performance for academics (R = -.715; p<.01). This implies that the more obstacles to cooperation the academics perceive within the network, the more satisfied they are with the relational issues. Although the relation is statistically significant, it is somewhat problematic to give a rational explanation for this. A closer look shows that there is especially a significant negative correlation between the 'impact of legal differences' and Relational Performance (R = -.723; p<.01). This implies that the more they perceive legal differences as an obstacle for cooperation, the more they are satisfied with the relational issues in cooperation. An explanation for this could be that the extra efforts needed for overcoming such obstacles may have made respondents more positive about the relational issues. The second significant correlation is between former cooperation and relational performance. This indicates that the process of cooperation (in terms of communication, coordination, commitment and division of authority) is perceived as more positive if there was a history of cooperation between the partner countries or universities. This relation is especially apparent for academics (Appendix IV: table 8). For managers and administrators it appears to be less important whether they have former experience with the partner universities and partner countries.

In general we can conclude that there is a positive relationship between Institutional Fit and Consortium Performance and between Former Cooperation and Relational Performance in ALMA. This supports the proposed relationships that we stated in chapter six and seven. An interesting feature of ALMA is that these relations are stronger for academics than for non-academics. No significant relation however could be established for complementarity and the performance indicators. Where respondents perceived an ample availability of important complementary resources, they did thus not perceive a higher performance.

11.2.5 *Performance-Complementarity-Compatibility*

In the sections above, we have looked at the relationships between our core concepts separately. This section examines the combined effects of the independent variables on the three performance indicators[43]. The results of the three regression analyses are reported in table 11-9.

The regression model for Individual Performance has a low F-value and therefore one may conclude that complementarity and compatibility do not explain the variations in Individual Performance. The regression model with Relational Performance as the dependent variable does provide an F-value that allows us to say that changes in the independent variables explain changes in the dependent variable. Relational Performance in ALMA is predominantly explained by the frequency of former cooperation with the ALMA member universities and the countries in which they are located. The model for Consortium Performance is also adequately explained by the independent variables. Of the three performance indicators, this model shows the highest R^2 and therefore it is best explained by complementarity and compatibility.

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[43] The assumption that the dependent variables have a normal distribution can be maintained. A One-Sample Kolmogorov-Smirnov Test performed for the variables does not give us statistically significant reasons to reject the hypothesis that the distribution is normal. Kolmogorov-Smirnov Z: Consortium Performance: 0.621; Individual Performance: 0.992; Relational Performance: 0.682.

Even in this model though, the Beta coefficient for Complementarity is not significant. In the case of ALMA, the attainment of the objectives of the consortium is thus best explained by the degree of Institutional Fit and the frequency of Former Cooperation.

Table 11-9: Results of Regression Analysis

Independent variables:		Dependent variables (Performance indicators):		
		Consortium Performance	Individual Performance	Relational Performance
Complementarity	Beta	-0.279	-0.202	0.019
	t-value	-1.558	-0.965	0.106
Institutional Fit	Beta	0.567**	0.142	-0.098
	t-value	3.034	0.657	-0.521
Former Cooperation	Beta	0.414*	-0.226	0.528*
	t-value	2.223	-1.039	2.829
Model	R^2	0.398	0.139	0.313
	F	4.194*	1.079	3.194*

*   *Significant at the 0.05 level.*
** *Significant at the 0.01 level.*

11.2.6 Coping Mechanisms

The ALMA network was established on the basis of complementarity between the participating universities. To exploit this complementarity, ALMA has never envisaged close integration of activities, but has functioned as a coordinator and facilitator for local initiatives. The network however has changed strategies, structures and objectives to cope with insufficient exploitation of complementary resources and with sources of incompatibility. *ALMA's core business in the beginning was the promotion of mobility, but this has developed somewhat disappointing due to a lack of interest on the side of the students*[44]. This disinterest was partly due to financial support regulations, but also to the fact that many students prefer more remote places. In the field of student mobility, ALMA has coped with this by exploiting their differences in institutional backgrounds as sources of complementarity, to attract international students from outside the region. Especially in fields like European Studies, the Euregion sells itself as "*a 'small Europe' with many of the linguistic, cultural, political and legal differences of the entire Europe*"[45]. In order to exploit complementarity in programmes, and to avoid problems due to distances the ALMA office has developed an Electronic Study Guide to make the offerings in the fields of economics and management transparent to the students of the respective universities.

"*In order to cope with legal difficulties concerning staff exchange, the universities have employed the system of 'closed purses'*"[46]. This means that the financial issues relating to staff exchange become based on reciprocity so that no financial compensation needs to be exchanged. Such a reciprocity-based system is enabled, or at least made easier,

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[44] ALMA Interview respondent 1
[45] ibid.
[46] ibid.

through the small size of the network. Legal differences also became apparent through the development of a joint masters programme. In such educational legal issues, some member universities also try to influence national policies through "negotiations with state governments".

One of the deficiencies in the original organisational structure has been the large 'organisational distance' between the Rectors Meeting and the actual activities that often take place on the department or faculty level. "*In the late nineties there was an attempt to create an extra body in order to relief the burden of the four rectors and because it was hard for the rectors to speak on behalf of the whole university*"[47]. In order to cope with these differences in levels of authority in the different universities, project groups or a management team was installed in order to "*bridge the gap between more strategic central-level decision-making and the stimulation and implementation on the work floor*"[48]. Other suggestions by respondents to the questionnaire to close this gap are frequently related to the provision of information like the "*circulation of the minutes of Rector's meetings to faculties and departments that are directly involved in ALMA activities*" or through the intensification of personal contacts through "*people with double tenures*". Others also called for opportunities to "*initiate partnerships at the faculty level and not at the university level*".

Cooperation within Alma has also frequently been frustrated by asymmetry in financial commitment. The University of Maastricht often could make available the most funds, "*both due to funding for national policies on cooperation but also due to the fact that they had more financial leeway*"[49]. This is mainly due to the differences in the level and nature of financial autonomy of universities in Germany, Belgium and the Netherlands. To cope with this, the ALMA office has applied for external resources, and has been successful at that: the establishment of the ALMA office was funded partly through the Interreg I and II programme, these programmes also provided the 2 million euros funding for several ALMA projects (e.g. the Mines et Mineurs project). More recently, the ALMA network gathered up to 3 million euros from the Interreg III programme (2002-2008) for Euregional programmes on water management, health care and education in the field of ICT. In the Netherlands, ALMA received 2.7 million Euros from the Dutch Cross Border Cooperation Programme (a programme where matching from the partner countries was anticipated). Although ALMA also tried to lobby with possible funding sources in Belgium and Germany, this has not been successful. Funding for ALMA activities however still remains inadequate, which is by one respondent seen as a lack of commitment: "*A network cannot work without funding for actions taken on the floor. For any kind of network a sufficient and efficient structure is mandatory. In the Euregion, cooperation is a huge challenge. So a clear will coming from authorities is needed to go ahead in the so-called cooperation*".

A mechanism that has been applied to incorporate organisational differences is the *Transnational University of Limburg*, the joint venture between the University of Maastricht (Netherlands) and the Limburgs Universitair Centrum (Belgium). Although

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[47] ibid.
[48] ibid.
[49] ibid.

not directly an ALMA initiative, the preceding cooperation between the two institutions within ALMA has set the stage for this joint venture. The Transnational University of Limburg is an organisation, formally independent from the two universities. The Board however does exist of representatives of the two universities and the ministries. Currently, it does formally not employ any teaching staff, but rely on the staff of the two host universities. There is thus a high level of interconnection between the TUL and the two universities, but the students (currently in two programmes) are registered at the transnational university.

Differences in culture and language have been prominent in ALMA cooperation, even though they have not presented severe problems in the process of cooperation. In the case of culture this can be contributed to the familiarity of many of the people involved in collaborative activities with the culture of the neighbouring countries. Because people were aware of differences, such differences were often anticipated in earlier stages of cooperation. In the case of linguistic differences, the partners have a flexible attitude. Although the official language is English, various respondents pointed to the fact that sub groups frequently use other languages (mainly French or German) for communication.

In terms of content of the collaborative activities, a gradual shift can be detected in the operations of ALMA, going from student mobility and educational cooperation, to cooperation in research. International student mobility however is still important, but not so much as an end in itself, but more as a way of exploiting the unique location of the universities and the complementarity in educational programmes offered by the universities. More recently, a high priority is placed on socio-economic aspects of the region and the contribution of educational cooperation to further regional integration. In addition, more links were established with business in the region. This shift appeared parallel with a change of leadership at the ALMA office in Maastricht, where the new ALMA coordinator was – and remained to be – a delegate in the Provincial council.

In general we can observe that ALMA has been mainly preoccupied with institutional coping mechanisms, finding ways to deal with or incorporate institutional differences between the partners. In addition, much emphasis has been placed on changes in the organisational structure of ALMA and on the acquisition of external funding sources (partly to account for an asymmetry in financial commitment). In these activities ALMA has on occasion been successful. This has however not led to the recognition or exploitation of the complementarity between the participating universities. With the exception of an electronic study guide, no concrete actions have been taken to identify or communicate such complementary resources.

11.2.7 Conclusions: Structure, Change and Performance in Alma

Although the history of ALMA shows considerable achievements, the accomplishments of the consortium are slightly negatively evaluated by the persons involved in ALMA activities. ALMA has however been occasionally successful in some areas. First of all the consortium has been successful in the acquisition of external funding. In the course of its existence it has been successful in acquiring funding in the Interreg programmes and also in the applications for the Dutch Cross Border Cooperation programme. The

consortium also initiated and facilitated various short-term projects that were executed within the framework of these programmes. Long term activities that succeeded include EURON (European Graduate School of Neuroscience), IUS COMMUNE, and the Jacques Delors Chair. In spite of these achievements, respondents have (on average) assessed the various performance indicators as slightly negative. The success of ALMA objectives however have been less negatively assessed by academics than by non-academics. On the other hand, the impact on the own university was more positively assessed by non-academics, who were also more satisfied with the relational items.

Although the quantitative data do not provide explanations for this, we can suggest some explanations for the moderate assessment of activities in ALMA. First of all, the most visible and, in the case of ALMA, most valued international activity is the mobility and exchange of students. This activity has been rather unsuccessful in the consortium. The consortium however soon acknowledged this and shifted to a more instrumental form of international mobility, where emphasis was placed less on the international and intercultural experience, but more on the content of the programmes offered by the partner universities. Another explanation might be that emphasis has shifted from a Euregional scope to a more pan-European or global scope of internationalisation activities. Finally we can point to the low level of exposure of ALMA. ALMA is not a consortium that is prominently present in most of the partner universities. Even in some of the successful projects (e.g. EURON and the starting phase of the Transnational University Limburg), ALMA operates behind the scenes or only laid the foundations of such activities. This is illustrated for example by the low assessment of the success in joint educational programmes. This is an activity in which the ALMA has succeeded in some occasions, but which apparently is hardly recognised by the respondents.

In the case of ALMA, the low evaluation of performance can only partly be explained by complementarity and compatibility factors. While complementarity was seen as the main rationale behind ALMA, complementarity does not show a significant correlation with any of the performance indicators. Institutional Fit and Former Cooperation however do show some of the proposed relations with performance. Table 11-9 showed that Institutional Fit and Former Cooperation provide significant predictors for Consortium Performance and that Former Cooperation significantly predicts Relational Performance. The significant relations are shown in the explanatory model below (figure 11-1). Coping mechanisms that have been employed have mainly focused on the circumvention of problems due to incompatibility of partners (illustrated in the figure by a non-dotted line for institutional coping mechanisms). ALMA has been active in identifying obstacles for mobility, promoting language courses for students and staff, finding measures to deal with differences in personnel legislation (e.g. the 'closed purse system'). In addition, ALMA has been active in lobbying on the Euregional, national and European levels in order to stimulate governments to remove obstacles for cooperation or to make legislation impacting on cooperation more flexible. The consortium has also played a role in the establishment of the Transnational University of Limburg. This can be seen as an organisational structure in which cooperation should become institutionalised and through which differences in legislative and procedural arrangements between the participating universities can be solved. In this arrangement however, only two of the four ALMA partners participate. Other measures that have

been taken have focused more on relational items like coordination and commitment. ALMA has tried to improve relational performance through organisational measures such as the creation of a management team but, considering the negative assessment of this performance indicator, this has not (yet) led to the anticipated results.

Figure 11-1: Significant relations in the explanatory model for ALMA
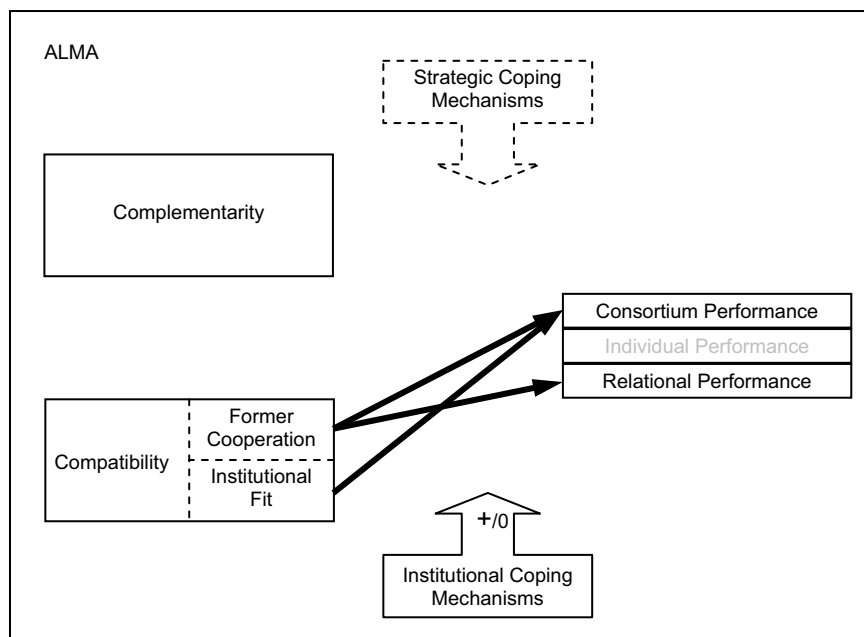
In conclusion we can observe a somewhat low appreciation of ALMA by the respondents, which can be best explained by a lack of perceived institutional fit. The lack of fit is mainly caused by a perceived negative effect of several institutional factors, especially the centralised institutional types like legislation, organisational procedures and the division of authority in universities. Complementarity between the partners is sufficiently present but does not lead to higher performance. The reason for this could be that complementarity is not exploited sufficiently or that, as we suggested before, there might be a case of over-complementarity in the case of ALMA. This supports the idea that there exists a paradox between compatibility and complementarity, where a (excessively) high level of complementarity is accompanied by a (excessively) low level of compatibility (see figure 6-1).

11.3   ASEAN University Network

11.3.1   Introduction

Of the 55 respondents[50] from AUN universities, almost half were involved in the organisation of conferences, seminars, workshops and other meetings within the framework of the ASEAN University Network[51]. Also, a substantial part is involved in the coordination of AUN activities. Most of the respondents (87%) only spend less than ten hours per month on AUN activities, while only three respondents spend between twenty and forty hours each month on AUN related programmes. In terms of positions within their university, the data show that almost half can be labelled as being involved in academic work (professors and other academics) while the other part exists of rectors or presidents, international relations officers and managers. Internationalisation and international relations are perceived as important by the persons involved in AUN activities. Over 90 percent of the respondents see internationalisation as important or very important for all levels in the university and nearly all see it as very important for the quality of education and research. The establishment of linkages of the university and faculty as well as personal linkages are seen as important or very important by nearly all respondents. Of all respondents, a large majority (96%) claims that their personal network of relations is international in scope. The countries best represented in the group of respondents are Malaysia, Thailand and Indonesia, followed by Singapore and the Philippines. The universities of these countries are also very active members of the network. The smaller and poorer countries are less well represented, but at least two responses came from each of the participating countries.

11.3.2   Performance

The descriptive data of our first indicator of performance – Consortium Performance – shows that the formal objectives of the ASEAN University Network are in general perceived as important by the respondents (Table 11-10). Information networking and staff exchange are seen as the most important of the objectives, followed by issues like student exchange and collaborative research. Wider cooperation with other countries in Asia is seen as more important than cooperation with the European Union. The goal of increasing cooperation with the EU is not developing very satisfactory, which is rather surprising considering the financial resources that are related to this relationship (see Chapter 10).

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[50] Minimum response: 28.2 %; Likely response: 34.4 % (see chapter eight; table 8-2).
[51] All descriptive statistics for section 11.3.1 are reported in Appendix III.

Table 11-10: Consortium performance of AUN (N=55)[52]

	Priority*		Attainment**		Performance***	
	Mean	SD	Mean	SD	Mean	SD
Development of student exchange in the ASEAN region	0.85	0.18	3.43	1.03	2.97	1.08
Information networking between ASEAN Universities	0.87	0.16	3.33	1.06	2.91	1.08
Development of staff exchange in the ASEAN region	0.87	0.14	3.28	0.97	2.86	1.05
Development of academic and professional human resources in the ASEAN region	0.83	0.17	3.42	0.96	2.85	1.16
Cooperation between ASEAN and other Asian countries	0.83	0.19	3.25	1.16	2.79	1.24
Promotion of the development of a common quality assurance system in ASEAN region	0.80	0.22	3.15	1.23	2.63	1.29
Development of ASEAN study programmes	0.76	0.21	3.35	1.02	2.61	1.19
Promotion of collaborative research programmes in ASEAN	0.85	0.18	3.00	1.10	2.59	1.18
Promotion of collaborative study programmes in ASEAN	0.80	0.19	3.21	1.11	2.56	1.17
Development of a regional identity	0.74	0.21	3.30	1.15	2.56	1.28
Establishment of an 'ASEAN University'	0.71	0.25	3.07	1.15	2.40	1.36
Establishment of ASEAN Studies scholarships	0.77	0.21	3.05	1.17	2.37	1.17
Cooperation between ASEAN and EU	0.71	0.22	2.84	1.08	2.14	1.08
Promotion of cooperation and solidarity among scientists and scholars within the ASEAN region	0.58	0.34	2.68	1.35	2.06	1.46
Overall Consortium Performance					2.65	0.85

*   *0.2 = low priority; 1.0 = high priority*
**   *1 = not satisfactory; 5 = very satisfactory*
***   *Performance = Priority * Attainment (Equation 9-1)*

Another remarkable result is that consortium performance is highest for the development of student exchange. This is remarkable because student mobility within the ASEAN area and between AUN universities is very modest (in comparison to intra European exchange and also compared to Inter-continental mobility from ASEAN countries). In addition, it is does not take place in a structural form but is organised on a more ad hoc basis in the Educational Forum (see chapter 10). On the other hand, AUN can be seen as one of the first initiatives that focus on intra-ASEAN student exchange, and therefore any increase in mobility is appreciated. Former international mobility schemes were often sponsored by international organisations or western partners and focused on inter-continental mobility. The establishment of scholarships to fund opportunities for exchange scores less on performance and, considering the limited sources of financial means in the region, can partly explain the moderate numbers of mobile students. Those students that can afford studies at foreign universities, or that have access to international funding opportunities, will be inclined to conduct their studies at Australian, Japanese, American or European universities. If we look at the other objectives, we can observe that the objectives in which the AUN is most active,

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[52] See also footnotes 37 & 38 in table 11-1

also receive a relatively high score in performance. This is for instance the case for the goal of information networking between universities, a goal which has been realised through the ASEAN Virtual University. It is especially in the field of research cooperation where AUN scores relatively low.

If we look at the different groups within the universities, we observe a statistically significant[53] difference in Overall Consortium Performance between non-academics and academics, with non-academics assessing the performance of AUN higher than academics (Appendix IV; Table 10). This difference is mainly caused by objectives relating to external cooperation, regional objectives and management issues. Remarkable are the different assessments of cooperating with other Asian countries and EU countries. Although the attainment of these goals is positively rated by administrators and managers, in the perspective of the academics this is significantly lower (cooperation with Asian countries: 3.65 versus 2.67; cooperation with EU: 3.26 versus 2.20). Also, the priority for these external cooperative programmes is higher for non-academics than for academics. Since substantial funding is connected to these external cooperation programmes, it seems that the funding is more beneficial to the organisation and management of the universities than to the academics on the work floor. The development of a joint quality assurance system is also significantly more successful in the perceptions of non-academics. Overall, administrators and managers see the AUN objectives as more important and more successful than non-academics. Even those objectives that definitely would need an active participation of academics (e.g. collaborative research programmes, ASEAN study programmes) are rated as less successful by academics (compared to non-academics). Only the objective "Promotion of cooperation and solidarity among scientists and scholars within the ASEAN region" is seen as more important and more successful by academics, compared to non-academics (although a significant difference can not be established).

Table 11-11 shows that AUN activities in general are seen to have a moderate positive impact on core activities within the universities. The overall impact of the cooperative activities of AUN on the individual member universities is seen as positive by 76.9 % of the respondents (Overall Individual Performance > 3). Membership of and cooperation in AUN is seen as beneficial especially for the reputation of the participating universities, but is also seen to positively affect teaching and research. Impact on the enrolment numbers in the universities is perceived as rather low, but is in general not a priority area for many ASEAN universities, since they already belong to the top level in their countries and are not threatened by a lack of students in the future. It might therefore also be the case that the concern with reputation mainly refers to the reputation within ASEAN or within the global environment. Other areas that were affected in a positive way that were mentioned by the respondents relate to the acquirement of knowledge and information ("*sharing teaching and research experiences with partner universities*" and "*getting familiar with the academic and administrative functions of the partners*").

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[53] Significance of the differences in means between non-academics and academics are based on independent samples t-tests for all items. Descriptive statistics grouped by position are reported in Appendix IV.

Table 11-11: Individual performance within AUN (N=55)

Area affected:	Mean*	SD
Impact on the reputation of university	3,86	0,82
Impact on the quality of teaching	3,59	0,88
Impact on the quality of research	3,57	0,88
Impact on the competencies of graduates	3,50	0,79
Impact on organisation & management within the university	3,45	0,73
Impact on the access to international funding opportunities	3,24	0,97
Impact on the regional socio-economic environment of the university	3,21	0,78
Impact on enrolment in the university	2,88	0,98
Overall Individual performance**	3,46**	0,68

*   *1 = negative effect; 5 = positive effect*
**   *Corresponding with Equation 9-2*

In the case of Individual Performance there is no overall significant difference between non-academics and academics (Appendix IV: table 11). It is only the impact on the reputation of the participating universities that is seen as significantly more positive by administrators and managers than by academics. Also a considerable difference in distribution can be observed in the impact on the access to funding opportunities. This impact is seen as positive by 50 % of the non-academics, while this positive impact is only observed by 27.3 % of the academics.

The indicator of overall relational performance within AUN is rated as slightly positive (Table 11-12). Internal Communication has been rated as positive (4 or 5 on a five point scale) by 39.6 % of the respondents, while this was lower (28.8 %) for external communication. Off all respondents, 35.9 % thought internal communication was insufficient (rated 1 or 2). For external communication this was 32.7 %. The clarity of the division of authority and responsibilities shows a similar distribution. Commitment within the universities and the coordination of the AUN activities by the Secretariat and the Board of Trustees is considered as positive (4 or 5) by the majority of the respondents (53.0 % for internal commitment and 54.0 % for external coordination). Dissatisfaction with relational items is also illustrated by some of the respondents. One respondent claims that "*activities of AUN are mostly kept or known among the administrators only*", while another respondent claims that "*the cooperation between the AUN member countries is not wide enough. Many of our 7000 students don't know AUN. I think that if we have cooperation on the level of faculties or departments, the result of AUN cooperation will improve*". The problem of a lack of knowledge on AUN is also shared by another respondent: "*I think the AUN is an excellent association. However, its members have to devote more attention to the publicising of its nature, purpose and activities within their own institutions. Hardly anyone at my university, for instance, is aware of its existence*".

Table 11-12: Relational performance of AUN (N=55)

Relational Items:	Mean*	*SD*
The coordination of AUN activities on AUN level has been effective	3,50	1,09
Other AUN partners are strongly committed to AUN Activities	3,50	1,03
There is strong commitment on AUN activities within my university	3,45	1,19
The internal coordination of AUN activities has been effective	3,25	1,27
The division of labour and authority between us and our partners (on AUN activities) has been clear	3,09	1,05
The division of labour and authority within the university (on AUN activities) has been clear	3,08	1,13
Communication within my university (on AUN strategies and activities) has been sufficient	2,94	1,23
Communication between us and our partners (on AUN strategies and activities) has been sufficient	2,92	1,15
Overall Relational performance**	3,18	0,97

*   *1= strongly disagree; 5 = strongly agree*
**   *corresponding with equation 9-3*

The slightly positive rating of relational items is largely accounted for by the judgement of non-academics. On all items above, non-academics are significantly more positive than non-academics[54]. While 72.4 % of all non-academic respondents rate Overall Relational Performance as positive (score higher than 3), this is the case for only 28 % of all academics. Another interesting result is that for all items except the coordination of activities, non-academics rate the internal aspects (sufficiency of internal communication, clarity on the internal division of responsibility and commitment within the university) higher tan the external aspects, while this is the other way around for the academics. In general we can conclude that Overall Relational Performance is moderate, being positively judged by non-academics and slightly negative by academics.

11.3.3 *Complementarity*

The composition of the ASEAN University Network is based on the country in which the universities are located (one or two from each member country of ASEAN) and the comprehensive nature of these universities and their national standing (all universities are among the top comprehensive universities in their countries). Apart from this, no specific other sources of complementarity were explicitly stated as foundations for cooperation within AUN. The main things to look for in cooperation according to the AUN respondents are the quality of education and research and the reputation of the partner universities (table 11-13). At the same time, most respondents perceive their partners to possess these qualities: respectively 70 %, 73.5 % and 71.2 % of the respondents perceive these characteristics to be amply present at the partner

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[54] Based on an independent samples t-test; p < .01 for all items (see Appendix IV: table 12).

universities. Also other resources and qualities that play a role in cooperation are perceived to be present in the consortium. Of least concern are the proximity of partners and the partner's access to student markets. The latter point can be based on the fact that for many partners, their student markets are national in scope[55] and that they do not need to fear a lack of students in these national markets, considering the increase in demand for quality higher education in all ASEAN countries.

Table 11-13: Level of complementarity in AUN (N=55)

	Importance of resources*		Presence of resources**		Complementarity of resources**	
	Mean	SD	Mean	SD	Mean	SD
High quality in research	0.90	0.13	4.02	0.97	3.61	0.92
High quality in education	0.89	0.15	3.98	1.02	3.52	1.02
Reputation of partner	0.83	0.17	3.94	1.02	3.27	1.11
Language of instruction at partner	0.82	0.19	3.88	0.89	3.17	1.02
Quality of management in partner university	0.80	0.17	3.81	1.10	3.07	1.10
Physical infrastructure/facilities of partner	0.78	0.18	3.82	1.04	2.98	1.09
Financial resources of partner university	0.81	0.15	3.63	1.03	2.93	0.94
Existing external relations of the partner	0.72	0.20	3.71	1.07	2.70	1.15
ICT-standards of the partner university	0.71	0.20	3.62	1.05	2.56	1.13
Positive country characteristics of partner	0.64	0.25	3.98	1.02	2.47	1.16
Proximity of the partner	0.63	0.29	3.82	1.04	2.40	1.27
The partners' access to student markets	0.63	0.26	3.57	1.20	2.13	1.17
Overall Complementarity	0.76	0.10	3.87	0.71	2.95	0.67

*   *0.2 = not important; 1 = very important*
**   *1 = not present; 5 = abundantly present*
***   *Complementarity = Importance x Presence (corresponding with equation 9-4)*

Financial resources of partner universities are also seen as important in partner choice. One of the respondents specified this issue by pointing to the relevance of funding opportunities like "*post-graduate scholarships at partner universities*" and "*research grants provided at the partner university*". In addition to the list of partner characteristics in table 11-13, respondents also pointed to other aspects that would form important in finding partners for cooperation. One of the respondents pointed to "*the possibility of credit transfer and exchange with partner universities*". Others indicated to the importance of "*cultural and ethical values*" in the partner universities. Some of the universities in the poorer ASEAN countries also point towards "*the willingness and commitment of partner universities to help universities in under-developed countries*". On the other hand, another respondent indicates that partners should possess "*approximately the same level of academic reputation*". This illustrates the paradox that can exist between complementarity and compatibility: while some see similarity (in education and research quality and reputation) as most important, others see the dissimilarity as a challenge to help other universities ahead. In that case however, opportunities for cooperation become harder to identify, as was indicated by one

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[55] An exception can be made for Singapore, which has the ambition of becoming the 'education hub' for the region (Marginson and McBurnie, 2004).

respondent: *"There is such great disparity between AUN Members. It is hardly possible to conceive of win-win situations for cooperation. Most likely, the cooperation will take the shape of the big brother helping the smaller one."*

The difference in the perceptions of academics and non-academics is not as apparent for importance, presence and complementarity of resources than it was for the performance indicators. In general, academics look for the same types of resources in cooperation as non-academics do. Academics however do value the quality of research and education in the consortium significantly higher than non-academics (for $p<.05$). Especially complementarity in the field of research is significantly more apparent for academics than for non-academics (for $p<.01$; see Appendix IV; Table 13).

If the level of overall complementarity is compared to the different indicators of performance, we observe that a significant correlation can only be found between Complementarity and Consortium Performance (table 11-14), an observation that supports our proposition on the relation between Consortium Performance and Complementarity. A higher level of complementarity would thus coincide with a higher level of achievement of AUN objectives. The data however do not show a significant correlation between complementarity and Individual Performance and Relational Performance.

Table 11-14: Relation between complementarity and performance

	Complementarity	
	Pearson R	Sig. (1-tailed)
Consortium performance	0,281*	0,023
Individual performance	0,178	0,108
Relational performance	-0,166	0,120

*   *Correlation is significant at the 0.05 level (2-tailed)*

A closer look at the relation of performance and different sources of complementarity shows that the relation is strongest for the complementarity in 'physical infrastructure/facilities' (R = .347; $p<.01$)[56]. Other significant correlations are found for the 'quality of education' (R = .302; $p<.05$), the 'quality of management' (R = .307; $p<.05$) and 'financial resources of the partner university' (R = .245; $p<.05$).

Calculating correlations separately for non-academics and academics (Appendix IV: table 14) also shows that the positive relation between Complementarity and Consortium Performance is particularly apparent for academics (Academics: R = 0.515; Non-academics: R = 0.186). Furthermore, in the case of academics, also a statistically significant positive correlation can be observed for Complementarity and Individual Performance (R= .411). Complementarity thus plays a more substantial role in cooperation and in the effects of cooperation for academics than for non-academics. Calculation of correlations for academics and for the different sources of

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[56] Based on a calculation of correlations between the three performance indicators on the one hand and the twelve sources of compatibility on the other.

complementarity, shows a particular strong correlation between 'physical infrastructure and facilities' and Consortium performance (R = 0.621). Other significant correlations with Consortium Performance were found for the quality of education (R = .521), research (R = .447) and management (R = .435), and the financial resources of the partner universities (R = .399).

11.3.4 Compatibility

Since countries in ASEAN and also higher education systems from that region are very diverse, and because one might expect that financial resources for international cooperation are less available than in (Western) Europe, a high level of incompatibility could be expected for AUN. Table 11-15 however shows that on average, the differences between the institutional contexts in which the AUN universities operate, do not strongly affect cooperation within the consortium. The high standard deviations however point to the fact that there is considerable disagreement on this impact. In general, a minority of 29.6 % of the respondents perceive a lack of institutional fit between the partners in AUN (Overall Institutional Fit < 0).

Table 11-15: Institutional Fit in AUN (N=55)

	Impact of differences*		Heterogeneity in consortium**		Institutional fit***	
	Mean	SD	Mean	SD	Mean	SD
Differences in national culture	0.19	0.48	3.66	1.04	0.72	1.86
Differences in conceptions of academic work	0.09	0.49	3.51	1.12	0.25	1.51
Differences in organisational procedures	0.07	0.46	3.41	1.06	0.20	1.62
Differences in the division of authority	0.05	0.52	3.65	1.06	0.11	1.90
Differences in the character of universities	0.06	0.39	3.51	0.99	0.09	1.22
Differences in legislation	-0.03	0.49	3.62	1.24	0.07	1.80
Overall Institutional Fit					0.18	1.22

*	*-1 = negative impact on cooperation; +1 = positive impact on cooperation*
**	*1 = homogeneous; 5 = heterogeneous*
***	*Institutional fit = Impact * Heterogeneity, higher score means better fit (see equation 9-5).*

Most of the items only have a minor net impact on cooperation. The diversity within the consortium on average is assessed as modestly heterogeneous (meaning higher than 3 on a five point scale). Diversity is highest in legislation, culture and the division of authority and responsibility in the participating countries or universities, but these are only slightly higher than for the other differences. There were also several other differences that were mentioned by respondents and were claimed to have a (negative) impact on cooperation. Most of these are related to quality issues, such as "*the diversity in quality standards and reputation*", the "*differences in teaching and learning resources*", and "*the presence of facilities*". Also mentioned were the differences in "*the proficiency of English*" and "*differences in the level of ICT use in the universities*". Many of these are related to the divide in ASEAN between the more developed countries and the underdeveloped countries. In general a distinction is made between Singapore, Brunei, Indonesia, Thailand and the Philippines on the one hand and Vietnam,

Cambodia, Laos and Myanmar on the other. One respondent also claimed that *"the different political traditions have a negative impact on cooperation"*.

If we look at the distribution of the respondents on Overall Institutional Fit, we observe that of the non-academics, 61.9 % see the members of AUN as institutionally compatible with each other, while for academics this percentage is 40 %. Looking at the mean assessment however, non-academics see the participating institutions in the consortium as only slightly more compatible with each other. The variation with academics is not as such that we can – with enough confidence – confirm the hypothesis that the perceptions between the two groups are actually different.

Table 11-16: Former cooperation in AUN (N=55)

	Mean	SD
Former cooperation with partner countries	1,96	0,81
Former cooperation with partner universities	1,84	0,75
Former cooperation**	1,9	0,73

*	*1 = never; 5 = frequently*
**	*Corresponding with Equation 9-6*

Our other indicator of compatibility – former cooperation with the partner countries and universities – is rather low for the AUN (table 11-16). Several factors can explain this low level of former cooperation between the AUN countries and universities. First, cooperation between academics is generally more apparent in the field of research than it is in education, and since many of the AUN universities are primarily focused on education, the need and opportunities for cooperation are less than in research universities. An additional explanation might be related to the costs of international cooperation. The amount of financial resources available for international cooperation between the universities in ASEAN countries is much more restricted than in for instance Europe. There are no ASEAN level cooperation programmes with resources comparable to for instance the Socrates programme and ASEAN member countries in general need their resources for absorbing the increase in demand for higher education. Due to this lack of financial resources, previous relations between the AUN universities are few. A third explanation is that many AUN universities are more focused on relations with other countries since they have a longer history of cooperation with universities from non-ASEAN countries, often based on colonial ties or on international funding opportunities. A break down of table 11-18 for position shows that non-academics have had more experience in cooperation with the partner universities and partner countries (see Appendix IV: table 16).

Table 11-17 shows the correlations between our two indicators for compatibility and the three indicators for performance. The table shows that there is only a significant correlation between relational performance and former cooperation (R = .405). This confirms our claim that a prior history of cooperation has a positive effect on relational issues such as communication, clarity of responsibilities, commitment and effectiveness of coordination. This relation however is only present in the case of non-academics (Appendix IV: table 17). For non-academics, also a correlation can be observed between

Institutional Fit and Consortium Performance. In the case of AUN we can thus witness a stronger relation between compatibility and performance for non-academics, while for academics there is a stronger relation with complementarity.

Table 11-17: Relation between compatibility and performance

Performance Indicators:	Compatibility Indicators:			
	Institutional Fit		Former Cooperation	
	Pearson R	Sig. (1-tailed)	Pearson R	Sig. (1-tailed)
Consortium Performance	.100	.240	.186	.091
Individual Performance	-.025	.430	.118	.203
Relational Performance	.187	.091	.405**	.001

**   *Correlation is significant at the 0.01 level.*

11.3.5 *Performance-Complementarity-Compatibility*

Rather contradictory to the previous case study (the ALMA Network), the correlations for AUN tend to show a stronger relation between complementarity and performance than for compatibility and performance. To see the combined effects for the independent variables we will again perform a regression analysis[57]. The results for the regression analysis are reported in table 11-18. The results show that – if we take a confidence level of 90 % - we can identify two valid models for explaining performance: both the models for Consortium Performance and for Relational Performance have F values large enough to be statistically significant. Considering the low R^2's however, the models are not very powerful in explaining the variance in Consortium Performance or Relational Performance.

The model for Consortium Performance shows that Complementarity and Former Cooperation form the best predictors for Consortium Performance. The level of Relational Performance is mainly explained by the frequency of former cooperation. For the management of the consortium this would imply that the focus should be mainly on the complementarity between the partners, and especially on the sources of complementarity identified by academics, because we already established that for this group the relation between complementarity and performance is higher. The frequency of former cooperation is harder to influence by consortium management, after the consortium is established. The only way to influence this compatibility indicator after the establishment of the consortium is to connect to already existing relations when new projects are started. How AUN has applied specific cooping mechanism in consortium management will be treated in the next section.

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[57] A One-Sample Kolmogorov-Smirnov Test has showed that there is not enough reason to believe that our the dependent variables are not normally distributed, implying that our data for AUN is fit for performing a regression analysis. Kolmogorov-Smirnov Z: Consortium Performance: 0.898; Individual Performance: 0.177; Relational Performance: 0.913.

Table 11-18: Results of Regression Analysis

Independent variables:		Dependent variables (Performance indicators):		
		Consortium Performance	Individual Performance	Relational Performance
Complementarity	Beta	0.331*	0.279+	-0.089
	t-value	2.390	1.941	-0.657
Institutional Fit	Beta	0.063	-0.072	0.140
	t-value	0.460	-0.505	1.057
Former Cooperation	Beta	0.233+	0.179	0.369**
	t-value	1.678	1.246	2.736
Model	R^2	0.144	0.096	0.182
	F	2.583+	1.600	3.474*

+　*Significant at the 0.1 level*
*　*Significant at the 0.05 level.*
**　*Significant at the 0.01 level.*

11.3.6　Coping Mechanisms

The idea for the ASEAN University Network was preceded by the ambitious idea for establishing an ASEAN University. Soon after this idea first came up, it became clear for the member countries that a looser type of cooperation would be more feasible[58]. This line of reasoning was repeated several times by the AUN. In the course of time, several ambitious ideas have come up, which in a later stage were transformed to more realistic objectives. An example of this was the aspiration to set up opportunities for structural student exchange. However, "*soon it was discovered that the rigidity of curricula in most member countries and the large differences in academic calendars, only left a flexible period of two weeks a year*" and in addition "*there were problems with the medium of instruction which in general is the native language*" [59]. An additional complication was that the funding for structural exchange was not available through ASEAN, the member countries or the universities. They coped with this problem by finding a possibility for international gathering of students in a specific period and based on cost sharing (the Educational Forum), while leaving the possibilities open for individual universities to set up exchange schemes for ASEAN students.

In the first few years of its existence, the AUN and its universities have mainly tried to manoeuvre within the financial and political/legal constraints that were provided to them by the national governments and ASEAN. Also, cooperation within AUN was mainly based on AUN-wide cooperation, not on bilateral links within AUN or smaller

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[58] "*It was soon clear that the establishment of the ASEAN University would present too much problems. These were mainly problems of a political nature concerning location, funding and leadership. With regard to funding problems AUN had learned from the experience with the establishment of the Asian Institute of Technology, where political problems also occurred*" (AUN Interview respondent 1). As an alternative the ASEAN University Network was established (see chapter 10) and they decided to make the ASEAN University a virtual university "*which should ultimately evolve into a degree granting programme for ASEAN Studies*" (AUN Interview respondent 2).

[59] AUN Interview respondent 2

groupings within the network. Through these circumstances, cooperation could only take place on the bases of the 'least-common-denominator' principle, and were funded on the bases of cost sharing, leaving not much space for ambitious, complex projects. Therefore, AUN projects remained limited to short term exchange of persons and exchange of information. Such programmes did not threaten to affect existing structures within the universities and national systems and did not require large scale funding.

In the second phase of its existence, the consortium has become more pro-active. While continuing the programmes focusing on short term staff and student exchange and the dissemination and exchange of information, the network searched for measures and projects that would better exploit sources of complementarity and especially, ways to improve compatibility or evade sources of incompatibility within the network. The network attempts to better exploit the complementarity of the different universities by giving more room for initiatives of individual universities. In the field of mobility, it was hard to establish AUN-wide mobility schemes, partly due to the diversity in level of development of the different countries and universities. Now, several universities in the more advanced countries have set up mobility schemes and scholarships for other ASEAN countries. Also, exchange has become organised more on disciplinary lines, like in the ASEAN Graduate Business/Economic Program (AGBEP).

Another shift can be seen in the disciplinary focus. In the course of time, focus has shifted towards disciplines that are either less affected by sources of incompatibility and towards disciplines that better exploit the 'ASEAN-ness' of the network. An example of the former is the focus on engineering, since "*integration has proven to be easier in some disciplines like engineering which are not so culturally determined and have a more or less universal language*"[60]. A better utilisation of the ASEAN nature of the network is sought by focusing on business studies, economics or on Southeast Asian studies. In the case of business studies and economics, the network has connected to developments in the region such as the advancement of the ASEAN Free Trade Area and the 1997 economic crisis. In the AGBEP programme for instance, several joint research projects have been conducted on the Asian Financial Crisis. The complementarity of the Network is obvious in the ASEAN Studies Programme, where each university can contribute specific expertise to the programme as a whole. This is also the case in the field of research, since "*research collaboration is mainly based on studies on the Asian economic crisis or on economic integration in ASEAN and on ASEAN studies*"[61]

With the establishment of a permanent AUN office, with its own financial resources, the AUN secretariat has also become more pro-active in the acquisition of funding: "*in the cooperation with Dialogue Partners, AUN functions as matchmaker between foreign universities or governments and ASEAN universities and the ASEAN secretariat*" It has done so by looking both at ASEAN sources and external sources. ASEAN funding mainly comes from the ASEAN Secretariat and from the ASEAN Foundation. Substantial sources of funding however have been acquired through cooperation with its 'Dialogue Partners', for instance through the AUNP Programme (in collaboration

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[60] Ibid.
[61] AUN Interview respondent 3

with the EU) and the AUN/SEED-NET Project (in collaboration with Japan). Notwithstanding these additional resources, AUN still lacks the kind of structural funding opportunities that can be found in the EU, made available through EU programmes, national governments and universities. Most of the financial arrangements in AUN are based on cost sharing: "*funding of activities is rather ad hoc based. Organizing costs are for the host, participants costs for participants (or by the richer countries for the poorer countries), office costs by the Thai government and other funding was obtained by external partners*"[62]. One other source of funding is comes from scholarships provided by members: "*student exchange is mainly a one way street and most funding mechanisms used are ad hoc and bilateral. Scholarships are for instance awarded by the National University of Singapore and by the University of Malaysia*"[63].

In spite of the initiative to provide scholarships from individual universities, the resources for student and staff exchange (issues that were perceived as very important by the AUN respondents) are still insufficient. The Educational Forum and the Distinguished Professors Programme (see chapter 10) have dealt with this issue, but can only contribute on a marginal scale. A solution for this was also sought in the provision of opportunities for 'virtual mobility' through the ASEAN Virtual University.

Intensification in the use of information and communication technologies was also suggested by respondents for improving the coordination of AUN activities and the communication on these activities. Several members are already "*progressing in the use of ICT*", but "*the backlog of some universities in the field of ICT is still severe*". Other suggestions for improving the coordination of AUN activities are sought in increasing face-to-face contact between scholars and professionals in AUN and "*to strengthen the role of International relations Offices in the member universities*". According to some respondents, these measures would also increase the commitment among the AUN member universities.

A project with the potential to impinge upon the basic principles of the diverse higher education systems and institutional organisation in the member countries is the AUN Quality Assurance project. "*The ambitious objective here is to come to harmonisation of QA standards and even educational systems. The project is now primarily based on the sharing of information. By now there have been set up 'minimal standards', although these are high standards for some of the members*"[64]. This might have significant positive effects on the compatibility of systems and organisational procedures of the countries and universities within the AUN. Also "*the idea was taken up to create standards for recognition, like the European Credit transfer System, and later maybe also a system of ASEAN accreditation. Agreement on common standards where however not yet found, but it remains an ambition for the future*"[65].

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[62] AUN Interview respondent 1
[63] Ibid.
[64] AUN Interview respondent 2
[65] AUN Interview respondent 1

11.3.7 Conclusions: Structure, Change and Performance in AUN

The data in the sections above showed us that both the models for Consortium Performance and for Relational Performance could partly be explained by the data. Relational Performance was mainly explained by the frequency of Former Cooperation and Consortium Performance by both Former Cooperation and Complementarity (see figure 11-2). A further subdivision by the different groups within the university also brought to the fore that the positive relation between Complementarity and Consortium Performance was especially apparent for the group of academics. In addition, although the relation is not significant for all respondents, we saw that a significant positive correlation (for $p<0.1$) could be established between Institutional Fit and Consortium Performance for the group of academics. This provides us with the notion that the perception of success or failure of academics is more based on what universities have to offer to each other (complementarity), while for Rectors, administrators and international relations officers, it is more important whether universities share similar characteristics and contexts (compatibility). In terms of complementarity, respondents emphasised the importance of quality in education and research in other universities, and the presence of adequate facilities and physical infrastructure at the partner institutions.

Figure 11-2: Significant relations in the explanatory model for AUN
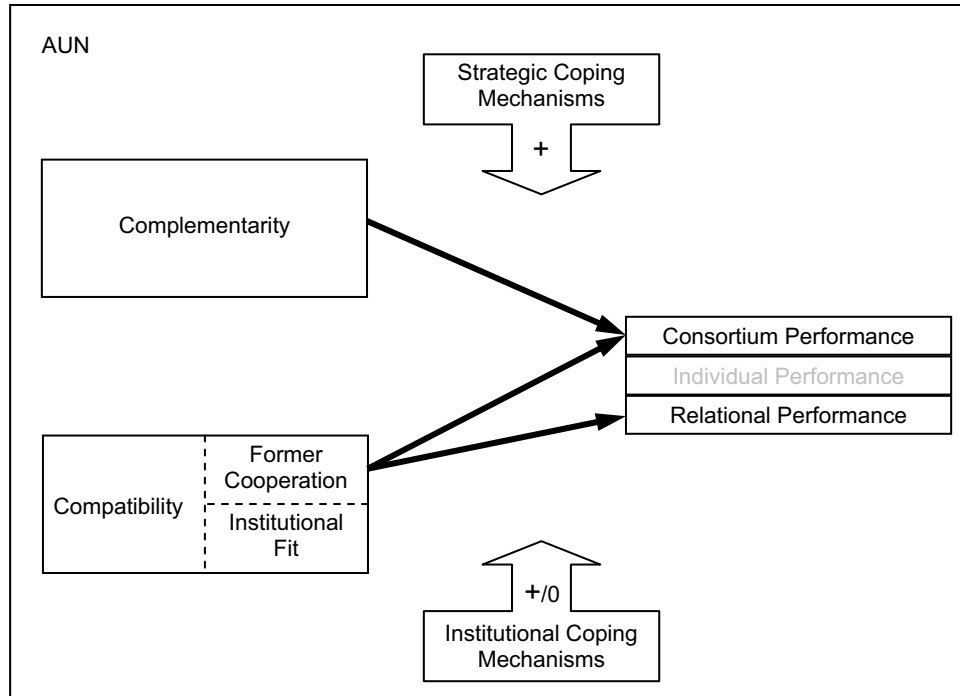
Coping mechanisms employed by the consortium have been both focused on incompatibility of institutional factors and on complementarity of resources. In the case of strategic coping mechanisms, the early period of AUN shows a process of trial and

error, where the level of ambition was repeatedly renegotiated in order to arrive at feasible activities. In its second phase however, AUN clearly searched and found their complementary resources in fields like ASEAN studies and business studies. Institutional coping mechanisms were hardly applied in the early stages of cooperation in AUN. The consortium mainly tried to manoeuvre within the constraints placed by the different institutional contexts of the participants. Recently, activities focused on the incorporation and – eventually – alleviation of differences are apparent in the field of quality assurance and in the establishment of the ASEAN Virtual University.

We have also showed that non-academics are considerably more satisfied with the relational items on which we based the indicator Relational Performance. Various comments of respondents pointed to the perception that AUN policies and projects often get 'stuck' in the central levels of the universities and that the activities are not sufficiently known by students and academics within the faculties. Since the assessment of other performance indicators were also higher for non-academics than for academics, this might imply that actions focused on the exploitation of complementarity and the internal communication on the opportunities for cooperation, could improve performance in the eyes of academics. In some cases, cooperation between a limited amount of members and focusing more on disciplinary sources of complementarity could improve the exploitation of complementarity, as was shown by some more recent AUN projects like AGBEP. On the other hand, AUN and ASEAN as a whole also see an important task in bringing the member universities closer to each other.

This paradox becomes apparent through the disparity between the members of AUN, where some play a leading role on a regional (Southeast Asian) scale or even on a global scale, while others operate in systems that are seriously lagging behind and are in a phase of rigorous reform. This dilemma was illustrated by various respondents, with some complaining about too many differences (due to which win-win situations could not be created), while others were stating that bridging the gap between these differences was one of the major challenges and tasks of AUN. This a-symmetry and the resulting different expectations about membership in the consortium are very well illustrated by one respondent: "*Our university is still very young and poor which makes it difficult to participate efficiently in AUN. However, we believe that, as a member of AUN, we will be able to take benefit from the future cooperations in the network and between AUN and external partners*". Accordingly it was stated by one of the interview respondents that "*in the future the challenge for AUN is to balance between bridging the gap between member universities while at the same time exploit opportunities of individual universities*"[66].

Other important challenges for the future of the ASEAN University Network that are mentioned are: "the development of ASEAN accreditation, student transfer and recognition and the sharing of resources among member universities"[67].

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[66] AUN Interview respondent 1 (but also supported by the other interview respondents)
[67] Ibid.

11.4 Coimbra Group

11.4.1 Introduction

Coimbra is the oldest consortium in this study and in its existence, it has very much connected to traditional internationalisation activities. This also becomes apparent if we look at the activities that the respondents for Coimbra are involved in. Over half of the 64 respondents[68] are somehow involved in student mobility[69]. Related activities such as joint education programmes, credit transfer and recognition and staff mobility are also prominent in Coimbra. Less emphasis is placed on more local concerns such as regional development (regional in the meaning of the direct surroundings of the university) and university-industry relations.

Over a third (37.5 %) of all respondents is involved in internationalisation on a regular basis, either as member of an international office or as a local representative of Coimbra within the universities. Almost one third exists of academics and the rest are managers and rectors, vice-chancellors or presidents of the participating universities. Over 75% is involved in Coimbra activities for only ten hours each month or less, while ten percent spends more than 20 hours each month on Coimbra activities. Within the Coimbra universities, internationalisation is by nearly everyone seen as important or very important for all different levels in the university. Individual networks of international relations and networks on the departmental levels are seen as slightly more important than institutional networks. The data also shows that for nearly all respondents, the scope of their activities and their personal networks are European or global in nature. Questionnaires were received from 16 countries, mainly from Western and Southern Europe. Countries from Central and Eastern Europe are underrepresented (questionnaires were received from the Czech Republic and Poland only).

11.4.2 Performance

Coimbra's concern with student mobility also comes to the fore if we look at the importance and attainment of the Coimbra objectives (table 11-19). The facilitation of student mobility is seen as the most important and most successful of all its goals. Related issues such as the recognition of study periods and the development of joint educational programmes also score high on consortium performance. In general, low priority is given to non-academic projects in the field of culture and sports. This is also a field in which Coimbra is perceived to be less successful. Providing opportunities for non-European students is seen as an important issue, but is not yet very successful within Coimbra, despite the cooperative projects with African, Caribbean and Pacific countries and Latin America. If we take into account Coimbra's strong connection with European mobility programmes, the new Erasmus Mundo programme might present new opportunities for the development of collaboration and exchange with non-European countries.

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[68] Minimum response 31.7%; Likely response 36.0% (explained in chapter eight; table 8-2).
[69] All descriptive statistics for section 11.4.1 are reported in Appendix III.

Table 11-19: Consortium performance of the Coimbra Group (N=64)[70]

	Priority*		Attainment**		Performance***	
	Mean	SD	Mean	SD	Mean	SD
Facilitation and stimulation of student mobility within Europe	0.83	0.22	3.84	0.96	3.34	1.16
Recognition of study periods spent by students in other European universities	0.76	0.28	3.79	1.11	3.17	1.34
The establishment of joint educational programmes with other European universities	0.78	0.24	3.63	1.13	3.09	1.31
Facilitation and stimulation of staff mobility within Europe	0.78	0.21	3.44	0.98	2.75	1.21
Promotion and encouragement of joint research projects among European researchers.	0.78	0.25	3.20	1.20	2.60	1.30
Arrangements that enable free tuition for students of other European universities	0.64	0.27	3.35	1.02	2.49	1.22
Providing wider opportunities for non-European students in a European university to experience other European universities	0.71	0.25	3.13	1.13	2.44	1.26
The encouragement of additional cultural and sporting	0.49	0.23	2.82	1.04	1.72	1.05
Overall Consortium Performance					2.65	0.84

*   *0.2 = low priority; 1.0 = high priority*
**   *1 = not satisfactory; 5 = very satisfactory*
***   *Performance = Priority * Attainment (Equation 9-1)*

Although non-academics and academics generally agree on the importance of the Coimbra objectives, they do display different perceptions on the level in which are attained (Appendix IV: table 19). In general, non-academics are considerably more positive about the attainment of the objectives. This is particularly evident for the objectives related to student mobility (4.10 versus 3.07) and recognition (4.14 versus 2,93). If we look at the distribution of the respondents on these items we see that 82.9 % of the non-academics are positive about the development of student mobility (score of 4 or 5), while this is the case for 35.7 % of the academics. In the case of recognition these percentages are respectively 81.1 % and 26.7 %. Also other items, in which academics can be expected to be closely involved, such as staff exchange and the development of joint educational programmes, are significantly less positively rated by academics.

If we look at the impact of cooperation on the individual universities (Individual Performance: table 11-20), we can detect one affected issue that clearly sticks out: the impact on the university's reputation. Of all respondents, 91.2 % perceives a positive effect on the reputation of their university due to membership of Coimbra. The high score on this item can be related to the fact that member universities all belong to the oldest universities within their countries, a characteristic that is also perceived to bring along considerable prestige. An item that clearly scores lower than the others is the impact on the surrounding region of the universities, where only 13.9 % of all respondents sees a positive effect. This is less surprising regarding the pan-European focus of the Coimbra Group. In the objectives of Coimbra and in its activities, relations

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[70] See also footnotes 37 & 38 in table 11-1

with the immediate region of the university do not play a role. These are mainly focused on Europe as a whole and on relations with developing countries.

Table 11-20: Individual performance within the Coimbra Group (N=64)

Area affected	Mean	SD
Impact on the reputation of university	4,33	0,64
Impact on the access to international funding opportunities	3,67	0,86
Impact on the quality of research	3,53	0,80
Impact on organisation & management within the university	3,52	0,62
Impact on enrolment in the university	3,52	0,79
Impact on the quality of teaching	3,50	0,98
Impact on the competencies of graduates	3,43	0,65
Impact on the regional socio-economic environment of the university	2,78	0,80
Overall Individual performance	3,66**	0,54

* *1 = negative effect; 5 = positive effect*
** *Corresponding with Equation 9-2*

Additional issues that were positively impacted by Coimbra activities relate to internationalisation in general. Cooperation within Coimbra has in some universities led to "*a better awareness of international cooperation and international mobility*". Also it has led to "*better contacts with non governmental organisations*". Respondents also point to the positive impact that Coimbra had "*on the development of career guidance and career services within the universities*". According to one respondent, Coimbra also had a very positive effect on universities in the Middle East and Latin America, with which Coimbra had connections through the activities in the framework of MEDCAMPUS and SCALA (see chapter 10).

In the assessment of Overall Individual Performance, there is no significant difference between the mean of non-academics and academics (Appendix IV: table 20). However, the impact of Coimbra cooperation on research is perceived as significantly more positive by academics than by non-academics. While 73.7 % of the academics perceived research to be positively affected, this was the case for only 28.1% of the non-academics. The reverse is the case for the effect of Coimbra cooperation on the enrolment in the universities. This area is on average perceived as being slightly positively affected by cooperation. This positive impact however is stronger in the view of non-academics of which 52.9 % perceive a positive effect. Only 20 % of the academics think that membership of Coimbra has a positive effect on enrolment.

If we look at our third indicator for performance – relational performance – we can in general observe a modest level of satisfaction with the cooperation process, where communication and commitment is slightly better between the member universities of Coimbra than it is within the member universities (table 11-21).

Table 11-21: Relational performance of the Coimbra Group (N=64)

Relational Items:	Mean*	*SD*
The internal coordination of Coimbra activities has been effective	3,52	1,08
The coordination of Coimbra activities on Coimbra level has been effective	3,50	1,03
The division of labour and authority within the university (on Coimbra activities) has been clear	3,44	1,09
The division of labour and authority between us and our partners (on Coimbra activities) has been clear	3,44	1,07
Other Coimbra partners are strongly committed to Coimbra Activities	3,42	0,82
Communication between us and our partners (on Coimbra strategies and activities) has been sufficient	3,26	1,01
There is strong commitment on Coimbra activities within my university	3,20	1,27
Communication within my university (on Coimbra strategies and activities) has been sufficient	3,05	1,26
Overall Relational performance**	**3,34**	***0,78***

*   1= strongly disagree; 5 = strongly agree
** corresponding with equation 9-3

The item with the largest amount of respondents answering positively (4 or 5) is the coordination of cooperative activities on the Coimbra Group level (62.1 % of all Coimbra respondents). This implies that most respondents are satisfied with the work of the Coimbra Office. Other items that the majority perceived as positive were the internal division of responsibilities, the coordination of Coimbra Group activities within the universities and the commitment within and between the universities. The cooperation within the different Task Forces is frequently mentioned as an example of strong commitment between the members and the bodies where "*the most interesting and effective work was done*". According to several respondents however, a lack of involvement and commitment of academic staff "*keeps Coimbra collaboration from becoming a visible and significant issue within the whole university*". Therefore, especially in the task forces "*a balance should be looked for between the administrative and the academic staff*".

The contentment with the internal processes related to Coimbra cooperation however, is less for academics than it is for non-academics. Internal communication on Coimbra projects is on average rated as somewhat negative by the academics and positive by non-academics (2.42 versus 3.32). Also a significant difference can be observed for the judgement of internal coordination of the cooperative activities (see Appendix IV: table 11-21). Overall, academics rate Relational Performance less positive than non-academics do. A majority of 78 % of the non-academics is satisfied about the Overall Relational Performance of Coimbra (score > 3), while only 36.4 % of the academics express this satisfaction.

The three performance indicators for Coimbra do not all correlate with each other. For a confidence level of 99 %, there is only a significant correlation: between Relational Performance and Consortium Performance (R = 0.346; p<0.01 for a 2-tailed test). Individual Performance only shows a weak correlation with Relational Performance (R = 0.223; p<0.1). These correlations imply that the accomplishment of the goals of Coimbra is not necessarily reflected in a positive judgement about the impact of cooperation on the university.

11.4.3 Complementarity

The composition of the Coimbra Group is clearly based on the similarity among the members. In a SWOT analysis of the network the paradox in cooperation became apparent in the observation that: "*the similarity among members may result in the weakness that there is a lack of a 'complementary' function, which is otherwise often looked for in consortial arrangements*" (Coimbra Group, 2002).

Table 11-22: Level of complementarity in the Coimbra Group (N=64)

Sources of complementarity:	Importance of resources*		Presence of resources**		Complementarity of resources**	
	Mean	SD	Mean	SD	Mean	SD
High quality in research	0.91	0.14	4.56	0.76	4.14	0.97
High quality in education	0.88	0.15	4.57	0.60	4.02	0.89
Reputation of partner	0.83	0.16	4.39	0.73	3.70	1.05
Quality of management in partner university	0.72	0.19	3.93	0.78	2.80	1.04
Existing external relations of the partner	0.70	0.18	3.98	0.88	2.78	1.04
ICT-standards of the partner university	0.70	0.22	3.83	0.88	2.72	1.25
Language of instruction at partner	0.68	0.20	3.67	0.91	2.48	1.07
Physical infrastructure/facilities of partner	0.63	0.20	3.72	0.98	2.33	1.03
Positive country characteristics of partner	0.63	0.23	3.61	1.00	2.28	1.15
Financial resources of partner university	0.56	0.19	3.32	1.08	1.86	0.93
The partners' access to student markets	0.57	0.26	3.05	0.96	1.71	1.01
Proximity of the partner	0.40	0.22	2.81	1.25	1.09	0.80
Overall Complementarity					2.66	0.62

*   *0.2 = not important; 1.0 = very important*
**   *1 = not present; 5 = abundantly present*
***   *Complementarity = (Importance*Presence)*

The data however show that the most important characteristics that are sought for in a potential partner are adequately present in the consortium (table 11-22). Especially, high quality in teaching and research are perceived as amply present within the partner universities. According to a respondent, the research at the partner universities needs to be of high quality, but it also needs to be "*compatible with my own research*". Characteristics like proximity and access to student markets, that are less present in the consortium, are seen as trivial. The financial capacity of the potential partner is also not a decisive factor in partner choice. The existing external relations are seen as important, and most respondents see their partners as being actively engaged in such relations.

External relations that are mentioned as relevant by the respondents are the links that partners have with the wider environment, ranging from links with local organisations as well as links with other (non European) countries. In general, non-academics see the sources of complementarity in table 11-22 as more important in cooperation than academics do (Appendix: table 22). Non-academics put significantly more weight on issues like the partners access to student markets, the facilities and infrastructure at the partner university and the external relations of the partner. The external relations with the partners is seen as important for 65.4 % of the non-academics, while 34.8 % of the academics see that as important. Additional remarks of the respondents on this issue especially point to "*the importance of existing individual or departmental links on which to base an institutional partnership*". Also the quality of education of the partner university is more important for non-academics than for academics. Both groups see the quality of research of the partner as the most important resource to look for in a partner. In general, there is agreement on the availability of the listed resources at the partner universities. Although non-academics tend to be a little more positive about the partners, this difference is not substantial enough to mark it as statistically significant.

The proposed relation between performance and complementarity is apparent for our first performance indicator: Consortium Performance (table 11-23). There is hardly any relation at all between the perceived complementarity in the Coimbra Group and the Individual or Relational Performance within Coimbra. A more detailed look at the different sources of complementarity and Consortium Performance[71] shows that the relation is particularly apparent for the infrastructure and facilities of the partners, their financial resources, their access to student markets and the existing international relations of the partner. To a lesser extent, also a relation between consortium performance and the quality of education and research can be observed. The more local or national resources like the country characteristics of the partner, proximity and the language of instruction only show very weak (statistically insignificant) relations with consortium performance.

Table 11-23: Relation between complementarity and performance

	Complementarity	
	Pearson R	Sig. (1-tailed)
Consortium performance	0,410**	0,001
Individual performance	0,026	0,424
Relational performance	0,001	0,497

**   *Correlation is significant at the 0.01 level (1-tailed).*

The relation between performance and complementarity however, seems only to be significant for non-academics (Appendix: table 23). For the case of non-academics, we observe a correlation between Complementarity and Consortium Performance of R = 0.479. A weak but significant negative correlation can be observed with Relational

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[71] Based on a calculation of the correlation of the twelve sources of complementarity and Consortium Performance.

Performance (R = -0.213; p<0.1). The data does not show any statistically significant relations between complementarity and performance for academics.

11.4.4 Compatibility

Membership of the Coimbra Group is based on the old, traditional and comprehensive nature of its members. Correspondingly, table 11-24 shows that the differences in the nature of the participating universities are rather small. The table however also shows that the universities come from very different traditions, and that these differences sometimes slightly negatively impact cooperation. This is most evident again for the legal national contexts in which the universities operate. The differences in organisational procedures and in the division of authority are also very diverse in the consortium. These types of institutions have earlier been located in the 'centralised institutional forms' (chapter 9). The diversity in national cultures is also assessed as high, although many see those differences as positive (59.3 % of the respondents gave a score of > 0 on the scale of -1 to +1).

Table 11-24: Institutional Fit in the Coimbra Group (N=64)

	Impact of differences*		Heterogeneity in consortium**		Institutional fit***	
	Mean	SD	Mean	SD	Mean	SD
Differences in national culture	0.31	0.42	3.84	0.73	1.25	1.59
Differences in the nature of universities	0.14	0.30	2.58	0.82	0.36	0.83
Differences in conceptions of academic work	0.03	0.47	2.74	1.04	0.11	1.48
Differences in the division of authority	0.02	0.53	3.56	0.91	-0.01	1.98
Differences in organisational procedures	-0.08	0.44	3.46	0.76	-0.43	1.35
Differences in legislation	-0.28	0.52	3.67	0.97	-1.19	2.03
Overall Institutional Fit	0.02	0.30	3.30	0.52	0.03	0.95

*   *-1 = negative impact on cooperation; +1 = positive impact on cooperation*
**   *1 = homogeneous; 5 = heterogeneous*
***   *Institutional fit = Impact x Heterogeneity, higher score means better fit*

A frequently mentioned issue is related to the use of English as a common language. Competency in the use of English of the people involved in cooperation is seen as differing between the universities. Also English used as a language of instruction differs between the universities, since some universities do offer international courses in English, while others only use the domestic language in their courses. In addition, a respondent also points to the differences that exist in the "*acceptance of English as the lingua franca of international cooperation*". The latter point may relate to differences in language skills but also to the idea that the acceptance of another language is culturally determined. For some, the use of English presents problems, not so much because of a lack of skills but from a more cultural point of view: "*I was appalled to read proposals by some Coimbra group members to make communication an all English affair*". One respondent even speaks about "*the imperialism of the English language*" and the "*difficulty of having lectures in English or other foreign languages*". The language issue is acknowledged on the Coimbra level as well: "*Language is an issue. There is a willingness to solve this through using multiple languages, but there*

are not sufficient financial means for that"[72]. Another respondent illustrates another cultural aspect and states that "*cultural prejudice (e.g. "we are the best") certainly hinders true academic communication and progress*". It seems that this does not so much refer to differences in national culture, but to a general (academic) culture that exists in all universities.

The negative impact due to legal differences is agreed upon by both academics and non-academics. Academics however see the consortium as more heterogeneous than non-academics (Appendix IV: table 24). This is a general pattern, but it is particularly the case for differences in the national legal context and the organisational procedures. If we look at the Overall Institutional Fit of the Coimbra Group, academics and non-academics seem to agree on a more or less neutral assessment of stability: in the case of non-academics, 53.8 % observes a neutral or positive fit (Overall Institutional Fit ≥ 0), while for academics this percentage is 56.5 %.

The respondents of Coimbra have had substantial experience in cooperating with the countries involved in the consortium and with the member universities in these countries (table 11-25). This is especially the case for links with the universities from Central and Eastern Europe[73], and to a lesser extent for the links with Southern European universities. Previous links were least apparent with the universities in Northern and North-western European universities. In general, non-academics have had more experience in cooperating with the member universities than academics (Appendix IV: table 25).

Table 11-25: Former cooperation in the Coimbra Group (N=64)

	Mean	SD
Former cooperation with partner countries	2,87	1,01
Former cooperation with partner universities	2,32	0,93
Former cooperation	2,60	0,89

*   *1 = never; 5 = frequently*
*   *Corresponding with Equation 9-6*

The correlation between indicators for performance and indicators for compatibility is only significant for the relation between consortium performance and former cooperation. The achievement of the goals of Coimbra is thus more likely in those cases where a history of cooperation existed prior to the cooperation within the Coimbra Group. This relation however is particularly apparent for non-academics (R = 0.465; p<.01; Appendix IV: table 26).

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[72] Coimbra Group Interview respondent

[73] This is observed notwithstanding the small amount of questionnaires that we received from Central and Eastern Europe. The respondents were asked with which member countries and member universities they have worked together outside the Coimbra framework and how frequently. On this question, Central and Eastern European countries and universities were frequently mentioned by the respondents from other parts of Europe.

Table 11-26: Relation between compatibility and performance

	Institutional fit		Former cooperation	
	Pearson R	Sig. (1-tailed)	Pearson R	Sig. (1-tailed)
Consortium performance	-0,042	0,377	0,402**	0,001
Individual Performance	0,084	0,267	-0,097	0,231
Relational performance	0,066	0,305	0,155	0,112

** *Correlation is significant at the 0.01 level (2-tailed).*

11.4.5 Performance-Complementarity-Compatibility

The results in the previous sections indicate that a statistically significant relation with the composition of the Coimbra Group can only be established for Consortium Performance. In this section we will look at the combined effects of complementarity, institutional fit and former cooperation on the performance indicators. The regression equation provides us with information about the joint influence of our independent variables[74]. Taking all independent variables into account for the three performance indicators provides us with the results of table 11-27.

Table 11-27: Results of Regression Analysis

Independent variables:		Dependent variables (Performance indicators):		
		Consortium Performance	Individual Performance	Relational Performance
Complementarity	Beta	0.322**	0.046	-0.066
	t-value	2.685	0.321	-0.478
Institutional Fit	Beta	-0.089	0.123	0.050
	t-value	-0.759	0.884	0.376
Former Cooperation	Beta	0.373**	-0.092	0.223
	t-value	3.092	-0.638	1.605
Model	R^2	0.301	0.022	0.051
	F	7.474**	0.376	0.967

** *Significant at the 0.01 level.*

Individual Performance and Relational Performance can indeed not be significantly explained by the independent variables. The model for Consortium Performance however is significant. The model shows that both Complementarity and Former Cooperation are significant predictors for Consortium Performance, while Institutional Fit hardly affects the attainment of consortium goals. This would imply that the institutional differences do not or barely affect the attainment of consortium performance, and accordingly, coping mechanisms should take into account the existing

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[74] In order to check whether the dependent variables are normally distributed we have first performed a One-Sample Kolmogorov-Smirnov Test. The results do not provide sufficient reason to reject the hypothesis of a normal distribution. Kolmogorov-Smirnov Z: Consortium Performance: .751; Institutional Performance: .812; Relational Performance: .551.

relations between university members and the complementarity of resources between partners.

11.4.6 Coping Mechanisms

The Coimbra Group is the oldest of the consortia analysed in this study. The Coimbra Group started in the period when the ambitious European mobility and cooperation schemes were established and the original activities of the Group evidently connected to those programmes. In its further development, the Coimbra Group has mainly acted re-active, responding to changes that took place on the European level. Much of its activities emerged as a response to the establishment of programmes and schemes at the European level, such as Erasmus, Tempus and Socrates and the European Framework Programmes for research. This can be explained through the dependence of Coimbra on European funding resources. The Coimbra Group as a consortium does not have a substantial funding base of its own, since only its coordinating activities are funded by the members' contribution fees: *the network has a relatively low budget. Members pay a fee of 5,000 euros per year. This is mainly spent on coordination, not on concrete activities. Universities pay for all their delegates, they pay themselves if task forces or committees meetings are organised and even for the General Assembly. The Coimbra Group Office does some fundraising but not very much*". To cope with this lack of structural financial resources, the Group needed to call upon other resources, of which European sources are most evident. This European infrastructure however provided a broad framework in which a wide variety of activities could develop. This framework however also means that activities are proposed by its member universities, not by the consortium as such. The fact that a substantial financial commitment is not needed within the Coimbra framework has as its advantage that the process of cooperation is not frustrated by asymmetry in financial commitment of its members. However, the responsibility for financial commitment is shifted towards the university level and accordingly "*finding extra money for activities is problematic, due to the financial policy of the university*". A lack of financial commitment in some of the member universities is seen as an obstacle to closer cooperation, "*especially in areas where closer cooperation is envisaged, such as joint curricula, open and distance learning and e-learning*", this is seen as a dilemma; "*but on the other hand, the lack of large investments (and therewith the preservation of autonomy) is also a factor that explains the good cooperation within the network. It also makes sanctions against non-cooperation unnecessary*[75]. One respondent illustrates the voluntary nature of the consortium: "*nobody is forced to cooperate. Those who are interested raise their hand and are committed for that project*".

Other obstacles in cooperation are often related to the traditional nature of the universities. The long history of the member universities also bring along strongly institutionalised procedures and patterns of behaviour. Respondents have addressed difficulties through differences in the organisation of academic work, of the differences in the delegates' authority to take decisions or even the terminology used by different countries and universities. "*The Coimbra Group applies the principle not to intervene*

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[75] Coimbra Group Interview respondent

with internal issues of its members[76]" and therefore has no clear authority to address such issues. Its main way of dealing with such issues lies in the provision of information on its member universities and on the different ways of organising higher education in different countries. The Coimbra Office issues newsletters on Coimbra activities, books have been published on the backgrounds of the member universities (e.g. Sabroe & Costa, 1993; Hermans and Nelissen, 1994). The Coimbra Group has also issued a list of terms used in higher education in European countries in order to make differences transparent. Several respondents also call for a greater use of information and communication technologies in order to cooperate more effectively. To improve the visibility of the Coimbra Group, some respondents propose "*the organisation of 'Coimbra events' or an 'annual Coimbra day' in the participating universities*". Apart from the facilitation of communication and information exchange, the consortium as a whole can not impose measures to remove obstacles due to organisational and legal differences. The Group however is involved in lobbying on such issues on the European level.

The long history of the member universities makes it unlikely that they will voluntarily transfer much authority (or financial resources) to the consortium level and therefore leaves the consortium with limited capacity. Because of its limited capacity, the consortium is likely to maintain its close connection to European programmes, since those provide the best financial resources for cooperation. The Coimbra Group however also has a political function through the support in European policy preparation and through advocacy. One of the respondents confirms this: "*The Coimbra Group is an important network for European higher education cooperation. It s well respected in the European Commission and has substantial expertise amongst its members, which is useful in contributing to higher education policy and practice across Europe. Its members are also strong teaching and research universities in their own countries, with substantial influence in their respective countries*". The reputation of the Coimbra Group as a whole reflects the good reputation of the individual universities. This makes Coimbra a consortium that is also taken seriously by European policy makers. This becomes clear from its involvement in issues like credit transfer and recognition and its input in the further development of the Tempus programmes. The consortium also sees itself as a potential important player in the Bologna process and the establishment of the European Higher Education Area.

To achieve a more pro-active role, the consortium has recently changed its organisational structure. Elements of this reorganisation are the stronger role of the presidency, stronger operational leadership for the Executive Board (the former Steering Committee) and the concentration of activities in a limited amount of Task Forces. This should give the Coimbra Group more external visibility (e.g. towards national governments, the European Union and countries and universities outside Europe), but also make Coimbra more visible and transparent within the participating universities. The increase in visibility in turn could lead to a greater involvement of academics and academic departments in the Coimbra Group projects and programmes.

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[76] Ibid.

11.4.7 Conclusions: Structure, Change and Performance in Coimbra

The Coimbra Group has by far the most members of the consortia under investigation in this study. It is therefore not surprising that the consortium is rather loosely integrated. The Group explicitly acts on the basis of non-interference in internal issues of its members. Notwithstanding, or maybe because of, its loose structure, we witness a relatively high level of commitment among its members. Some respondents pointed to the fact that this commitment is especially apparent in the various task forces. Other observations in this case study indicate that the activities in the Coimbra Group show that there is a fit between the member universities, but also that there is a fit with the wider European context on the one hand and a fit with the internal 'academic principles' on the other. The first follows from Coimbra's involvement in the European polity and its close connection to the European programmes. The connection with the 'academic principles' can be observed in the emphasis that is placed on cooperation in the core academic areas and the cooperation with developing countries and Central and Eastern Europe. Here, the idea of 'cooperating to compete' is hardly present, but instead, cooperation is seen as an end in itself. This fit is also apparent if we look at the assessment of the importance of the objectives set by Coimbra. All but one of the objectives are on average seen as important. The relative success of Coimbra is determined more by its level of complementarity and history of former cooperation than by its level of institutional fit (see table 11-27 and figure 11-3).

Figure 11-3: Significant relations in the explanatory model for Coimbra
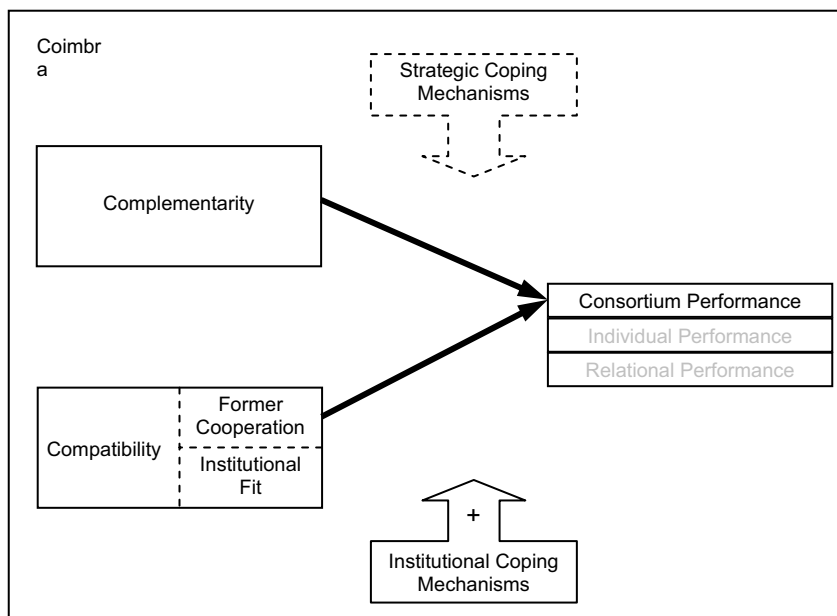
A more detailed look at the groups within the consortium showed that this relation was especially apparent for academics. The relation with performance is only significant for our first indicator: Consortium Performance. The high perceived level of

complementarity and the rather frequent former cooperation do not show a relation with Individual Performance or Relational Performance. The fact that the latter is rather positively assessed thus seems to be unrelated to the perceived high complementarity and/or the frequent former cooperation.

The observation that the performance indicators as well as complementarity is assessed higher by non-academics than by academics and that they show more experience in former cooperation might indicate that the consortium is more an administrative or leadership driven consortium instead of a consortium driven by academics. If we connect this notion with Coimbra's dependence on European projects and cooperation schemes, the explanation for this could be that the Coimbra Group and the Coimbra Office mainly have a facilitative function. Probably the main benefits from European cooperation for academics comes from EU programmes and EU financial resources, which could imply that many academics see this not as a benefit of Coimbra but as a pay off of their own proposals and involvement in EU Programmes, even though the Coimbra Group plays an indirect role in this. In this view, the Coimbra Group performs like a body that lowers transaction costs (not only in financial terms) for cooperation and exchange and therewith paves the way for closer cooperation between academics.

This impression of the consortium as transaction cost minimiser is also supported if we look at the Coimbra Group structure and the coping mechanisms that are applied by the consortium. In its management it has mainly, and rather successfully, focused on institutional coping mechanisms. The Coimbra Group's activities focus on removing obstacles for cooperation for instance through mutual recognition and mutual exemption from student fees, but also through lobbying on the European level and through provision of information on differences between the systems, qualifications, methods, etc., used at its member universities. Furthermore, the Group tries to improve cooperation through the stimulation of the use of new technologies. For these activities it has set up an organisational structure which has remained relatively stable in the history of Coimbra, and which has recently been simplified. Many of the task forces, working parties and committees that emerged in the early years of Coimbra however remained to exist (although they have recently been renamed to or integrated into a limited amount of task forces. The cooperation in the task forces, with their relative endurance in composition is valued very positively by its members.

11.5   European Consortium of Innovative Universities

11.5.1   Introduction

The involvement in consortium activities of the 42 ECIU respondents[77]   is rather
different than for the other consortia[78]. The traditional internationalisation activities
such as mobility and credit transfer are less well represented. At the same time, ICT
related activities, joint programme development, university-industry relations and
regional development are very well represented. This clearly corresponds with the
identity of the ECIU. Academics are underrepresented in the group of ECIU
respondents. A majority of 70% is involved in other than academic work, either in
executive and managerial positions, in international relations, or in positions related to
ICT, knowledge transfer or public relations. Most of the respondents only spend little
time on ECIU activities. Over 80% of the respondents are involved in consortium
projects for less than ten hours each month. As was the case in the other consortia,
internationalisation is seen as important on all levels within the universities. Personal
international networks are seen as more important than the relations of the faculties or
departments. Only a small majority of the ECIU respondents sees the international
relations of the universities as important or very important. Both in the content of their
activities and the scope of their relations, the respondents are European or globally
oriented.

11.5.2   Performance

The innovative nature of ECIU also becomes apparent if we look at the perceived
importance of its objectives (table 11-28). Issues like ICT cooperation research
cooperation and knowledge transfer score relatively high. Performance is highest for
cooperation in ICT, but also the more regular internationalisation activities such as
student mobility contribute substantially to the overall performance of the ECIU. Some
other flagship activities such as the quality review system, the research schools and the
cooperation between science parks develop somewhat unsatisfactory according to the
respondents. The level of consortium goals for the majority of ECIU objectives, receive a
score of lower of three, indicating – on average – a slight dissatisfaction with the
development of the consortium as a whole.

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[77] Minimum response 32.2%; Likely response 39.2% (explained in chapter eight; table 8-2).
[78] All descriptive statistics for section 11.5.1 are reported in Appendix III.

Table 11-28: Consortium performance of ECIU (N=42)[79]

	Priority*		Attainment**		Performance***	
	Mean	SD	Mean	SD	Mean	SD
Broadening the scope of student mobility	0.72	0.25	3.22	1.12	2.61	1.17
Cooperation with respect to ICT in education	0.70	0.25	3.32	1.07	2.62	1.17
Development of flexible educational programmes	0.70	0.25	2.58	1.06	1.89	1.01
Development of entrepreneurship modules	0.59	0.24	2.65	0.93	1.77	1.04
Further development of a quality review system	0.60	0.25	2.00	0.88	1.37	0.76
Structured exchange of experience in teaching and administrative staff development	0.66	0.24	2.75	0.97	2.13	1.13
Establishment of European research schools	0.55	0.24	2.33	0.69	1.50	0.66
Establishment of joint European doctorates	0.60	0.26	2.53	0.84	1.74	0.79
System for joint investment in facilities and ICT	0.46	0.24	2.63	1.20	1.64	1.36
European cooperation in research	0.74	0.27	2.71	0.95	2.24	1.16
Closer cooperation between European regions	0.64	0.24	2.65	0.93	1.64	0.80
Knowledge transfer between university and surrounding society	0.74	0.27	2.70	1.17	2.19	1.32
Cooperation between European science parks	0.53	0.27	2.11	1.02	1.38	0.92
Integration of regional development, research and education	0.63	0.27	2.58	1.26	1.82	1.35
Seminars and other forms of information exchange in university management	0.62	0.27	3.14	1.17	2.37	1.43
Thematic conferences on the nature of innovative universities	0.59	0.24	2.81	0.94	1.76	1.07
Development of cooperation with international higher education consortia	0.71	0.22	2.91	1.04	2.23	1.17
Cooperation with other universities in negotiating with the EU and other authorities	0.69	0.26	3.05	1.22	2.20	1.37
Overall Consortium Performance					1.91	0.67

*   *0.2 = low priority; 1.0 = high priority*
**   *1 = not satisfactory; 5 = very satisfactory*
***   *Consortium Performance = Priority x Attainment, corresponding with Equation 9-1*

Although non-academics and academics in general agree upon the level of attainment of ECIU objectives, there is disagreement about the importance of several objectives (Appendix IV: table 28). Significant differences can be found for the importance of student mobility, the development of a quality review system and the organisation of seminars on university management. The importance of these objectives is significantly higher for non-academics (for significance levels of respectively $p<.01$, $p<.01$, $p<.05$). A

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[79] See also footnotes 37 & 38 in table 11-1.

similar pattern can be found as in the other consortia, where non-academics are in general more positive about the success of the consortium than the academics.

The reputation of the individual member universities is again seen as most positively impacted by cooperation (although this is still merely moderately positive; table 11-29). This is especially the case for non-academics. Furthermore, cooperation positively impacts the organisation and management of the participating universities, something that is probably caused by the exchange of best practices and information on management and institutional research. The impact of ECIU cooperation on the quality of research in the respective universities is assessed as positive, especially for academics. The influence of ECIU activities on most other aspects are assessed as positive as well. Another positive influence that was mentioned by respondents was that "*cooperation within ECIU makes us aware of several European and other international programmes and funding opportunities*" and that, through ECIU they "*gained more knowledge about European programmes*".

Table 11-29: Individual performance within ECIU (N=42)

	Mean*	SD
Impact on the reputation of university	3.79	0.65
Impact on organisation & management within the university	3.43	0.57
Impact on the quality of teaching	3.32	0.65
Impact on the access to international funding opportunities	3.30	0.68
Impact on the competencies of graduates	3.27	0.69
Impact on the quality of research	3.21	0.57
Impact on enrolment in the university	3.00	0.60
Impact on the regional socio-economic environment of the university	2.96	0.58
Overall Individual performance**	3.35**	0.44

*   *1 = negative effect; 5 = positive effect*
**   *Corresponding with Equation 9-2*

A positive assessment on average is not apparent for Relational Performance (table 11-30). The indicators for relational performance are in general assessed as mediocre or negative. There is especially a lack of communication within the universities and on the level of the consortium as a whole (on both items, over 90 % of the respondents assess these items with 3 or lower). Most communication between the member universities goes through individual channels or through the web site. The plan to circulate newsletters however was proposed, and the first issue was released in December/January 2003/2004. The lack of satisfaction with the process of cooperation is also illustrated by several respondents that complain about "*the lack of willingness to do something rather than just talk*" or the "*unbalanced commitment among the universities*". Also within the universities there are numerous complaints about the process of cooperation. Among them are the lack of involvement of academics (as opposed to administrators) and departments (as opposed to central level units), the lack of time allocated to the local coordinators, and the lack of financial commitment of the university. On Relational Performance over all items, 59.5 % of the respondents give a

neutral or negative score (score ≤ 3). In general, non-academics are more satisfied with the relational items than non-academics. This is above all the case for the perception of the commitment of the ECIU members and the coordination on the ECIU level (Appendix IV: table 30). If we calculate correlations between the three performance indicators, we observe a weak correlation among them.

Table 11-30: Relational performance of ECIU (N=42)

Relational Items:	Mean*	*SD*
The internal coordination of ECIU activities has been effective	3.14	1.16
The coordination of ECIU activities on ECIU level has been effective	3.08	1.01
There is strong commitment on ECIU activities within my university	2.90	1.23
The division of labour and authority within the university (on ECIU activities) has been clear	2.89	1.25
The division of labour and authority between us and our partners (on ECIU activities) has been clear	2.89	0.99
Other ECIU partners are strongly committed to ECIU Activities	2.76	0.96
Communication between us and our partners (on ECIU strategies and activities) has been sufficient	2.51	0.89
Communication within my university (on ECIU strategies and activities) has been sufficient	2.29	1.02
Overall Relational performance**	2.80	0.71

*   *1= strongly disagree; 5 = strongly agree*
**   *Corresponding with equation 9-3*

11.5.3 Complementarity

In the choice of international partners, ECIU universities base their selection mainly on quality in teaching research and organisation and the reputation of the prospective partner (table 11-31). The current ECIU partners are perceived as having a good reputation and a high quality in these issues. The resources and characteristics related to the location of the partners – like proximity, country characteristics and access to student markets – are perceives as only moderately important.

Table 11-31: Level of complementarity in ECIU (N=42)

	Importance*		Presence**		Comple-mentarity***	
	Mean	SD	Mean	SD	Mean	SD
High quality in research	0.86	0.18	4.37	0.69	3.74	0.97
High quality in education	0.83	0.21	4.26	0.76	3.51	1.11
Reputation of partner	0.81	0.15	4.11	0.69	3.32	0.90
Quality of management in partner university	0.74	0.20	4.06	0.92	2.99	1.04
ICT-standards of the partner university	0.67	0.20	3.94	0.91	2.71	1.06
Language of instruction at partner	0.67	0.12	3.73	0.58	2.55	0.65
Existing external relations of the partner	0.66	0.24	3.47	1.13	2.43	1.32
Physical infrastructure/facilities of partner	0.64	0.20	3.69	1.04	2.40	1.12
The partners' access to student markets	0.63	0.19	3.53	0.99	2.29	1.06
Positive country characteristics of partner	0.57	0.23	3.44	1.16	2.03	1.09
Financial resources of partner university	0.61	0.23	3.26	1.24	2.02	1.10
Proximity of the partner	0.56	0.20	3.24	1.03	1.84	0.98
Overall Complementarity					1.67	0.87

*   *0.2 = not important; 1.0 = very important*
**   *1 = not present; 5 = abundantly present*
***   *Complementarity = Importance x Presence, corresponding with Equation 9-4*

Overall, there is no significant relation between complementarity and performance within ECIU (table 11-32). However, if the correlations are calculated for non-academics and academics separately, we can observe significant correlations between Complementarity and Consortium Performance (R = 0.675; p<0.01) and Complementarity and Relational Performance (R = 0.423; p<0.1) for academics, while these are close to zero respectively slightly negative (though statistically insignificant) for non-academics (see Appendix IV: table 32). The relation between Consortium Performance and Complementarity for academics is particularly strong for issues like the availability of complementary infrastructure and facilities and technological resources. For non-academics, none of the twelve sources of complementarity that we identified shows a significant correlation with Consortium Performance.

Table 11-32: Relation between complementarity and performance

	Complementarity	
	Pearson R	Sig. (1-tailed)
Consortium performance	0,194	0,136
Individual performance	0,044	0,395
Relational performance	-0,042	0,399

11.5.4 Compatibility

The different legal context in which the ECIU universities operate is the main source of incompatibility in the consortium (table 11-33). The differences in various organisational procedures and in the division of authority also cause a lack in institutional fit between the partners. Hence, it are the 'centralised institutional forms'

(see chapter nine) that are seen as sources of incompatibility. Although the consortium is also perceived as diverse in a cultural sense, this does in general not affect cooperation negatively. This is probably due to the fact that "*the cooperation of the universities is based on their 'like mindedness', based on an innovative and entrepreneurial attitude, which makes it easier to set cultural differences aside*"[80].

Table 11-33: Institutional fit in ECIU (N=42)

	Impact*		Heterogeneity**		Fit***	
	Mean	SD	Mean	SD	Mean	SD
Differences in national culture	0.13	0.46	3.69	0.86	0.44	1.76
Differences in the character of universities	0.07	0.28	2.93	0.83	0.23	1.04
Differences in conceptions of academic work	0.01	0.32	3.27	0.84	0.09	1.04
Differences in the division of authority	-0.13	0.40	3.47	1.04	-0.42	1.64
Differences in organisational procedures	-0.17	0.39	3.67	0.96	-0.50	1.59
Differences in legislation	-0.44	0.47	4.00	0.85	-1.70	2.25
Overall Institutional Fit	-0.09	0.26	3.47	0.61	-0.27	1.11

*   *-1 = negative impact on cooperation; +1 = positive impact on cooperation*
**   *1 = homogeneous; 5 = heterogeneous*
***   *Institutional fit = Impact x Heterogeneity, higher score means better fit*

Examples of legal differences that were given by the respondents were for instance the differences in tuition fees. While in many member countries these have become common, in some (e.g. Finland) imposing tuition fees is not allowed. Another obstacle is the differences in academic calendars, leaving just 11 weeks each year which are overlapping in the ECIU countries. Also the lack of English programmes in some countries is seen as a major obstacle to cooperation. Academics and non-academics in general agree upon the level of institutional fit between the ECIU partners, although academics see the consequences of differences as slightly more negative, while non-academics perceive the consortium as somewhat more heterogeneous than academics.

Table 11-34: Former cooperation in ECIU (N=42)

	Mean*	SD
Former cooperation with partner countries	3,20	0,87
Former cooperation with partner universities	1,61	0,80
Former cooperation**	2,40	0,75

*   *1 = never; 5 = frequently*
**   *Corresponding with Equation 9-6*

Many of the respondents have had substantial experience in working with the countries of the ECIU members (table 34). The former cooperation with the specific ECIU

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[80] ECIU Interview respondent 1

universities however, is incidental. There is however a significant difference between academics and non-academics (Appendix IV: table 34). Non-academics have had more frequent prior relations with the members of the ECIU than non-academics did. For experience in cooperation with the member countries, this difference is not statistically significant.

As was the case with our complementarity thesis, there also seems to be no significant relation between compatibility and performance. Neither the fit between the institutions nor the history of previous relations appears to have a statistically significant impact on any of the performance indicators. Broken down for non-academics and academics, the only significant correlation that can be observed is between Consortium Performance and Former Cooperation for non-academics. This relation however is negative (R = -0,383), implying that non-academics perceive the ECIU as less successful if they had prior experience in cooperation with these partners before the establishment of ECIU. An explanation could be that the experience in cooperation with the partners before the establishment of ECIU or outside the framework of ECIU was more satisfactory than within this framework.

Table 11-35: Relation between compatibility and performance

	Institutional Fit		Former Cooperation	
Correlations	Pearson R	Sig. (1-tailed)	Pearson R	Sig. (1-tailed)
Consortium performance	0,047	0,393	-0.261	0,062
Individual performance	0,139	0,194	0,166	0,150
Relational performance	-0,147	0,177	0,003	0,493

11.5.5 Performance-Complementarity-Compatibility

The results until now do not provide support for our propositions. Only for academics there appeared to be a strong positive relation of performance with complementarity. It is therefore not surprising that the regression analysis[81] for the combined effect of complementarity and compatibility on the three performance indicators do not provide us with models that sufficiently explain the variance in performance.

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[81] To test the assumption of normality for the dependent variables a one-sample Kolgomorov-Smirnov test was conducted: Kolmogorov-Smirnov Z: Consortium Performance: 0.513; Individual Performance: 1.079; Relational Performance: 0.867.

Table 11-36: Results of Regression Analysis

Independent variables:		Dependent variables (Performance indicators):		
		Consortium Performance	Individual Performance	Relational Performance
Complementarity	Beta	.327+	-.010	.035
	t-value	1.709	-.055	.193
Institutional Fit	Beta	.072	.119	-.146
	t-value	.414	.704	-.876
Former Cooperation	Beta	-.319	.088	-.131
	t-value	1.650	.468	-.713
Model	R^2	.118	.025	.041
	F	1.344	.294	.518

+   *Significant at the 0.1 level*

The only coefficient that shows a somewhat significant (p<0.1) relation is the Beta coefficient for complementarity in the relation with Consortium Performance. As we observed before, this relation is especially apparent in the case for academics, where we observed a correlation of Pearson R = .675. This would imply that academics perceive Consortium Performance as more successful when they perceive a presence of important complementary resources at the partner universities. In the case of academics, the most important resources to look for in partners for cooperation were a high quality in research and education and a good reputation.

11.5.6 Coping Mechanisms

The European Consortium of Innovative Universities started of with a wide range of ambitious objectives. In its early years, the consortium's organisational setup did not provide the accurate structure for firm and decisive action in the strategic fields of operation. In this period, ECIU's main body was the annual General Meeting. Once the different members had reached a consensus on the strategic direction of ECIU, it was soon acknowledged that the consortium would need a change in its structure in order to implement its objectives. This understanding led to a stronger role of the Secretariat and the establishment of the Executive Board in 1999. Since then, the permanent bodies in ECIU have remained limited to the General Meeting, the Executive Board and the Secretariat. All other bodies are of a temporary nature.

The establishment of the Executive Board was also paralleled by changes in the content of ECIU's activities. The Strategic Plan of 1999 contained a clear reduction of activities, based on two alterations in the strategic direction of ECIU. First there came a more realistic approach to the ambitions of ECIU. The long list of objectives ranging from traditional activities such as student mobility and research cooperation to more innovative practices related to ICT and entrepreneurship. Some of the objectives, such as joint doctorates, joint research schools and joint investments in ICT, called for a high level of integration in organisational terms and financial terms. It was soon acknowledged that the commitment of the members, together with the obstacles due to legal differences, made such a level of integration infeasible, at least for the time being.

A second shift was the move from external profiling to a mixture of internal and external objectives. The idea of 'cooperating to compete' partially shifted to the idea of cooperation as a vehicle to expand opportunities for students and staff to become more mobile and to profit from economies of scale and scope. The external exposure of ECIU was very successful in its early years. This success was due to a PR campaign set up by the consortium, but also by the exposure of some of the partners in Burton Clark's popular book on "Creating Entrepreneurial Universities". External exposure however, was not enough to materialise the cooperation into concrete projects. This was the reason to put more emphasis on internal mobility and cooperation. This shift in emphasis from competition to cooperation has led to a more reserved position towards ECIU of members from competitive systems like the UK (e.g. University of Warwick that was reviewing their relationship with ECIU) and from private universities (e.g. Chalmers University that withdrew from ECIU).

The consortium developed or proposed several instruments to reach the objectives of the strategic plan. For attaining the objectives it was thought to be "crucial that funds are available for proper project identification and proposal writing"[82]. In financial terms this would mean that, besides the ECIU-budget for general affairs and public relations, two types of incentives have to be developed[83]:

- Local funds, earmarked for ECIU-activities. Partly to support individual researchers and administrative staff wishing to engage in ECIU activities, partly to co-invest in the development of projects;
- An ECIU revolving fund, a small budget for pre-project development that the ECIU Board can allocate.

These local and ECIU sources of funding are instruments to exploit the complementarity between partners. Clearly, complementarity is thought to not automatically lead to the exploitation of complementary resources, but mechanisms need to be employed that provide incentives for people to do this. Considering the low satisfaction with internal and external commitment, it is obvious that these funds – if established at all – have not been substantial enough to inspire the targeted people.

An example of a project that was considered ambitious but did reach its objectives was the Web Supported Learning Project. The lack of structural funding however, also hindered cooperation in this project. Especially, the continuance of cooperation after the start-up phase seems to be a neglected issue as shown by the conclusion on one of the workshops in the WSL project: *I can conclude that the workshop form in itself was a very concentrated, fruitful and productive way of working, but there must be a chance for the participants to follow up on their work. There need to be a realistic connection between expectations to the result of the workshop, in this case the product, and the allocated resources[84].* This lack of commitment after the start up phase is also apparent with the ECIU Quality Review, which was successful in its development, but reached a state of dormancy in the phase that the Quality review system should be applied by the partners. The WSL project also shows the importance of trust and

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[82] Report of the 2nd Executive Board Meeting, University of Barcelona, 3 December 1999
[83] ibid.
[84] ECIU web-supported learning initiative: 1st report (December 2001)

symmetry in commitment. This is illustrated by a comment on funding as stated in the first report on the Web Supported Learning Project: "*it is unlikely that institutions will be prepared to subsidise future workshops by hosting them or sending delegates while other institutions can freely use the products* (the envisaged end results of the WSL Project; EB) *without any contribution to their development*"[85].

The problems with the commitment in the financial sphere was eventually also acknowledged by the Executive Board. Instead of giving the consortium as a whole more financial autonomy, the Board sought solutions by leaving more space for bottom-up initiatives where: "*all partners have the right to initiate ECIU activities as long as they are supported by other partners*"[86]. The idea was that not all ECIU activities needed to be initiated by the board and not all ECIU activities needed to involve all ECIU members. Other solutions were sought through connecting to European Programmes like the Framework Programmes and the Marie Curie Programmes. The consortium also attempted to seek funding sources in the business community, mainly through post graduate courses, but the initiatives in this field have not been successful.

Recently, since the General Meeting of June 2003, ECIU has shifted again to a further concentration of its activities. Here it was decide that "*the ECIU Graduate School, improved student and staff mobility and university-industry interaction will be the future focus points of ECIU*".   At the same time, projects that are conducted by smaller groups of partners will be continued. This change in objectives will be accompanied by an increase in communication and information exchange about the ECIU.

11.5.7   Conclusions: Structure, Change and Performance in ECIU

If we place the development of ECIU in the sequential model of figure 7-1, we observe an almost continuous loop back to the renegotiation of objectives and activities. In most cases this has led to a reduction of the ambition of the projects. Non-academics seem to be convinced of the partner's complementarity in education, research and management. Although one tried to make this transparent through meetings and seminars and through the ECIU Research Survey, the consortium has partially failed to either communicate this to academics or to provide the appropriate incentives for exploiting this complementarity. Several respondents mentioned a lack of financial commitment in ECIU cooperation both from other partners as well as from their own university. This indicates that the local funds and the funding provided by the Board have not been substantial enough to involve academics into projects. In relation to the explanatory model, this led to the absence of relations between performance, complementarity and compatibility (see table 11-36 and figure 11-4).

The coping mechanisms employed by ECIU have mainly been focused on finding and exploiting the complementary resources within the consortium. The consortium has taken measures to make those resources transparent, and in few cases this has led to the exploitation of such sources (e.g. the Web Supported Learning Project). In many cases however, the planned exploitation of complementarity did not materialise since

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[85] ibid.
[86] ECIU Interview Respondent 1

partners were not sufficiently committed to engage in the ambitious ventures that were planned. This has led to frequent 'loops' back to the negotiations on activities and objectives. More recently the consortium has started to focus more on the obstacles that arise because of national and organisational rules and regulations and attempts to deal with those differences (e.g. through the ECIU Graduate school and the renewed focus on student mobility). How this will eventually work out is still too early to say.

Figure 11-4: Significant relations in the explanatory model for ECIU
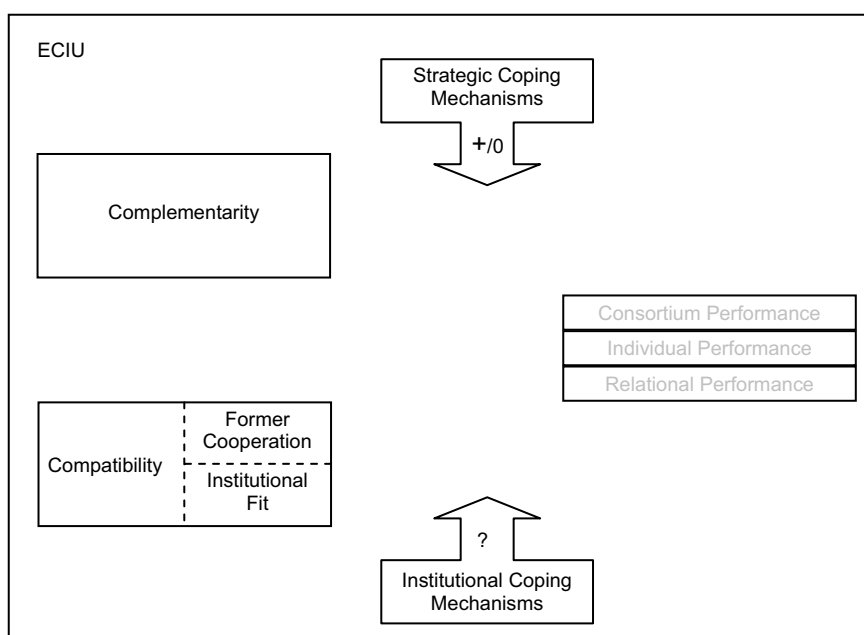
Organisational measures that have been taken in 1999 have not resulted in a stronger role of the consortium. The strengthening of the Secretariat and the establishment of the Executive Board has not been sufficient enough to commit the universities to the further integration that was needed to accomplish several objectives. The stronger role of the Secretariat has not been accompanied by an increase of staff of the secretariat. The strengthening of the Executive Boards has been hampered by insufficient and changing commitment of partners and also by the differences of authority of the universities' delegates. The former head of the secretariat illustrates this: "*Commitment was in general unevenly spread but this spread shifted over time. Especially the financial commitment was complex because of the differences in power* (in their own universities; EB) *of the participating leaders*"[87].

ECIU has not seized enough opportunities to change the relation between the partners by bridging differences or by stimulating people to initiate concrete projects. The employment of institutional coping mechanisms in order to solve obstacles or bridge differences has not been applied on the overall ECIU level. An explanation for this could

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[87] ECIU Interview Respondent 2

be that partners were considered to be 'like-minded' from the start and that incompatibility would not be an issue. In general it has not focused much on changing the compatibility between partners, but more on the complementarity of the partners. Coping with the insufficient complementarity of partners, or at least the exploitation thereof, frequently materialised in the renegotiation of the portfolio of activities and projects. The former chairman of the Executive Board however does not rule out more substantial types of coping mechanisms for the future. Anticipating on future developments like GATS and the Bologna process and increased competition, private configurations could in the future provide coping mechanisms to deal with the legal obstacles laid down by the different governments[88]. This can in the future be a mechanism to surpass legal educational problems in the further development of the ECIU Graduate School[89]. Such ventures however need a high level of integration and financial commitment, features that have not been very strong on the consortium level in the past.

A final aspect should be noted here in relation to the below average performance of ECIU. This can to a certain extent be explained by the high ambitions of many of its objectives. The level of integration envisaged by the ECIU objectives (e.g. joint doctorates, joint research schools, joint accreditation) is higher than for the other consortia. But also in regular internationalisation activities such as student mobility, ECIU goes beyond the traditional objectives (e.g. by integrating mobility with international internships). Putting the stakes too high however, can also lead to a disinterest or distrust of people on the work floor or of other partners. On the other hand, considering the relative young age of ECIU, one can see this as a process where the margins and possibilities of cooperation are explored. Focusing only on mainstream activities would probably not result in the exposure of the possibilities within the consortium. More risky, entrepreneurial activities do result in the possibility that real sources of complementarity become manifest, even though this is likely to proceed in a process of trial and error.

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[88] ECIU Interview Respondent 1
[89] ibid.

Chapter 12   Comparative Analysis

12.1   Introduction

In chapter 10 and 11 we have described and analysed the four consortia under investigation. The description of the consortia has showed that all four cases are of a different nature. On the basis of the dimensions of international higher education consortia identified in chapter 4 (table 4-2), we will review the differences in the nature of the consortia in the subsequent section.

The analysis of the case studies in chapter 11 exposed three general observations. First, complementarity and compatibility affect the performance of consortia in different ways. While in some consortia complementarity plays a significant role in explaining the variance in the perception of performance, in others this is better explained by compatibility factors. Our second observation is that in many cases, the relation between complementarity/compatibility and performance differs for the two distinct groups in the consortia (non-academics and academics). Thirdly, the structure of consortia – in terms of complementarity and compatibility –only partially explains the perceived performance of international higher education consortia.

In order to clarify the first observation, we will compare the results of our case study analyses of the previous chapter. For performance, complementarity, compatibility and their interaction we will explore differences and similarities between the consortia. In this section we will also look at the different perceptions on and relations between complementarity, compatibility and performance for the different groups within the universities. Next, we will explore the way in which consortia are managed and how coping mechanisms are employed and see to what extent this might explain the additional variance in performance that complementarity and compatibility could not account for. In section five we will identify the coping mechanisms that were put into

operation by the four consortia and look at whether it is possible to identify different types of mechanisms for successful consortium management. The comparative analysis in this chapter then results in the identification of determinants for the perceived performance in international higher education consortia.

12.2 Dimensions of International higher education consortia Reviewed

12.2.1 Dimension 1: Size of the Consortia

In chapter four consortia were distinguished from bilateral partnerships and associations on the basis of the number of members. We concluded that the number of members in a consortium is three or more, but restricted to a limited number of members. This rather wide range of possible members is also apparent in our case studies where the number of members in ALMA is four, while the amount of member universities in the Coimbra Group is almost tenfold. This naturally has an impact on the management of consortia, through practical differences such as the difficulty in coordinating activities or gatherings on a frequent basis or in providing communication to all members. It can also lead to a lack of commitment of members due to free riding behaviour, since it will be less notable when members manifest such behaviour in a consortium of 39 members than in a consortium of 4 members. It is therefore all the more remarkable that the two largest consortia (Coimbra and AUN) score higher on items such as coordination, communication and commitment between its members than the two smaller consortia (ALMA and ECIU).

12.2.2 Dimension 2: Membership of the Consortia

All consortia under investigation in this study satisfy our criterion of restricted membership. The four consortia all have rules regarding the admission of new members, although some use stricter criteria than others. The largest growth in members during the consortium's existence has been witnessed by Coimbra. Since its establishment in 1987, the Group has more than doubled in size (from 19 to 39). Initially, membership was based on three criteria: universities were established a long time ago (originally, this criterion was termed 'traditional'); they are not located in the capitals of their countries; and they are comprehensive in scope. The second and third became more flexible over time, as could be witnessed with the admission of the universities of Prague, Budapest, Krakow and Aarhus. "*There is a procedure for the entrance of new universities: There are no objective, measurable criteria for this, but it mainly depends (in addition to the three formal criteria) on reputation of future partners and the relations they have with Coimbra members. The decision for admission is mainly based on an overall idea of the fit between the new member and the existing consortium*"[90]. Obviously the growth of Coimbra is closely related to the fall of the Berlin Wall in 1989 and the admission of Central and Eastern European Countries to the European Union. "*Future growth is a point of discussion, but Coimbra does not want to increase its size too much. For Western European countries and*

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[90] Coimbra Group Interview respondent

Mediterranean countries, membership is very restricted. Partners will probably mainly be accepted from the accession countries. The Coimbra Group does not actively seek for new partners but waits for invitations. An important issue is that the network remains manageable and that there will remain ample opportunities for communication"[91].

The ASEAN University network has also grown due to political circumstances. With the inclusion of Myanmar, Laos and Cambodia, the consortium grew from 13 to 17 members. For AUN the admission of new members has also been an issue. "*This issue revolved around both the admission of new countries to ASEAN as well as around applications from other universities. But, since funding is already a problem within AUN, it was decided to only admit universities from new member countries. Non member universities are however often invited as observers in meetings*"[92]. Taking this into account, it is likely that the consortium will not expand further[93].

The ALMA Network has also increased in size since its foundation, although it has only admitted one additional member and did so in its early years of its existence. The Limburgs Universitair Centrum joined ALMA in 1992. "*After the LUC joined in 1992, there have been some discussions on the admission of new members, for instance on the inclusion of the university in Namur*"[94] (Belgium). The consortium has however chosen not to grow any further in the near future, although it does not rule out this possibility in the future.

Contrary to the other consortia, the ECIU has remained the same size since its establishment in 1997. One member however was admitted soon after the establishment of ECIU (Université de Technologie de Compiègne from France), but another withdrew in 2003 (Chalmers University from Sweden). "*There have been several requests for membership, but until now they have not been rewarded. We would consider membership for one or two new members at the most. Outside of Europe, ECIU tries to ally with other networks through ECIU's associate members. The consortium also aspires to ally with networks from the US*"[95]. Connections with networks outside Europe were established through the Monterrey Institute of Technology University System and with the Hong Kong Polytechnic University. The first is a network of Mexican universities and has the title of associate member of ECIU. Hong Kong Polytechnic University used to be an associated member and "*provided ECIU with a connection to the International Strategic Technology Alliance (ISTA). Hong Kong Polytechnic however withdrew from ECIU because of financial reasons*"[96].

In general we can conclude that ALMA and ECIU are most restrictive in the admission of new members. AUN has retained its criterion of a maximum of two members per ASEAN country, and therefore, due to political developments, it admitted four universities from three new member countries. Coimbra has been the most flexible

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[91] Ibid.

[92] AUN Interview respondent 1

[93] This is assuming that ASEAN will not expand. However, inclusion of East Timor might become reality in the future.

[94] ALMA Interview respondent 1

[95] ECIU Interview respondent 1

[96] Ibid.; ISTA is an expertise network initiated by the Hong Kong Polytechnic University with the support of major universities on mainland China. In addition to Chinese universities, this Alliance has members from the UK and US.

in its admission of new members, but in the future, the consortium will be more open to applications from the accession countries than from other European countries.

12.2.3 Dimension 3: Interests in the Consortia

In chapter four we distinguished consortia from associations on the basis of their size, restriction in membership and the representation of interests. Associations were characterised as consisting of numerous and an unlimited amount of members that become part of the arrangement through an open membership (aside from, for example being a university, or centre involved in a specific field). The third distinction was made on the basis of the interest represented. While organisations or individuals become members of associations as they represent the interests of a specific cluster of institutions, disciplines or professional groups, members are involved in consortia in order to enhance their own interests. This dimension of international higher education consortia is strongest for ECIU. ECIU was not founded in order to represent interests of young, innovative or entrepreneurial universities vis-à-vis governments or the EU, but is clearly aimed at improving the position of its members in the contemporary (competitive and international) higher education environment. Objectives are not related to improving 'European higher education' or 'the position of young innovative universities' in general, but at improving the competitiveness of its members. The adage of 'cooperating to compete' is therefore best applicable to cooperation in ECIU. In the other consortia, membership is also aimed at improving the position of the own university, but is often supplemented with broader objectives such as improving the socio-economic integration of the Euregion (ALMA), supporting the development of the European higher education and research area (Coimbra) or promoting solidarity and the advancement of quality higher education in the ASEAN region (AUN). The result of these additional agendas is that other universities in the Euregion, in Europe or in ASEAN can benefit from the actions of the consortia without being a member. This is especially the case for Coimbra and AUN. Coimbra is actively involved in European policy making and lobbying for issues such as European credit transfer and recognition of qualifications, issues that extend beyond the interest of Coimbra members and affect all European universities (with a European or international outlook). AUN is founded partly as a political instrument in order to enhance higher education throughout the ASEAN region and also to support further cooperation and integration in ASEAN and improve the competitiveness of ASEAN economies. Aside from benefits to member universities, benefits to the wider (higher education) community are also anticipated. These observations show that AUN and Coimbra are more similar to associations (as typified in chapter four) than for instance ECIU.

12.2.4 Dimension 4: Temporal Scope of Cooperation

All consortia in the study clearly comprise of the indefinite temporal scope, which we used to distinguish consortia from short term projects with a finite time-span. None of the consortia indicate when 'their job is done' or encompass objectives with a definite endpoint. Therefore the lifespan is indefinite for all consortia and consequently this dimension can not account for differences between the consortia.

12.2.5 Dimension 5: Scope of Cooperative Activities in the Consortia

In addition to the indefinite time span, we have also identified the comprehensive scope in activities as one of the dimensions of international higher education consortia. This dimension distinguishes our study objectives from disciplinary or thematic arrangements. Each of the four consortia shows a comprehensive scope in their cooperative activities. The consortia are focused on multiple activities in multiple disciplines or themes. Although ECIU places emphasis on more modern-day issues such as university-industry relations, entrepreneurship and information and communication technologies, its activities are still broad enough to mark them as comprehensive. The specific focus of ECIU is mainly based on the characteristics of its members, which are focused on engineering and social sciences and the complementarity between the two. The other three consortia mainly consist of comprehensive universities and aim for cooperation in a wide range of disciplines and on a wide range of themes. For all consortia, the benefits of membership are not restricted to particular faculties or units in the university, but are meant to cover the whole institution. The scope of activities therefore does not provide an additional explanation for the differences between the consortia.

12.2.6 Dimension 6: Integration of Activities in the Consortia

An additional dimension of international higher education consortia identified in chapter four is the 'direction' of integration. The study was restricted to horizontal integration of universities in consortia. Thereby we excluded cross-sectoral arrangements between universities and other sectors of society, such as industrial and business partners. The four consortia in the study exclusively consist of university members, and include no partners from other sectors. In the periphery of the consortia however, some consortia have set up linkages with partners from other sectors. ALMA for instance cooperates with various regional actors such as chambers of commerce, SME/business associations and political actors. Both Coimbra and ECIU are (partly) involved in the collaborative European Virtual University (cEVU), which in turn is a cross-sectoral arrangement, including partners from industry. AUN is more entangled with political actors, mainly the ASEAN institutions such as the ASEAN Secretariat and the ASEAN Foundation, but also with political institutions related to their Dialogue Partners. In conclusion, it can be seen that membership within the consortia is exclusively reserved for universities, but that, at the fringes of the consortia activities, actors from other sectors play a role. Since this is the case for all consortia, this dimension also cannot provide us with additional explanations for the differences between the consortia.

12.2.7 Dimension 7: Equity in the Consortia

In terms of power, we made a distinction between equity and non-equity arrangements. International higher education consortia as defined in this study were presented as equity arrangements, where all partners have an equal say in the consortium. Formally, this is the case for all consortia. In the two larger ones however (Coimbra and AUN), there is a distinction between core members and more recent members. This distinction is not based on a difference in the formal vote in consortium decision making, but more

on the stage of development of higher education in general in the respective countries (accession countries in the case of Coimbra and Myanmar, Cambodia, Laos and Vietnam in the case of AUN). But the amount of influence is not only related to the formal vote or situational circumstances, but also seems to relate to the level of involvement. In all consortia there appears to be a difference in the level of involvement between the various partners, which again might lead to a greater influence on activities. The level of involvement also seems related to the initiators of the consortia and to the location of the formal bodies of the consortia. The University of Maastricht for example has been the major initiator of ALMA and also hosts (but not funds) the ALMA office. This university also appears to be the driving force behind many ALMA activities and attaches the most importance to ALMA[97]. In the case of AUN, the involvement of the partners seems rather equally distributed, even though the Thai government and Chulalongkorn University in Bangkok have provided the funding and the Executive Director for the AUN secretariat. Also, the gap in quality and in capacity between the universities of the more developed ASEAN countries and those from the newer ASEAN members is acknowledged by the consortium. In the case of Coimbra, with its large number of members, there are members that are more involved than others, but this seems to shift over time. It is difficult to point to specific members that have played a leading role in Coimbra and the Coimbra Office is also not tied to a specific member and is not located in any of the member universities or cities. At the start of ECIU, a leading role was played by the Universities of Twente, Dortmund and Warwick, and to a lesser extent, Aalborg and Barcelona. The universities of Twente, Aalborg and Dortmund have remained key players in ECIU in the subsequent years. More recently, the University of Strathclyde has also taken up a leadership role. This university has provided the new Chairman of the ECIU Executive Board and also played a leading role in one of ECIU's major projects (Web Supported Learning Project). The latter point, different leaders for different projects, can also be observed in other ECIU projects (e.g. the University of Twente and the ECIU Quality Review System; University of Hamburg-Harburg and the ECIU Graduate School). In general we can conclude that all consortia show an equal distribution of formal power and also a rather equal distribution of power to influence consortium activities, although power arrangements do shift over time and over types of activities.

12.2.8 Dimension 8: Intensity of Cooperation

The intensity of cooperation, our final dimension, refers to the place a consortium occupies in the cooperation-amalgamation continuum (see section 4.4.3). Within this continuum we identified coordination as an intermediate form where a new arrangement is established in order to coordinate inter-organisational activities and where authority is only partly transferred to the arrangement as a whole. This distinguished consortia from loose cooperation on the one hand – without a coordinating unit and without loss of authority – and amalgamations – where organisations are fully merged and authority is totally transferred to the new unit – on the other. All levels of intensity in the consortia are located somewhere on the continuum, although some different locations can be observed along this consortium.

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[97] Although the latter point appears to become less in the near future (see University of Maastricht, 2003; and also section 12.3.1)

However, from the case studies it becomes clear that we need to distinguish between the intensity of cooperation as foreseen in the formal objectives and the real intensity. Some of the objectives of ECIU and AUN anticipate a high level of coordination and integration of activities. Objectives such as the establishment of an ASEAN university, a joint accreditation system, joint investments for facilities or joint doctorates or graduate school require a strong (financial) commitment of partners and the willingness to delegate authority from the university to the consortium. As we saw in the case studies, this is not something that universities readily do in reality. Especially in the case of ECIU, this has often led to renegotiation or weakening of the ambitions of objectives. But the anxiety of universities in committing themselves to activities where authority needs to be delegated is apparent in all consortia. This is clearly a dimension that needs to be taken into account in the comparative analysis of the case studies.

12.2.9 Summary: The Nature of the Consortia Compared

Even though all four consortia in this study can, according to the dimensions of the definition used, be termed International higher education consortia, there is still substantial diversity in the nature of consortia. Obviously this diversity makes comparisons more complex. ALMA is the smallest consortium in our study. It is a consortium that was established with a specific rationale in mind, which extends beyond benefits for the individual institutions. It also never had the ambition to pursue a high level of integration between the participating universities. Further integration is only foreseen in very specific activities (e.g. joint programmes) or between specific partners (Transnational University Limburg). AUN is, much more than other consortia, a political creation. It has nevertheless developed in a group with clear benefits to the individual members. In the long term it shows aspirations to achieve a high level of integration, mainly in the field of accreditation and quality assurance and in information networking through the ASEAN Virtual University. Of the four consortia, Coimbra can be considered as the one closest resembling an association. Although many of its activities are focused on internal issues and the improvement of conditions of internal cooperation and exchange, it also often acts as a representative of European universities in general, for example through its political influence and relationships. Instrumentally it also connects most with European programmes and initiatives. Consortium-wide tight integration and internal interference in the member universities is not anticipated. ECIU is clearly a consortium that was established for the benefits to its members, and also the consortium that aimed at the highest level of integration of activities. This high ambition however has also made the consortium vulnerable as such a level of integration also calls for a high level of (financial) commitment of the members. This commitment has not always been present and the consortium was therefore regularly required to renegotiate its objectives and adjust its aspirations.

We have touched upon these differences in the nature of the consortia under investigation in order to provide a better base for comparison. In the subsequent sections we will compare the results of the case studies that assessed the performance, complementarity and compatibility of the consortia and the relationships between these variables. Keeping the differences on these dimensions in mind, this should then provide sufficient information to detect critical factors that determine the effectiveness of higher education consortia.

12.3 Performance, Complementarity & Compatibility

12.3.1 *Performance of the Consortia*

If we compare the three performance indicators for the four consortia, we can observe that the Coimbra Group and the ASEAN University Network perform best, followed by ECIU and then ALMA. To better illustrate this, weighted and standardised Z scores[98] for the consortia were used in table 12-1.

Table 12-1: Performance scores of the consortia (weighted Z scores)

Performance Indicators:	ALMA	AUN	Coimbra	ECIU
Overall Consortium Performance	-0.49	0.42	0.42	-0.42
Overall Individual Performance	-0.28	0.05	0.39	-0.15
Overall Relational Performance	-0.61	0.28	0.47	-0.15

The three indicators are variables composed of several items. In order to detect where exactly the differences are located, we will look at the (standardised) components of the three indicators. Since the first indicator – Consortium Performance – is based on the particular objectives of each consortium, we have organised these objectives into four groups (see Appendix II). The standardised performance scores on these objectives are given in table 12-2.

Table 12-2: Consortium Performance (weighted Z scores)

Consortium objectives:	ALMA	AUN	Coimbra	ECIU
Objectives related to education	-0.54	0.25	0.57	-0.35
Objectives related to research	-0.34	0.25	0.29	-0.35
Objectives related to external & regional relations	-0.37	0.49	0.01	-0.23
Objectives related to organisation & management	-0.55	0.44	0.27	-0.34
Overall Consortium Performance	-0.49	0.42	0.42	-0.42

The table indicates that the relatively high score for AUN and Coimbra find their origin in different types of objectives. While Coimbra in particular is positively assessed for education and research related objectives, AUN scores better on organisation and management issues and on objectives related to external cooperation and regional objectives. This assessment can be related to the identity of both consortia. Since its establishment, Coimbra emphasised the 'traditional' academic values and cooperation in the core areas of education and research. The ASEAN University Network on the

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[98] This is the case for all data displayed in this section: first the four cases were weighted in order to control for the different sample sizes of the four consortia. The attached weights are calculated in the following way: Weight = [expected population]/[actual population] with an expected population of [N]/[number of consortia] = 188/4 = 47. The actual populations for ALMA, AUN, Coimbra and ECIU are respectively 27, 55, 64, 42. In order to make it easier to compare results, the scores of all variables were subsequently standardised. For N=188, scores therefore have a mean of '0' and a standard deviation of '1'.

other hand is also (as illustrated by its name) a creation and political 'instrument' of ASEAN where cooperation of the partner universities should also lead to the development of a regional identity and a better economic position of the region vis-à-vis other regions in the world. ECIU and ALMA on the other hand receive low scores for objectives related to education and research. Considering the 'entrepreneurial' identity of its partners and related emphasis on organisational leadership and management, the low score on objectives related to organisation and management are remarkable for ECIU. The same argument can be made for the objectives related to regional relationships in the case of ALMA, which has very much a confined regional focus.

The last point is illustrated through looking at the perceived effects on the universities of the respondents (table 12-3). In the case of ALMA, the positive effects of the consortia on the university's (Euregional) environment are higher than average. For a pan European consortium like Coimbra, this aspect appears less affected by the consortium. In the case of ECIU, where we saw that objectives related to organisation and management did not develop successfully, the impact on the organisation and management within the universities is however perceived as more positive than average.

Table 12-3: Individual Performance (weighted Z scores)[99]

Affected Areas:	ALMA	AUN	Coimbra	ECIU
Impact on the quality of teaching	-0.22	0.22	0.11	-0.10
Impact on the quality of research	-0.34	0.26	0.21	-0.20
Impact on the regional socio-economic environment of the university	0.29	0.20	-0.42	-0.15
Impact on organisation & management within the university	-0.61	0.15	0.25	0.12
Impact on the competencies of graduates	-0.45	0.26	0.16	-0.04
Impact on the reputation of university	-0.56	-0.03	0.60	-0.12
Impact on enrolment in the university	-0.23	-0.23	0.53	-0.08
Impact on the access to international funding opportunities	-0.06	-0.17	0.32	-0.09
Overall Individual performance	-0.28	0.05	0.39	-0.15

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[99] Note that negative scores do not indicate 'negative effects', but (since we are using standardised Z scores) scores that are 'lower than the average' of all respondents.

We observed in the case studies that the impact on the reputation of the universities was assessed as very positive for all consortia. This appears most evident for Coimbra, a consortium which already sees itself as a group of 'high reputation universities'. This indicates that reputation of partners is perceived to reflect upon the reputation of the own university. The above average effect on the access to international funding opportunities can be explained by Coimbra's close connection to European Union programmes. The relatively high score on 'impact on enrolment' of Coimbra respondents implies the respondents believe that membership of the Coimbra Group attracts new students to their universities and that students take this international image into account in their decision on where to enrol. The areas closely related to the core business of universities (delivering high quality teaching, research and graduates) reflect the overall performance of the consortia, with Coimbra and AUN scoring above average compared to ALMA and ECIU.

Table 12-4: Relational Performance (weighted Z scores)

Relational Items:	ALMA	AUN	Coimbra	ECIU
Communication within my university (on consortium strategies and activities) has been sufficient	-0.31	0.26	0.35	-0.29
Communication between us and our partners (on consortium strategies and activities) has been sufficient	-0.38	0.14	0.45	-0.24
The division of labour and authority within the university (on consortium activities) has been clear	-0.50	0.13	0.44	-0.03
The division of labour and authority between us and our partners (on consortium activities) has been clear	-0.36	0.10	0.42	-0.09
The internal coordination of consortium activities has been effective	-0.59	0.16	0.38	0.07
The coordination of consortium activities on consortium level has been effective	-0.44	0.25	0.25	-0.12
There is strong commitment on consortium activities within my university	-0.62	0.41	0.21	-0.03
Other consortium partners are strongly committed to consortium activities	-0.52	0.40	0.32	-0.31
Overall Relational Performance	-0.61	0.28	0.47	-0.15

On nearly all items AUN and Coimbra are more positive about the relational items than ECIU and ALMA. Differences on effectiveness of coordination at the consortium level reflect the staffing of the various offices/secretariats, where AUN and Coimbra have a larger number of staff (respectively eight and five persons) than ECIU and ALMA (two and three people respectively), although it must be remembered that the former two consortia are substantially larger than the latter two. Communication seems to improve if newsletters are issued on a regular basis, which is the case for AUN and Coimbra, but not for ALMA and ECIU (although ECIU just began circulating newsletters in December 2003). Coimbra receives relatively high scores on the clarity and transparency of the division of responsibilities. This might be explained by the relatively enduring structures established in the Group, with a clear-cut emphasis on the various Task Forces that in some cases have existed for over ten years. The relatively long existence of

Coimbra can help clarify which bodies are responsible for which actions. According to the data this is less the case for ALMA, which has also existed for over a decade but has a more loose organisational structure than Coimbra. Commitment, both internal and external, appears to be especially high in the case of the ASEAN University Network. Furthermore, perceived commitment on consortium activities is low within the universities of ALMA. This might be partially explained by the broader international focus of the RWTH in Aachen (with almost 5000 international students out of a total of 28000) and the shift in international positioning of the University of Maastricht, which recently decided to focus more on the European and global level than on the Euregional level (University of Maastricht, 2003).

Overall, we can conclude that, according to the respondents involved, AUN and Coimbra perform better than ECIU and ALMA. For AUN and Coimbra this is especially the case for issues that naturally arise from their identity and their raison d'être. Respectively, these are objectives related to core academic functions of education and research and objectives with a regional (=ASEAN) focus. ALMA and ECIU on the other hand perform below average on issues that form the basis of their existence. Low levels of performance also appear to be accompanied by low satisfaction with relational issues such as communication, commitment, coordination and transparency of roles and responsibilities.

The differences in the performance indicators that are statistically significant[100] are displayed in table 12-4.

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[100] For p<.05; based on an independent sample t-test for all six combinations. We used the weighted scores (see footnote 57).

Table 12-5: Significant differences between the consortia

	Alma	AUN	Coimbra	ECIU
Alma				
AUN	Consortium Perform. (-) Relational Performance(-) *Complementarity (-)* *Institutional Fit (-)* *Former Cooperation (+)*			
Coimbra	Consortium Perform. (-) Individual Performance (-) Relational Performance (-) *Institutional Fit (-)*	*Complementarity (+)* *Former Cooperation (-)*		
ECIU	Relational Performance (-)	Consortium Perform. (+) Relational Performance(+) *Complementarity (+)* *Former Cooperation (-)*	Consortium Perform. (+) Individual Performance(+) Relational Performance(+)	

*   The sign refers to the direction of the difference: (-) means the score for the consortium above is significantly less than for the consortium on the left; (+) means that the score for the consortium above is significantly higher than for the consortium on the left .

The table also highlights the significant differences in independent variables (complementarity, institutional fit, and former cooperation; in *italics*). Naturally, the signs on one side of the diagonal are opposite to the signs on the other. The table clarifies that the relations between the performance indicators and the indicators for complementarity and compatibility are not as straightforward as proposed in chapter six and seven. If that were the case, all significant differences in performance indicators would have been accompanied by significant differences in independent variables. We will discuss these indicators and their relationship with performance indicators in the following section.

12.3.2 *Complementarity and Compatibility in the Consortia*

The differences with regards to the independent variables between the consortia show a somewhat similar pattern for Complementarity and Institutional Fit, and a rather different pattern for Former Cooperation (table 12-6).

Table 12-6: Independent Variables (weighted Z scores)

Independent variables:	ALMA	AUN	Coimbra	ECIU
Complementarity	-0.23	0.42	-0.02	-0.17
Institutional Fit	-0.40	0.31	0.18	-0.09
Former Cooperation	0.24	-0.52	0.25	0.04

In terms of complementarity, AUN scores significantly higher than all other consortia. A detailed look at the various sources of complementarity shows that the difference in complementarity between AUN and the other three consortia is located mainly in the complementarity in financial resources and the infrastructures and facilities of the partners (see tables 11-4, 11-13, 11-22, and 11-31). Respondents of Coimbra on the other hand, perceive a significantly higher level of complementarity in educational and research quality. Differences between ECIU and ALMA are primarily located in resources such as ICT, reputation and external relationships, where ECIU respondents see their partners as more positive than the ALMA respondents do. The main partner characteristic perceived as relatively positive by ALMA respondents is the proximity of their partners.

Significant differences in Institutional Fit can be observed between ALMA on the one hand and Coimbra and AUN on the other. This can be largely explained by the relatively strong negative impact that ALMA respondents perceive as coming from legal differences and differences in the division of authority at the partners (see tables 11-6, 11-15, 11-24, and 11-33). Furthermore, ALMA respondents on average see cultural differences as impacting cooperation in a negative way, while the other consortia see this as positive. The moderate level of institutional fit in ECIU can chiefly be explained by the perceived negative impact of and the diversity in the consortium. Overall, it are the centralised types of institutions (national laws, organisational procedures and the formal division of authority) that constitute the main source of incompatibility.

The differences in the frequency of Former Cooperation are significant for AUN and the other consortia. Explanations for the lack of former relations for AUN were already suggested in section 11.3.4. Considering the substantial importance attached to international cooperation and the global scope of the network of professional relationships of many AUN respondents, this implies a lack of former relationships with the current AUN partners, it does not necessary imply a lack of former cooperation on the wider international level. A significant difference can also be observed between the former relationships (in terms of former cooperating with the partner *universities*) among the ECIU partners and those of ALMA and Coimbra. Since this is not the case for former cooperation with partner *countries*, this does not imply that ECIU respondents

have a more confined spatial focus in their work. It does indicate that they did have previous experience in cooperation with other universities in the countries involved.

Our propositions predicted a positive relationship between complementarity and compatibility on the one hand and performance on the other. We already observed that for some consortia this was (partly) the case and for others it was not. The beta coefficients for the regression equations are summarised in table 12-7 (summary of tables 11-9, 11-18, 11-27 and 11-36).

Table 12-7: R² and Beta coefficients of regression equations (summary)

	ALMA			AUN			Coimbra			ECIU		
	CP	IP	RP	CP	IP	RP	CP	IP	RP	CP	IP	RP
R^2	.398	.139	.313	.144	.096	.182	.301	.022	.051	.118	.025	.041
Complementarity	-.279	-.202	.019	.331	.279	-.089	.322	.046	-.066	.327	-.010	.035
Institutional Fit	.567	.142	-.098	.063	-.072	.140	-.089	.123	.050	.072	.119	-.146
Former Cooper.	.414	-.226	.528	.233	.179	.369	.373	-.092	.223	-.319	.088	-.131

CP = Consortium Performance; IP = Individual Performance; RP = Relational Performance

The R²'s show that the models for Consortium Performance provide the best fit for the data. The variation in Individual Performance can not sufficiently be explained by the three independent variables. We also observed that on the consortium level, Overall Individual Performance showed only minor differences between the consortia. The models for Relational Performance are only significant in the case of ALMA and AUN and show a very poor fit for the other two cases. However, since the differences in Relational Performance are significant for almost all combinations of cases, this performance might provide alternative explanations. Considering the better fit, we will pay extra attention to Consortium Performance as the performance indicator in the remainder of this comparative analysis.

If we focus on the perceived Consortium Performance, the model for ALMA clearly deviates the most. This model indicates that compatibility factors are most important in explaining the success (or failure) of cooperation. Complementarity shows a negative relationship with performance. The latter observation would mean that the more respondents perceive a match in resources, the less successful the performance in terms of objectives. This would mean that complementarity might exist, but is not exploited sufficiently. We observed for the case of ALMA that Relational Performance was low, especially in the eyes of academics. It can therefore be argued that a particular level of Relational Performance is required to exploit the complementarity of resources.

For the other cases, the positive correlation between complementarity and Consortium Performance is present. In these case however, no significant relationship can be established between Institutional Fit and Consortium Performance. This does not necessarily mean that differences in institutional contexts do not exist, but that in reality, they hardly affect the performance of the consortium. Institutional Fit was

relatively low in ALMA, corresponding with a below average performance. Therefore, the question arises why the different institutional context does affect performance in ALMA and not in the other three cases. What we observed in the case studies was that in ALMA, non-academics perceived a lower institutional fit than academics, while this was the other way around for other consortia (or equal in the case of Coimbra). We will further explore these differences in the next section. For Former Cooperation we can observe a positive relationship with Consortium Performance. Only in the case of non-academics in ECIU, is this relationship negative.

Figure 12-1 presents a graphic representation of statistically significant relationships between dependent and independent variables. These models represent the explanatory model of figure 9-2 for each of the four consortia. In figure 12-1, relationships are only portrayed for the performance indicators where the model was significant (see tables 11-9, 11-18, 11-27 and 11-36), and for these models only the relationships are shown where Beta coefficients were significant.

Figure 12-1: Significant relations for the four consortia (summary)
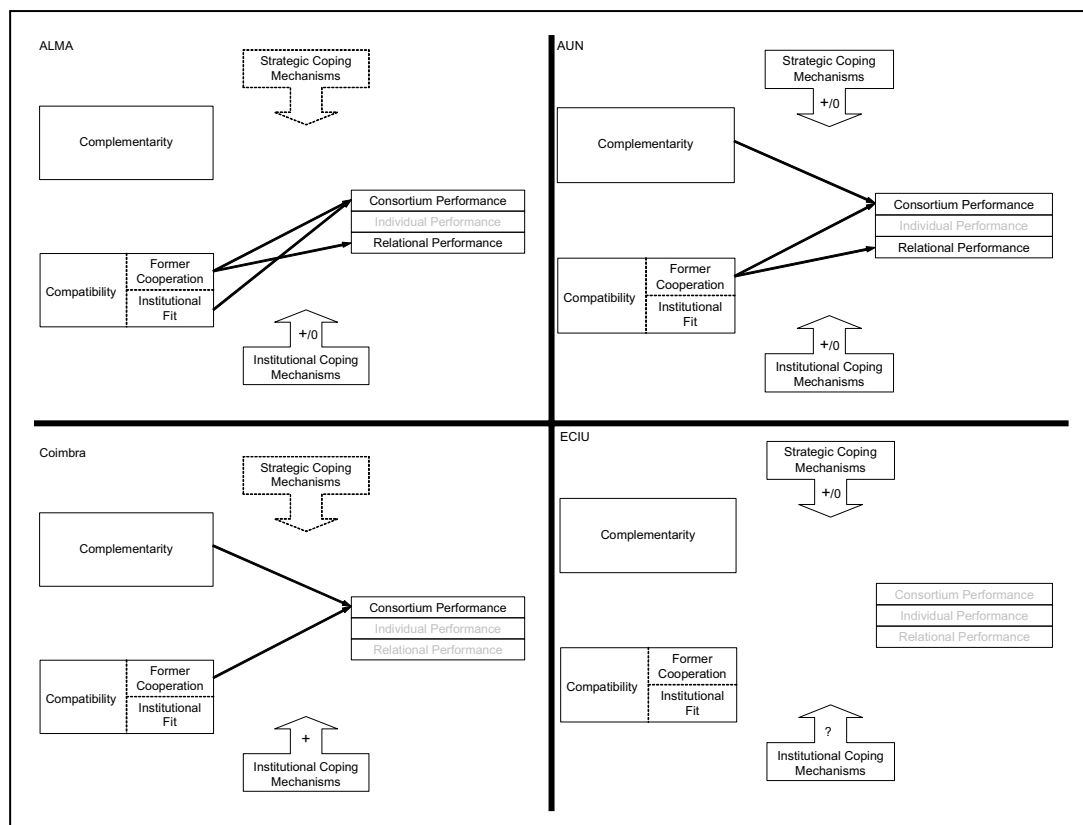
Note: black arrows represent positive relations, significant for p < .05

The figure above again makes clear that there is no clear overall pattern that can be detected in the linear relationships between dependent and independent variables. Complementarity and Former Cooperation do show the proposed relationship with Consortium Performance for the two consortia with above average scores on performance. This however is not the case for the other two consortia. Institutional Fit on the other hand, only shows a significant relationship in the case of one consortium. These observations indicate that other factors need to be taken into account as well in explaining performance. The employment of coping mechanisms and the differences between groups within the universities might provide additional factors in explaining performance of higher education consortia.

12.3.3 Academics and non-academics in consortia

Table 12-7 and figure 12-1 show that we can detect stronger relations for Complementarity and Former Cooperation, with deviances in the cases of ECIU and ALMA, which are also the consortia with below average performance. In the case studies we have seen that there are often significant differences between academics and non-academics. These are summarised in table 12-8.

Table 12-8: Differences between non-academics and academics (summary)

	ALMA		AUN		Coimbra		ECIU	
	Non-acad	Acad	Non-acad	Acad	Non-acad	Acad	Non-acad	Acad
Consortium Performance	1.74	2.00	2.90*	2.35*	2.80**	2.25**	1.89	1.95
- *Educational*	1.80	1.96	2.89+	2.40+	3.23*	2.42*	2.02	2.26
- *Research*	1.76	2.16	2.70	2.42	2.69	2.44	1.78+	2.33+
- *External*	1.58	1.92	2.98**	2.16**	2.19	1.82	1.75*	2.50*
- *Management*	1.28	2.00	3.03**	2.27**	2.58	2.23	1.84	1.55
Individual Performance	3.43	3.08	3.49	3.43	3.65	3.67	3.35	3.33
Relational Performance	2.55	2.23	3.65*	2.63*	3.34*	2.97*	2.87	2.66
Complementarity	2.35	2.71	2.82	3.10	2.77*	2.40*	2.69+	2.27+
Institutional Fit	-0.92	-0.31	0.39	- 0.06	0.03	0.04	0.16	0.52
Former Cooperation	2.55	2.63	2.16**	1.59**	2.72	2.33	2.53**	.213**

+   *Difference significant for p <.1*
*   *Difference significant for p<.05*
** *Difference significant for p<.01*

In this table, Consortium Performance is further divided into the four categories of objectives. One remarkable observation is that in both AUN and Coimbra, non-academics see the consortium as significantly more successful than academics. This

assessment however is the other way around for ECIU and ALMA[101]. Another interesting point can be observed for Relational Performance, where in all instances non-academics are more satisfied with the relational items than academics. An explanation for this observation can be that the consortia in the study are mainly leadership driven rather than initiated by academics.

In table 12-9 the correlations between the dependent and independent variables for non-academics and academics are summarised separately.

Table 12-9: Correlations between dependent and independent variables for non-academics and academics (summary)

	ALMA		AUN		Coimbra		ECIU	
	Non-acad	Acad	Non-acad	Acad	Non-acad	Acad	Non-acad	Acad
Complementarity								
Consortium Performance	-.441+	.104	.186	.515**	.479**	.126	.001	.675*
Individual Performance	-.334	-.108	-.062	.411*	.044	-.016	.018	.111
Relational Performance	-.243	.202	-.044	-.066	-.213+	.107	-.236	.423+
Institutional Fit								
Consortium Performance	.277	.558*	.254+	-.184	.059	-.133	.035	.098
Individual Performance	.321	-.057	.051	-.166	.033	.166	.120	.187
Relational Performance	-.006	-.715**	.114	.023	.052	.094	-.186	-.117
Former Cooperation								
Consortium Performance	.319	-.032	.094	.037	.465**	.175	-.383*	.292
Individual Performance	-.114	-.017	.143	.063	-.161	.108	.237	-.160
Relational Performance	.299	.660**	.516**	-.088	.070	.180	-.078	.272

+   *Correlation significant for p <.1*
*   *Correlation significant for p<.05*
** *Correlation significant for p<.01*

In the case of ALMA, we detected that the negative relationship between performance and complementarity was mainly the case for non-academics, while this relationship was positive (although not significant) for academics. On the other hand, the relatively strong relationship between Institutional Fit and performance in ALMA is mainly accounted for by academics. In the case of AUN, we observed a strong relationship between complementarity and performance for academics, while this relation was considerably weaker for non-academics. In this case, the non-academic respondents showed a stronger correlation between Institutional Fit and performance. In the case of

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[101] This difference is however not statistically significant for Overall Consortium Performance. In the case of ALMA this is partly because of the small N in ALMA.

ECIU, a strong correlation between complementarity and compatibility could only be observed for academics. All in all, a general pattern in the perceptions of academics versus non-academics is hard to establish for all four consortia. However, in many cases it appears that Institutional Fit is a more determining factor for performance in the case of non-academics (Pearson $R_{Institutional\ Fit}$ > Pearson $R_{Complementarity}$) while complementarity is more important to academics (Pearson $R_{Institutional\ Fit}$ < Pearson $R_{Complementarity}$). This could indicate that for non-academics, institutional factors are more relevant for success, while academics show more interest in the instrumental gains of cooperation. Exceptions to this observation are academics in ALMA and non-academics in Coimbra.

What can be concluded from the previous sections is that we need to take other factors into account in order to explain the differences in performance and the different relationships between performance and the independent variables. Some preliminary conclusions are that the relations between performance and complementarity/compatibility do not only differ for the consortia but also for the positions that respondents occupy in the consortium. In general, non-academics seem to place more emphasis on the Institutional Fit between the partners while academics emphasise the complementarity of resources. In general however, the quantitative data obtained through the questionnaires do not provide sufficient information to explain the differences between the consortia. Following our sequential model of collaboration and coping mechanisms (figure 7-1), the way the consortia are managed, or in other words, the coping mechanisms employed by the consortia, could provide alternative explanations.

12.4 The Management of Consortia

In the sequential model of collaboration and coping mechanisms we have represented consortium management as the application of coping mechanisms, which can be either strategic or institutional coping mechanisms. Strategic mechanisms are applied in cases of incomplementarity, that is, in cases where pressures for effectiveness and efficiency make it necessary to intervene in consortia activities. Institutional mechanisms on the other hand are employed when incompatibility occurs due to resistance and pressures for conformity, and which result in obstacles for cooperation. On the basis of the case studies, we can make two primary observations. First, consortia seem to put more time and effort in the employment of institutional coping mechanisms than of strategic coping mechanisms. A second observation is that many of the measures taken by the consortia are not directly aimed at the increase of complementarity or the avoidance of obstacles due to incompatibility, but should be classified otherwise. Before we will discuss these additional measures, we will first look at what types of strategic and institutional coping mechanisms have been employed by the consortia.

12.4.1 The Employment of Strategic Coping Mechanisms

Strategic coping mechanisms are instruments for increasing the complementarity in the consortia. On the basis of the observations in the case studies, we can detect the following broad categories of strategic coping mechanisms:

i.)   After the consortium is established, measures can be taken to admit new members that provide specific *new resources* or other assets to the consortium.

ii.)   Measures can also focus on the existing resource bases of the participating universities. In that case, a consortium can concentrate on the *transparency of these resource bases*, so that academics and non-academics know what their partners have to offer.

iii.)   When complementary resources are apparent for the staff of the universities, coping mechanisms can focus on the *exploitation and utilisation of this complementarity* in order to achieve a competitive advantage in relation to non member universities.

(i) Although in practice it might not be the most obvious coping mechanism, conceptually we can regard the acquisition of new resources through new partners as the most straightforward mechanism to gain access to necessary resources if they are not available in the consortium. In admitting new members to gain access to new resources, the countries in which the universities are located have played a major role. In AUN, the choice for new partners was not made by the consortium itself but by political actors (from the new countries and from ASEAN). Considering the level of development of higher education in these new member countries, additional complementary resources are not so much in the quality of education, research and management, but more on the knowledge and links that these new universities provide. Through the inclusion of the new members, the consortium gained knowledge on national circumstances and it gained relations with national actors from these countries. Especially for activities related to research and education on ASEAN and for the more political objectives of AUN, the new universities provided new resources to the consortium. For Coimbra, similar reasons played a role in the admittance of new members from Central and Eastern Europe. The inclusion of these new members also provided knowledge on and relations with the accession countries of the EU. Obviously, these new members also provided links in the framework of the TEMPUS programmes. Also in ECIU, one of the considerations for the inclusion of the University of Compiègne was to have a member from France, a country which was not yet represented in ECIU. In ALMA, other reasons played a role. Of course it was logical to consider the LUC as a new member considering its location in the Euregion. At the same time the LUC, as a small university, gained access to the resources of the three existing partner universities. From the perspective of the RWTH Aachen or the University of Liège, the LUC did not contribute a substantial added value by entering ALMA. The University of Maastricht however did see benefits in the inclusion of the LUC in some areas (in fields such as information technologies or life sciences), especially in relation to the proximity to Maastricht and the shared language. Increased complementarity due to admission of new members in ALMA was thus mainly the case for LUC, the new member, and Maastricht, the leading (or at least most active) member at that period in time.

(ii) Once the partner choice is made in a consortium, the hypothetical resource base is relatively stable. However, universities are complex organisations involved in many disciplines, research areas and other activities. The resources that universities possess in those areas will not always be known or recognised by individuals from other

member universities. In those instances, consortia can make the sources of complementarity more transparent through the identification of such sources and by communicating them to the right people. An example of this was for instance done through the Research Survey that was conducted by ECIU in 1997 (and was updated in 1999). This survey consisted of a list of the main fields of research within the member universities of ECIU. Although the survey was confined to listing faculties and research centres, such an initiative at least provided some indications on the sources of complementarity. A similar project was conducted by ALMA, but in that case it focused on the educational programmes offered in the partner universities. Other mechanisms have not been employed by the consortia in order to identify sources of complementarity. At the same time however, we have seen that for all consortia a reasonable level of complementarity between the members exists. This however has not in all instances led to a higher perceived performance. An explanation for this might be that in addition to the presence of sources of complementary and the knowledge about them, these sources of complementarity also need to be utilised and exploited.

(iii) In order to benefit from the complementarity between the members, mechanisms need to be employed that stimulate the exploitation and utilisation of these complementary resources. From the case studies, three categories of mechanisms can broadly be distinguished:
 a) First, activities were *revised or new activities* were started that were (expected to be) more in line with the sources of complementarity in the consortium.
 b) Secondly, activities *were adapted to existing ideas and beliefs* of the university communities.
 c) And thirdly, measures have been taken that *provide incentives* for the persons involved (or encouraged to be involved) in existing projects to become active in those projects.

(a) The first mechanism has been employed frequently by different consortia. Having learned from the failure or infeasibility of particular activities, decision makers *renegotiated objectives* and came up with *new activities*. This can especially be observed in the case of ECIU and in the early stages of AUN and can be explained by the high ambitions of the consortium. Objectives such as joint doctorates, joint research schools, joint investment in facilities, or in the case of AUN, the establishment of an ASEAN University, proved too ambitious and were therefore abolished or at least delayed. The abolishment of objectives at first glance does not appear to be an example of strong consortium management. But on the other hand it is also useless to stick to unfeasible objectives. In the case of AUN, it is clear that they have learned from such drawbacks. Whether that is the case for ECIU is too early to say, but ECIU has exchanged very ambitious projects for activities with more moderate and feasible aspirations. ECIU has also taken up more of the traditional internationalisation activities; activities that also seem to fit the traditional ideas of 'academia' better and therefore might constitute a better stimulus for staff to become involved in the consortium's activities.

(b) This brings us to the second type of mechanisms that has been employed in order to better exploit or utilise existing complementarity: *adaptation* of activities to existing

norms and beliefs of the targeted groups. There seems to be support for the observation that more traditional internationalisation activities are more accepted by the different universities in the consortium and the individuals within these universities. The Coimbra Group is the consortium that best connects to existing ideas on cooperation and internationalisation. Activities such as student and staff mobility, joint research on a voluntary basis or the exchange of information on teaching and management methods are likely to be more compatible with the idea of internationalisation in the meaning of the 'the medieval scholar that would wander from one place of learning to another in search for extending his academic knowledge' (see chapter 1). In other words, the adage of international cooperation as an end in itself seems to appeal more to the university community than the idea of cooperating to compete. AUN also operates more under the former idea by emphasising issues such as 'promoting solidarity between scholars in the region'. Although ALMA also acknowledges the inherent benefits of international cooperation, in this case the Euregional focus of cooperation does not seem to correspond with the broader international aspirations of the participating universities and their staff. ECIU took a more entrepreneurial approach to cooperation at the time of its establishment, focusing on the university's economic role and its contribution to national economies instead of seeing the university as a social and cultural institution. Relating collaborative activities to existing norms and beliefs thus is likely to increase the willingness of staff to become involved in such collaborative activities. Although the case studies support the idea that this is likely to increase the perceived performance of consortia, it can well be assumed that those activities do not fully exploit the complementarity of the members in the consortia. On the other hand, the case studies also support the notion that, if objectives deviate too much from existing beliefs about the benefits of internationalisation, collaboration can come to a standstill all together. Obviously when that is the case, there is no utilisation of complementary resources at all.

(c) In addition to adaptation of activities, consortia also made use of *incentives* in order to better exploit and utilise sources of complementarity. This is the third type of coping mechanisms identified. Stimuli that have been provided for staff of member institutions frequently come in the form of financial incentives. Obviously, staff members need to be financially compensated for their activities in the consortium. Since the consortia themselves do not have substantial financial resources at their disposal, such incentives often are more related to university management than consortium management, and are therefore likely to differ between the different member universities. Consortia however can connect to financial resources made available by external partners. All consortia in the study have been active in this. Coimbra and ALMA have received substantial resources from European programmes, be it on regional development (ALMA) or programmes specifically aimed at education (Coimbra). AUN has also been very active in the acquisition of external funding (e.g. from the EU, South Korea, Japan), although the data indicates that, according to academics, these resources do not sufficiently trickle down to the academic work floor. ECIU's activities are least connected to European programmes. Instead, ECIU focuses more on partnerships with industry to access funding for research or student mobility.

In conclusion we can thus identify three broad types of strategic coping mechanisms:

i.)   search for new resources through the admission of new members;
ii.)   the identification and communication of complementary resources;
iii.)   the exploitation and utilisation of the sources of complementarity through:
   a) abolishment and renegotiation of objectives,
   b) the adaptation of activities to existing ideas and beliefs and
   c) financial stimuli for cooperation through the acquisition of external funding sources.

It should however be noted that these are observed coping mechanisms and not prescriptions for management. An assessment of the use of strategic coping mechanisms point to a high level of risk avoidance and a strong commitment to the preservation of institutional autonomy. This provides an explanation for a generally more positive evaluation of those consortia and activities that focus on rather loose cooperation, with clear academic objectives (instead of entrepreneurial ones) with a global or pan-European/Southeast Asian scope. On the other hand, the case studies also show that due to the commitment to institutional autonomy, strategic opportunities for cooperation are not optimally exploited in the consortia.

12.4.2 *The Employment of Institutional Coping Mechanisms*

Consortia apply institutional mechanisms in order to deal with sources of incompatibility in the consortium. In chapter 9 we identified four different types of institutional forms: (i) the national legal context as a centralised public institution, (ii) national culture as a decentralised public institution, (iii) organisational and professional norms and belief as private decentralised institutions and (iv) organisational rules and procedures as centralised private institutions. In the cases studies we observed that the consortia adapt their measures in accordance with the institutional forms that are the cause of incompatibility. Consortia deal in different ways with legal differences than with cultural differences, and differently with cultural differences than with procedural differences.

Where national legal differences and the differences in higher education systems present obstacles in cooperation, consortia seem to be relatively powerless, since they are not in the position to change such laws or systems. A closer look however reveals that some of the consortia have been active in handling such obstacles. This has been most apparent in the case of Coimbra. This consortium (sometimes in cooperation with other European consortia) is active in lobbying on the European level. In broad European developments, such as the Bologna process, the consortium is actively involved or active in influencing (national) opinions through their personal contacts and the publishing of statements and recommendations. In ALMA this has also been the case, although more on a binational level. National legal frameworks were adjusted and a binational treaty was concluded to enable the establishment of a transnational university (although the two individual institutions – the University of Maastricht and the Limburgs Universitair Centrum – played a more substantial role in this than ALMA). In a more indirect manner, the frequency of cooperation and exchange in Coimbra (mainly in the framework of ERASMUS and SOCRATES) has made European authorities aware of obstacles that arise due to incompatibility of national regulations

and thereby contributed to the process of European integration in higher education. This of course is a consequence of European cooperation and exchange in general and not just of Coimbra, although Coimbra is large enough to have had a substantial influence on this process. ALMA uses similar tactics, although they rarely act at the pan-European level but more on a multilateral and Euregional level. ALMA is fairly embedded in Euregional society and politics through their relationships with local business and local/provincial governments. However, the authority of such actors on national regulations is limited. ECIU is relatively inactive in exerting of influence at a European level. For AUN the case is rather different due to the close relations that most member universities have with their governments. In general, the public universities in ASEAN are more dependent on their governments (in terms of regulations) than European universities. Also, AUN is closer connected to ASEAN than European consortia are to the EU (in the Board of Trustees of AUN for instance, one member represents ASEAN). Lobbying and communicating with ASEAN therefore takes place through relatively direct channels.

National regulations often do not so much obstruct exchange and cooperation but raise additional barriers that require extra administrative tasks and knowledge about other systems. Such tasks (e.g. recognition of study periods) increase transaction costs in cooperation. Consortia can be a way to institutionalise cooperation between a particular group of universities and in that way can create structures that minimise transaction costs. Frequent cooperation within the framework of a consortium avoids the need to perform specific tasks or gain specific knowledge over and over again. The Coimbra Group has set up such structures through its Task Forces and through the informal relations that have grown between international relations offices, but also through projects like the Hospitality Scheme (see chapter ten). The most obvious example for this however, is the exemption of tuition fees for intra-consortium mobility of students (although this is now regulated on a European level). This is also a feature of ECIU's Student Exchange Programme. However, tuition fees cannot be regarded as part of national regulations in all countries since in some universities or countries they can also be determined by universities themselves, and therefore need to be classified under the centralised private institutions or organisational rules.

Differences in such organisational rules and procedures also provide obstacles in the cooperation. With regards to exchange of staff and students as well as cooperation, specific organisational rules can frustrate activities in a consortium either through ignorance or lack of information, or also because specific organisational procedures just do not match. The former issue is often coped with through the provision of information and facilitating opportunities for staff to get to know one another's universities. Especially in cases where terminology used at the different member universities creates confusion, the provision of information, as happened in Coimbra, can be a simple way to create clarity. From the respondents from Coimbra, it became also apparent that the regular meetings and the relatively stable composition of the Task Forces created a very positive stance on these groups. The fact that Coimbra is more structured and that its structure has remained stable, has created networks of personal relationships within the consortium. Such networks seem to be beneficial for the exchange of information, but also for the commitment of persons to consortium activities. Obvious examples of organisational differences that create obstacles for exchange are academic calendars

and credit systems. A first step in dealing with such obstacles is acquiring knowledge about each others calendars or systems. ECIU has dealt with this through the provision of 'fact sheets' with (references to) the required information for students. In the case of AUN, the difference in academic calendars has led to redesigning their student exchange objectives. The Educational Forum was their answer to the 'misfit' between the respective academic calendars used by the members. Obstacles due to the differences in credit systems have also been acknowledged by the consortia. In the case of Europe, a collective solution to this problem was found in the European Credit transfer System, a system that will also be taken as an example for an ASEAN system of credit recognition.

The latter mechanisms constitute a level of cooperation that already is a step further than information exchange. When knowledge about each others organisation does not sufficiently alleviate the obstacles, member universities need to mutually adjust to each other. What becomes clear in the case studies is that, when cooperation enters this level, many universities back away. This is partly related to the fear or unwillingness to loose autonomy that we observed earlier. What can also be observed is that member universities might not be willing to come to mutual adjustment because they would see this as a decline of the quality of their own organisational procedures. A previously quoted statement of one of the respondents illustrates this: "*the culture of 'we are the best' certainly hinders true academic communication and progress*". Steps toward mutual adjustment have been taken by some consortia, but have proven to be difficult to realise. For instance on the issue of quality assurance, AUN has formulated common standards that will be aimed for by all member universities, but it still remains to be seen how these will work out in practice. The statement was made that this will be done "*while recognising and respecting the differences among member universities in their institutions and environment*" (AUN, 2000). In the case of ECIU, the ECIU Quality review System can also be seen as a step to mutual adjustment. Although this has been successfully set up in the first years of the ECIU, until now it has failed to be implemented on an ECIU-wide basis, and therefore has had little impact on the actual operations in its member universities. In general we can conclude that mutual adjustment is used as a mechanism to cope with organisational differences, but that it frequently fails in the implementation phase.

If mutual adjustment is taken one step further, this results in the possibility of the creation of separate organisations or joint ventures. Such new organisations incorporate the organisational differences and this will in time (optimistically) lead to assimilation of sources of diversity. Considering the problems that are being faced with mutual adjustment, it does not come as a surprise that these mechanisms are not frequently used. In ALMA it has however taken place on a bilateral basis with the establishment of the Transnational University of Limburg. This organisation is set up in a way that national differences and organisational differences are incorporated in one organisation, so that the partners in cooperation fall under a binational regime and, in legal terms, under one organisational regime. This University has an autonomous legal status, although it is clearly entangled with the two parent organisations, The University of Maastricht in the Netherlands and the Limburgs Universitair Centrum in Belgium, both in terms of governance and the location of facilities. AUN has 'created' a separate organisation in the form of the ASEAN Virtual University. This evidently is not a 'real' university, but mainly is a syllabus and information guide about the study programmes

on ASEAN topics that are jointly offered by AUN's members. A similar structure has been applied by the ECIU Graduate School. Unlike the Transnational University of Limburg, these universities or schools are not legal entities. ECIU however does consider the possibility of creating separate private organisations in those cases where national or organisational differences with regard to educational regulations or fees constitute obstacles. Joint Masters Programmes are now for instance offered by the Graduate School, but the establishment of a separate private organisation to offer these Joint Masters is not ruled out for the future. Such joint ventures would demand substantial commitment from the partners, a characteristic that was not highly assessed in ECIU. Coimbra has never displayed any real aspirations in setting up joint ventures. The Group is however involved in the Collaborative European Virtual University project, of which ECIU is also part.

The data in the case studies have shown that the centralised institutional forms (e.g. national law, organisational rules and procedures) present the most difficulties and are the main causes for a lack of institutional fit between the members in the consortia. It is therefore not surprising that the consortia mainly employed coping mechanisms to tackle problems due to national and organisational procedures and regulations. In some cases it is difficult to distinguish between public/national institutional differences and private/organisational institutional differences. This is related to the fact that some universities are more tightly controlled by national governments than others. In some cases for instance, the issue of tuition fees is related to national regulations, while in other cases universities are free to set these tuition fees. In general we can observe that the employment of coping mechanisms becomes more complex in the cases where a higher level of integration of activities is envisaged. On the other hand, these are the areas where concrete coping mechanisms such as measures for mutual adjustment or the establishment of separate organisational structures are most needed.

Problems caused by differences in decentralised institutional forms like culture, norms and beliefs were perceived as less crucial. In many cases, differences in national, organisational and professional cultures are even perceived as positive or at least as a positive challenge. This observation is rather contradictory to much of the international management literature on international consortia and international strategic alliances. This could be a specific characteristic of inter-university cooperation compared to general inter-organisational cooperation. Universities in general (at least in the regions of Europe and Southeast Asia) also see themselves as carriers of national cultures and therefore cultural diversity might be valued higher than in the business sector. Learning about each others cultures can in this respect be seen as a core academic value and in turn, cultural diversity may become a source of complementarity in a consortium. An additional explanation might come from the coping mechanisms that are used in the consortia. In the case of the more intangible institutional forms like culture, norms and beliefs however, mechanisms are not aimed at mutual adjustment or integration but mainly at the process of becoming acquainted with different cultures and habits and the recognition of those differences. This does not so much take place in the form of (acculturation) courses or written information but seems to be more successful in a process of 'learning by (frequent) doing'. Support for this claim is provided by activities in the Coimbra Group. Because of their consistent and stable nature of their sub-

structures (Steering Committee, Task Forces) there is a high level of interaction between the persons involved, both face-to-face and through new technologies. Through frequent interaction, persons get better acquainted with each other and with each other's norms and habits. Coimbra has also established a task force for cultural diversity. AUN also places emphasis on the cultural interaction of many of its meetings and even established a separate forum for it (the Youth Cultural Forum, a four day AUN event consisting of workshops and performances; first organised in 2003). The benefits of frequent interaction in order to get to know each others (university) cultures have also frequently been mentioned by respondents to the questionnaires.

If we include language as an expression of culture and thereby as a part of the public context, we can detect some more concrete coping mechanisms. In general, coping with problems due to linguistic differences has led to one solution that has been applied everywhere: the use of the English language. In all consortia this has officially become the working language, even though other languages are used sometimes in smaller settings. This measure has proved successful in most cases in all consortia, although some people (from different consortia) complained about the lack of knowledge of English at partner universities (interestingly, they did not complain about the English language capabilities of their own university). In one case, a respondent expressed his or her fear for the ubiquitous acceptance of English as the working language. As we saw in the case studies, it is not just English that benefits from an increase in international cooperation and mobility. Universities also offer courses in other foreign languages for students or staff members who want to spend time abroad. These courses however are not so much consortium initiatives but are arranged at the level of the individual universities. Furthermore, they are not only a consequence of membership in the consortium but a response to broader developments.

A final issue that needs to be addressed in relation to institutional coping mechanisms is related to the history of former cooperation. We have seen that in most cases, a history of frequent cooperation has a positive effect on consortium performance. This also has implications for consortium management. First of all, one needs to take this into account when new partners are chosen and admitted. In the admission of new members, consortia use their own fixed criteria (e.g. location, reputation, innovativeness), or are dependent on external political developments (in the case of AUN). Only Coimbra explicitly takes prior organisational relationships into account in their choice of new members. The relation between former cooperation and consortium performance also implies that consortia have to take existing relationships into account when starting new initiatives. Since we have seen that consortia are primarily leadership driven, the initiators of the consortia should look at existing relations in the research and education related sub-units of their universities. If new activities are initiated it would therefore be recommendable to relate to existing collaboration between faculties, departments, research centres, administrative units or individuals.

In summary, we can observe that relatively little effort is made to deal with obstacles due to differences in the decentralised institutional forms. This is because they are generally not seen as differences having a serious negative impact. Institutional coping mechanisms are therefore predominantly aimed at obstacles that result from national

and organisational differences in regulations and procedures. These categories of institutional coping mechanisms can be classified according to complexity:

- On the most basic level, institutional coping mechanisms are not aimed at reducing or abolishing differences but at recognising and acknowledging them:
  - consortia can try to relate activities to *existing relationships*, since people involved in such relations are already accustomed to the organisational and national differences;
  - if this is not a viable option, coping mechanisms are focused on creating *awareness* of the differences between the consortium members. This does not reduce or change the differences, but they make those involved aware of the different institutional contexts;
  - subsequently, a step can be made from awareness to *familiarity*. Through sufficient contact and awareness, people become familiar with the specific institutional contexts and the differences between them and learn how to cope with them.
- On a next level, the consortium actually sets up structures to *deal with differences*. Here, differences also remain unchanged, but the consortium takes over or facilitates administrative tasks that constitute the transaction costs of cooperation.
- On the third level, the consortia actually attempt to *reduce the differences*. In the case of national differences this occurs by influencing policies at the European and national levels and by lobbying for the abolishment of obstacles through a harmonisation of national regulations. On the organisational level this can occur through mutual adjustment of the various universities.
- The final and most complex step aims at the *abolishment of differences*. Obviously, this is not likely (and not aimed for) at the national level. On the organisational level this can occur through incorporation and assimilation of differences into one organisation. In concrete terms, this means the establishment of (private) joint ventures by all or some of the members.

12.4.3 Coping Mechanisms and Consortium Management

One of the observations we started this section on coping mechanisms with was that also measures could be identified that could neither be classified as mechanisms focused on complementarity nor as mechanisms focused on compatibility. These additional instruments seem to be more aimed at the relational dimensions of cooperation. Throughout the study we have considered Relational Performance as one of the three performance indicators. The case studies however, support the idea that relational performance should not be seen as an indicator of performance but more as an indirect condition for performance, a factor that enables complementarity and compatibility to be fully exploited. This is not only supported by the qualitative data but also by the quantitative data[102]. Improvement of the relational items between the members can improve performance by helping identify and exploit complementary

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[102] This support is based on the positive correlation between Overall Consortium Performance and the external relational issues (communication/coordination/clarity on responsibilities/commitment *among* the member universities). Pearson R and confidence intervals for the consortia are: ALMA: .315 (p<.05); AUN: .441 (p<.01); Coimbra: .407 (p<.01) and ECIU: .237 (p<.1)

resources, and by improving the information on and familiarisation with different institutional contexts and the willingness of the members to deal with these differences in a complex way. A sufficient level of satisfaction with relational issues can therefore be considered a condition for an effective employment of strategic and institutional coping mechanisms. This means that measures aimed at these relational issues can also be regarded as instruments for consortium management.

What becomes apparent from the case studies is that the personal and organisational relationships play a decisive role in cooperation. Even if there is complementarity and compatibility between the members, this was not always a guarantee for success. It has mainly been in the cases where individuals were satisfied with the relational themes where the consortium objectives were seen as relatively successful. This implies that these relational issues should also be of concern to consortium management. The question then becomes: what have consortia done to improve the relationships between individuals and organisations. In general, three broad methods can be distinguished on the basis of the case studies: sufficient communication, a clear organisational structure and the stimulation of commitment among the members.

The improvement of communication at the consortium level can be rather straightforward, for example through regular newsletters and updates on activities. On the project level this can take place through for instance mailing lists, but also through providing the opportunities for more frequent face-to-face meetings. These measures are especially apparent for AUN and Coimbra. These consortia have issued newsletters on a regular basis and have facilitated regular meetings of their sub-units. ECIU started publishing electronic newsletters in December 2003. ALMA does not provide information on consortium activities on a regular basis, and relies mainly on its website for the provision of information. The other consortia also have a website. But AUN and especially Coimbra provide the most information on their websites. Coimbra even includes reports of task force meetings and reports and results of other activities.

The enhancement of the coordination of consortium activities also benefits from the provision of sufficient and regular information. Furthermore, coordination can also be supported through a clear organisational structure, where the tasks and responsibilities of the various sub-units are clear and known by the persons involved in consortium activities. At first sight, all consortia that we studied have employed similar structures to organize and manage their cooperative activities: they all rely on their office or secretariat for the coordination of the day to day affairs while the major decisions are taken by their board, be it under the heading of a Rectors Meeting, Board of Trustees, General Meeting or Executive Board. In the case of ALMA, this structure was supplemented by a management team in 2001, in order to bridge the gap between the decision making on the Rector's level and the ALMA activities on the faculty level. The Coimbra Group already had a more refined structure with the Steering Committee as a general intermediary body and Task Forces, Committees and Working Groups on thematic issues. Recently, Coimbra reorganised its structure, renaming the Steering Committee to Executive Board and merging Working Groups and Committees into existing Task Forces. Both AUN and ECIU have no permanent bodies next to their Boards and Secretariats. In these consortia temporary bodies are created around specific finite projects and activities.

Coimbra provides the best support for the argument that a clear organisational structure is necessary. The stability and the transparency in the organisational structure have led to a high assessment of the coordination of Coimbra as a whole. Most of the Task Forces in Coimbra have existed for a long time and in many cases the composition of these groups has remained rather stable. This creates a situation where people know each other and know what they can expect from each other. Several respondents of Coimbra pointed to the high commitment and effectiveness of the work that is being done in the task forces. With the recent restructuring and simplification of the organisational structure of Coimbra, the roles and responsibilities have become even more clear and transparent. In the case of AUN, the structure is of a less permanent nature for most of the activities. Only in the AUN Quality Assurance project, a permanent body was established, which has remained relatively stable in its composition. The planning and execution of the other activities take place in bodies of a less permanent nature. The AUN secretariat, however, is heavily involved in all activities, which might explain the positive assessment of the coordination of AUN activities. The tasks and responsibilities of the sub-units in the other consortia seem to be less clear and transparent, mainly due to the absence of permanent sub-units. In the case of ALMA, activities are more based on content and of a temporary nature. Accordingly, bodies set up for those activities are also of a temporary nature and, after projects are initiated, operate rather independently from ALMA. ECIU on the other hand has set up a structure that entails both project related groups and more generic permanent bodies. The latter are the Thematic Working Groups of ECIU, but in these groups there seems to be a lack of consistency and commitment in comparison to the Coimbra task forces. The fact that these Coimbra Group Task Forces have existed substantially longer than the ECIU working groups, can (partly) explain these differences.

This takes us to the third relational issue: how to stimulate commitment between individuals. Commitment between individuals arises from trust and familiarity between the people involved. The qualitative data point to the existence of processes of socialisation among members in specific bodies within the consortia. Socialisation is generally defined as the process of inducting actors into the norms, rules, and ways of behaviour of a given community (Checkel 2003), and can be seen as a condition for commitment to materialise. When frequent meetings take place, where there is sufficient communication, and where there is a relative stability in the people involved, a process of socialisation can emerge. What seems to be the case is that such processes flourish better in small groups. Commitment between the member organisations thus becomes more likely if this arises in a bottom up way. It starts in smaller groups and then reflects on other levels in the consortium. Also cooperation between a limited number of members, instead of all members, can increase the commitment, since members that are not committed to a specific type of activity are not 'forced' to take part.

In conclusion, we argue that consortium management is a combination of the employment of coping mechanisms to increase complementarity and compatibility in combination with 'relationship management', that is the facilitation of the rise of commitment through communication and organisation. If this relationship management is conducted satisfactorily, more complex coping mechanisms can be

employed, and in turn, complementarity and compatibility between members can be better exploited which again increases the chances for success for the consortium as a whole. The strategic and institutional coping mechanisms that we observed are listed according to their level of complexity in table 12-10. Obviously the more complex coping mechanism have a more substantial influence on cooperation, but also require higher levels of trust and commitment between members.

Table 12-10: Identified Strategic and Institutional Coping Mechanisms

	Strategic coping mechanisms	Institutional Coping Mechanisms		
		Centralised institutional forms	Decentralised institutional forms	
low				low
↓ ↓ complexity ↓ ↓	* Seeking *new resources* through new members * *Identification of additional complementary resources* within the existing consortium * Improve utilisation of existing sources of complementarity through: - *renegotiation or abolishment* of objectives - *adapting* activities to existing university communities and to existing regional circumstances - providing *incentives* for staff to become involved or to increase their involvement	* Connecting to *existing relations* * Information on existing differences in institutional contexts of the members to create *awareness* * *Familiarisation* with existing institutional contacts through meetings, seminars or courses * Administrative structures for *tackling problems* due to differences * *Reducing differences* through mutual adjustment * *Abolishing differences* through incorporation (only in the case of organisational differences)	* Connecting to *existing relations* * Information on existing differences in institutional contexts of the members to create *awareness* * *Familiarisation* with existing institutional contacts through meetings, seminars or courses	↓ ↓ complexity ↓ ↓
high				high

12.5 Conclusions: Explaining Performance of higher education consortia

12.5.1 *Final reflections on the case studies*

These basic theses presented in chapters six and seven claimed that the level of complementarity in resources and the level of compatibility in institutional contexts determine the performance of consortia. Furthermore, we argued that consortia can employ mechanisms to increase complementarity and compatibility. The results of chapters ten, eleven and twelve have shown that the validity of these propositions is not unconditionally supported for all cases. However, the results provide sufficient ground to claim that the relation between complementarity/compatibility and performance exists *under specific conditions*. The data indicate that the existence of

complementarity and compatibility form the basic conditions for consortia to be successful. Complementarity seems to play a more substantial role than compatibility, however this is more the case in the view of academics as opposed to non-academics.

The most important observation however, is that the mere existence of complementarity and compatibility is not sufficient. Consortia also have to make use of complementary resources and compatible contexts and also have to deal effectively in when faced with a lack of complementarity or when obstacles arise through incompatibility. For this they will have to employ the suitable coping mechanisms. We have also indicated that these coping mechanisms can vary according to their complexity. The consortia in this study primarily employ mechanisms that are low in complexity. For most activities in the consortia such relatively uncomplicated coping mechanisms are sufficient to deal with the problems they encounter. However, as objectives require more intense levels of integration, more complex coping mechanisms are needed. Complex coping mechanisms however require adequate communication, organisation and commitment.

If we apply the perspective above to the four consortia, we arrive at the following conclusions. ALMA is assessed as relatively incompatible by the respondents. In addition, a rather low level of complementarity is apparent according to the respondents. Especially the latter is unexpected since the consortium was established on the basis of its expected complementarity. We observed that, to some extent, sources of complementarity are present in the consortium. These sources of complementarity are therefore not recognised and not sufficiently exploited by the consortium. An explanation for the relatively low assessment of performance of ALMA might be located in the fact that many of its activities do not connect to existing university communities and the European educational and research programmes. This is inherent to ALMA since it does not have a pan-European focus but instead operates in the Euregional environment. Commitment of individuals is therefore hard to establish, since most individuals seem to place more emphasis on wider European or global cooperation. ALMA has however played an important role in setting up various successful projects and has formed a source of inspiration for projects that were ultimately carried out outside the ALMA framework. Examples of this are EURON and the Transnational University Limburg. Especially in the case of the latter we can identify complex institutional coping mechanisms, even though it involves only two partners of the consortium. On the other hand, sufficient commitment and trust is more easily established between two partners than multiple partners and therefore the bilateral character of this arrangement might well be one of the main explanations of its success (in addition to the national legal revisions). The fact that these more successful activities are continued outside the framework of ALMA can explain part of the low assessment of ALMA's performance. Since those activities do not carry the label of ALMA, they might not be perceived as ALMA activities.

The other consortium that received a low evaluation from the respondents was ECIU. ECIU started of as a very ambitious consortium, and accordingly, its objectives require a high intensity of cooperation. ECIU seems to be illustrative for the claim that satisfactory relationships are a prerequisite for the employment of complex coping mechanisms. To achieve its objectives, ECIU needs to employ such complex coping

mechanisms, but the consortium does not (yet) show sufficient commitment and does not (yet) have an organisation that is adequately institutionalised. As a result, complex coping mechanisms and an intense level of integration (and the accompanying threat to autonomy) cannot yet materialise. We should bear in mind however that the consortium is relatively young and that institutionalisation of cooperation does not happen overnight.

This can be seen in the case of Coimbra, which is the oldest consortium in the study. In the course of its existence, a climate of cooperation emerged where people became familiar with each other, each others universities and each others national circumstances. Over the course of time, this has led to a high commitment on cooperation within Coimbra. Another explanation for Coimbra's positive assessment is its connection to the wider European developments in higher education (EU Programmes) and its conformation with general academic principles. Coimbra does not aim at a high level of integration of activities but operates under the idea of cooperation as an end in itself and its objectives can be realised without significant threats to the autonomy of individual members.

The ASEAN University Network was also assessed positively by the respondents. In the case of AUN, the fact that universities actually have something to offer to each other, or in other words, are complementary to each other, contributes to this performance. The additional financial resources that are acquired by the consortium might cause this complementarity to actually be exploited as well. Also, there seems to be a strong commitment by most members and there is a strong coordination of the AUN secretariat. An additional reason for a positive assessment for AUN could be that this consortium gives individuals the opportunity to be active internationally. It is likely that many universities in the consortium do normally not have sufficient resources in order to be internationally active on a frequent basis, neither are there Southeast Asian resources that are comparable with the EU programmes on cooperation and mobility. Especially for the universities from the less developed countries it might be the first significant opportunity to cooperate regionally.

In the comparison of the cases we must acknowledge that success is hard to define. In our terms, consortium performance as an indicator proved to be most useful in comparing the consortia. We need to recognise that in this way, performance is also based on the complexity of the objectives. Nevertheless, the other performance indicators showed a similar pattern, where AUN and Coimbra accounted for higher scores than ECIU and ALMA.

12.5.2 *Conclusions: Structure, Change and Performance of Consortia*

The case studies show that there is no straightforward recipe for success. Many factors, and not only the availability of complementary resources and the presence of compatible contexts, influence the path of cooperation. In this respect our theoretical approach has proven to provide an incomplete explanation for success or failure in higher education consortia. However, the inclusion of coping mechanisms in the model enabled the incorporation of factors relating to the process of cooperation (in addition

to the composition of the consortium). This focus on the process has given us insight on the importance of the 'softer' relational aspects of cooperation. This is also an aspect that has become more apparent in recent studies of international alliances (e.g. Parkhe, 1998; Das and Teng, 1998; Cullen and Johnson, 2000; Ariño et al., 2001).

The theoretical framework was based on the hypothesised positive relationships between complementarity/compatibility and performance and the positive influence on performance by the employment of coping mechanisms. If we reflect on this theoretical framework, we can conclude that:

- ***complementarity*** is a necessary condition, but will only contribute to success if the appropriate coping mechanisms are employed in order to identify, communicate and exploit the sources of complementarity. This will be easier if objectives of a consortium are consistent with both the wider regional and global context and the internal values of 'academia', which is the case for the more traditional internationalisation activities such as student exchange, staff exchange, cooperation in research and exchange of information. Because of this, consortia seem to be more successful – though maybe not more substantial – when they are based on cooperation rather than competition. In those cases where a high level of integration is required in order to attain the goals of the consortium, more complex coping mechanisms need to be employed and the risk of failure becomes higher;

- although the **compatibility** between institutional contexts does not show a strong relationship with performance in all cases, we can still argue that it contributes positively to performance, although not as linear as previously suggested. The relation is especially apparent when a negative fit is perceived. This would support the argument that a sufficient level of perceived institutional fit is a prerequisite for success. After this minimum level, differences in the institutional context will only present considerable obstacles in those cases where close cooperation and a high level of integration is required for achieving the goals of the consortium. Furthermore we have seen that it is particularly the formal organisational and national rules and procedures that can negatively impact cooperation. Differences in national and organisational culture are acknowledged but do not substantially hamper cooperation, and in some cases even constitute a basis for cooperation;

- in cases where complementarity and compatibility can be further improved, consortia can employ **coping mechanisms**. These mechanisms will be more effective if the quality of the relationships is satisfactory. This is encouraged by sufficient communication, a clear and stable organisation and adequate commitment. These factors will improve interpersonal, interdepartmental and inter-organisational relationships through processes of socialisation and the emergence of trust. These factors will become increasingly important as coping mechanisms get more complex. Therefore, especially in those arrangements where close integration is anticipated (e.g. joint ventures, joint research schools, joint educational programmes, joint administrative units, joint accreditation), attention to relational issues is crucial.

PART V: CONCLUSIONS & REFLECTIONS

Chapter 13   Global Opportunities and Institutional Embeddedness:
Reflections on Theory, Methodology and Reality

13.1   Globalisation, Regionalisation and Cooperation in higher education consortia: Reflections on the Research Questions

In the first section of this concluding chapter, questions posed at the beginning of this study are reflected upon. The main task was to detect the critical features of international inter-organisational arrangements in higher education and to explain the performance of such collaborative ventures. To accomplish this task, we stated five sub questions (see section 2 in chapter 1)). These sub questions related to three broader issues:

- globalisation, regionalisation and the relationship with international cooperation in higher education;
- the dimensions of higher education consortia that distinguish these arrangements from other international inter-organisational arrangements;
- the critical features of higher education consortia and their implications for consortium management.

These issues and the related questions will be discussed in the subsequent parts of this section.

13.1.1   Globalisation, Regionalisation and Cooperation

We commenced the study with the assumption that the nature of internationalisation activities in higher education has changed and that the emergence and increase of international higher education consortia was related to processes of globalisation and regionalisation. In order to provide a sound background for the study of higher

education consortia, we therefore first analysed what the concepts of globalisation and regionalisation mean and how they relate to (international cooperation in) higher education. Accordingly, the following questions in relation to globalisation and regionalisation were posed:

> *1. How can we conceptualise processes of globalisation and regionalisation?*
>
> *2. How can processes of globalisation and regionalisation explain the increase and change of international inter-organisational arrangements in higher education?*

In the literature, globalisation appears to be approached from different temporal perspectives. We have identified these approaches as geographical, political, cultural and institutional in nature. On the basis of these approaches we have defined globalisation as a process in which basic social arrangements become disembedded from their spatial context due to the acceleration, massification and flexibilisation of transnational flows of people, products, finance, images and information. This process is also apparent in basic social arrangements within and outside universities. Regionalisation was approached as a subset of globalisation, where a similar process of disembedding is occurring, but where arrangements become re-embedded in a regional context.

On the basis of the general exploration of the concept of globalisation we identified four broad themes in higher education, in which globalisation manifests itself, and which in turn contributes to the growth of international inter-organisational arrangements:

- the *increasing interconnectedness between universities* and increasing flows between them. Universities as well as society as a whole have become better connected through technological advancement and this enables and stimulates universities to engage in relationships with other universities. This is also the case for universities from different countries and this process enabled and stimulated the activities normally placed under the heading of 'internationalisation of higher education';

- the *changing relationship between the university and the state*. The 'competition state' promotes international collaboration as they become less tied to the national regulatory and financial context. International cooperation is enabled through increasing institutional autonomy which gives universities more margins to operate internationally. Universities are also motivated to operate in a more entrepreneurial way and gain more (though still marginal) opportunities for acquiring international sources of funding.

- the *threats to diversity versus the rationality of standardisation*; although globalisation might pose a threat to the diversity of educational systems and traditions, it also promotes the standardisation and harmonisation of national structures and methods. Both directions promote collaboration between universities. The acknowledgement of diversity promotes linkages in order to learn from each other's structures and methods, while the rationality of standardisation enables universities to collaborate more closely, without cooperation being hampered by national peculiarities.

- the *identity of universities in a globalised world*. From this perspective, universities and higher education become more 'footloose' and less tied to the national institutional contexts. This can be the case for the university as an organisation but also for the content and methodology of education, which becomes – in the words of Smith - "*tied to no place or period, but becomes context-less, a true melange of disparate components drawn from everywhere and nowhere*" (1990: 177).

The shifts taking place in these four themes due to processes of globalisation have been identified as the major drivers behind the emergence of international inter-organisational arrangements. Although we have argued that globalisation and regionalisation processes are significant, we also acknowledged that in many ways, society is still very much rooted in nationally constructed institutions. This is especially true for universities, of which the majority were established and developed in a national institutional context. We have seen that this paradox in which universities face global opportunities while being strongly embedded in national institutional environments also becomes apparent in higher education consortia.

13.1.2 Dimensions of higher education consortia

In order to narrow our study subject from international inter-organisational arrangements in general to a specific type of arrangements that we have termed international higher education consortia, we needed to detect the specific characteristics of such arrangements. The question was therefore:

> *3. What dimensions differentiate International higher education consortia from other inter-organisational arrangements in higher education?*

We have indicated in chapter four that higher education consortia differentiate themselves from other inter-organisational arrangements on several dimensions. Higher education consortia were identified as inter-organisational arrangements with three or more, though a limited number of members; with membership being restricted and based on the agreement of partners; where universities cooperate to serve their own interests; where the time-span is indefinite and not defined in advance; where cooperation takes place simultaneously on several themes and in several disciplines; where cooperation primarily takes place between universities or other higher education institutions and not for instance between universities and industry or political actors; where relationships are based on equality, with an equal say and equal distribution for all members; and where cooperation is based on coordination, differentiating them from informal cooperative arrangements on the one hand and mergers and amalgamations on the other.

The identification of these dimensions provided the opportunity to make a selection of comparable case studies. However, after having analysed the case studies, we have experienced that even the fulfilment of these criteria does not mean that the consortia are totally similar in nature. We have especially seen a variety on the dimensions of the

amount of members, the interests represented and the intensity of collaboration. We have chosen to select case studies with a large variety in the amount of members. They ranged from 4 to 39, a difference likely to have implications for the course of cooperation. With regards to interests, all consortia satisfied the criterion that individual university interests were pursued, although at three of the four consortia other agendas were apparent as well. While in the case of AUN and Coimbra, these were mainly related to regional (meaning European or Southeast Asian) development, in ALMA this agenda was more of a Euregional scope. This means that these consortia strive for activities that would also benefit non-members. For ALMA, these non-members are Euregional players such as local governments or small and medium enterprises. For AUN and Coimbra however, the work done by the consortium in some activities sometimes affects and benefits all universities in Europe or Southeast Asia. In this respect, ECIU best fulfilled the criterion of the representation of the members interests since this consortium is predominantly aimed at enhancing the strength of its member institutions.

We detected substantial variety in the dimension related to the intensity of cooperation, or rather, the envisaged intensity of cooperation. This criterion proved crucial in the development of consortia. We have seen that complex activities which require a high level of organisational integration require more complex coping mechanisms (see next section). The ambitions to achieve a high level of integration were especially apparent in ECIU and in some activities of AUN. The envisaged cooperation in other activities of AUN and of ALMA and Coimbra do require an extra coordinating level above the universities (which distinguishes consortia from informal cooperation), but do not require the delegation of substantial authority to the consortium level. In the case of high intensity cooperation, a delegation of authority is necessary to a certain extent. In conclusion, we can say that the typology and the derived dimensions do provide a valid category of inter-organisational arrangements, but room for variety is still available (as in all typologies) and boundaries between types sometimes appear more blurry than at first sight.

Another dimension was related to equality of the partners, where we stated that consortia members had an equal say in decision making on consortia activities. This proved the case for all four consortia. However, it might be true that some members have more influence in the decision-making process than others, although this – on the basis of the data collected – can not indisputably be claimed for the consortia in this study. The criteria fulfilled by all consortia included the horizontal nature of integration, the selective membership, the indefinite time-span and the engagement in several disciplines and themes. None of the consortia had a specific timeframe for the envisaged cooperation. Also, we observed that they are all selective in the admission of new members, although some use stricter criteria than others. Furthermore, membership was only open to universities and not to partners from other sectors. Finally, all consortia were engaged in multiple activities in various disciplines and a wide variety of themes such as ICT, quality assurance, credit transfer, etc.

Relating to this last point, there is one issue that was not included directly. This issue is related to the groups that actually drive the consortia. We have argued that consortia

are established at the level of the university as a whole and were not based on cooperation in specific disciplines or themes. What we can observe is that HEC's are not so much driven by academics or professionals in specific fields, but more by the leaders of the member universities. This characteristic was also mentioned by De Wit (2002: 180) who observes that "*there is a trend towards leadership-driven multilateral institutional networks, mostly within the European Union but also elsewhere*". We will include this dimension of agency in our characterisation of higher education consortia. The leadership-driven nature is apparent for all consortia in the study. The dimensions of higher education consortia and their diversity in the consortia are summarised in table 13-1).

Table 13-1: Dimensions of HEC's and diversity in the case studies

Dimensions	International HEC's	Diversity in case studies
1. Members:	Multiple; three or more but limited	*High*: ranging from 4 to 39
2. Membership:	Restricted, based on agreement of partners	*Low*: all consortia are selective
3. Interests:	Individual interests of participating institutions	*Moderate*: some consortia mix individual interests with collective or regional interests
4. Time-span:	Time-span is not defined in advance	*Low*: all consortia have an indefinite time span
5. Activities:	Simultaneously covering multiple disciplines & themes	*Low*: all consortia show activities in a broad range of disciplines and themes
6. Agency	Leadership driven	*Low*: all consortia are leadership-driven
7. Integration:	Horizontal integration between universities	*Low*: all consortia only include universities.
8. Relations:	Relations based on equal say and equal contribution	*Low*: all members have an equal say, at least formally.
9. Intensity:	Collaboration based on coordination	*High*: some consortia envisage much closer integration than others

This diversity between the case studies was taken into account in explaining success or failure of such arrangements. As we saw in chapter twelve, issues such as the envisaged intensity of cooperation, the number of members, and the types of interests represented are all likely to affect the actual outcomes of cooperation in the consortia.

13.1.3 Critical Features of higher education consortia and their Implications for Consortium Management

The questions addressed and their answers provided us with the necessary background information to address our main empirical research question. We divided that question into two sub questions, one related to the nature of consortia and one related to the management of consortia:

4. What features of International higher education consortia can explain the performance of these consortia?

5. What type of mechanisms can be adopted by International higher education consortia in order to increase performance?

For the analysis of these questions a more inward perspective of higher education consortia was used. We have argued that the performance of these consortia can be explained on the basis of the complementarity in the consortium, the compatibility in the consortium and the coping mechanisms employed by the consortium. On account of the comparative analysis of the case studies, we can identify the following critical aspects of higher education consortia:

1. First, the consortium has to consist of members that possess resources which are strategically valuable for the other members. Simply put, this means that the partners in a consortium have to be able to offer each other something. If this would not be the case at all, the consortium as a vehicle for resource exchange would be pointless. In general we have seen that various *sources of complementarity* can nearly always be found between groups of universities. The fact that these sources are present however, does not always mean that they are known by the right persons and that they are utilised and exploited.

2. This brings us to the second aspect. Sources of complementarity must be accompanied by the *appropriate strategic coping mechanisms*. These coping mechanisms are aimed at the acquisition, identification, dissemination and exploitation of complementary resources. In general, closer cooperation and tighter integration requires more complex coping mechanisms that are aimed at the exploitation of complementary resources. This can be done through creating sufficient incentives and motivations for staff of universities to commit themselves to consortium activities. This can be accomplished by adapting the consortium activities to the existing activities in the universities, by adapting them to wider regional programmes in order to access funding or by creating internal (financial) incentives or obligations to take part in consortium activities.

3. A third critical aspect of higher education consortia is related to the differences in the institutional contexts in which the members operate. We have claimed that higher compatibility in the consortium leads to higher performance. We have observed that the condition of *compatible backgrounds* is valid in order for cooperation to be successful. We have also seen that for less complex forms of cooperation, only a minimum level of institutional fit has to be present in the consortium. We have argued however that when cooperation becomes more complex, a higher level of institutional fit becomes necessary.

4. The fit between institutional contexts is not something that universities fully control. They can however employ *institutional coping mechanisms* in order to deal with the problems that arise through differences, in order to lessen or abolish them. Dealing with obstacles generally occurs through information on existing differences in institutional contexts of members, and through familiarisation with existing institutional contexts through meetings, seminars or courses. Another way of efficiently dealing with such obstacles is to set up joint administrative structures to efficiently deal with specific exchange requirements. The more complex institutional coping mechanisms are aimed at actively changing the differences

between members. Here we have referred to mutual adjustment of universities and the abolishing of differences through incorporating them.

5. Additional characteristics that contribute to the performance of higher education consortia are related to what termed 'relationship management'. In the case of close cooperation and tight integration this becomes more important. Relationship management refers to the measures that consortia take in order to improve communication, create stable and clear organisational structures and increase commitment. A good communication strategy and a clear and transparent organisation of a relatively stable nature support processes of socialisation in sub units of the consortium which then will reflect on the consortium as a whole.

6. A final point that can be made here is that a consortium, like any other organisation, needs to adapt to its internal and external environment. This means that when activities are compatible with prevailing norms and beliefs in the universities and with the ongoing developments on the regional level, they are more likely to be successful. However, when this results in a risk avoiding strategy, it will not always correspond with the strategic global needs and opportunities that a consortium and its universities face in an increasing competitive environment. The seizing of those opportunities frequently requires taking risks not in line with the traditional views of the university, but that will more effectively exploit the complementarity in the consortium.

13.2   Performance in higher education consortia: Reflections on the Theory

In the answers to the research questions it becomes apparent that the theoretical (sequential and explanatory) models of cooperation did not predict the performance of cooperation to a full extent. In this section we will reflect on these models and the theoretical approaches that formed the basis for these models.

13.2.1   Universities and the Resource-based view

The proposed relation between complementarity and compatibility came about through a resource-based view of universities. This approach stems from the field of strategic management where it has become popular as a counterpart to prevailing strategic management theories on competitive advantage in the 1980's, which took the external environment as their point of departure. The resource-based view on the firm argues that firms can achieve competitive advantage if they possess the right resource base and that this competitive advantage can be sustainable if its strategic resources are valuable, inimitable, immobile and not substitutable. A resource-based view on inter-organisational arrangements perceives collaboration between organisations as an opportunity to gain access to these strategic resources, resources that would otherwise not be available to a firm as they are valuable, immobile, inimitable and not substitutable. Two valid questions on the use of this approach in this study are whether this strategic management perspective can also be applied to universities and whether it is applicable to higher education consortia.

Strategic management principles have frequently been applied to universities and are often used in higher education research. The resource-based view however is rarely applied in the study of universities or university management. An explanation for this could be that strategic resources are hard to identify in contemporary universities. Obviously, the quality of education and research are important resources, but at the same time they are difficult to identify, let alone measure. Furthermore, many universities also try to distinguish or market themselves by emphasising other resources such as location, facilities or their external relationships. We have seen in this study that the quality in education and research and the reputation of partner universities are the most important characteristics looked for in possible partners for cooperation. We have also seen that cooperation in the consortia has the most positive impact on the university's reputation. This seems to imply that membership and cooperation in higher education consortia is partly symbolic in nature, and that overall no real value is added to the resource bases of the participating universities. The reluctance and perceived pointlessness of transferring authority to the consortium level and the unwillingness of partners to (financially) commit themselves strongly to consortium activities supports this.

The resource-based view sees the exchange of resources as the most important rationale for engaging and cooperating in higher education consortia. We have already observed that it is not completely realistic to perceive higher education consortia merely as vehicles for obtaining strategic resources. Although taking this perspective in this study has proved to be useful, we have also seen that other approaches to cooperation in consortia are applicable. Higher education consortia can, for example, be perceived as vehicles to reduce transaction costs, something that we have mainly seen in the case of Coimbra. Through integration of specific activities, transactions such as student mobility and staff exchange can take place in an administrative framework through which such transactions can be executed more efficiently. Another (more political) rationale for cooperation is also apparent in some of the case studies. This is the collective representation of universities vis-à-vis international and regional authorities such as the EU or ASEAN. By operating collectively, consortia can open up policy channels to gain better access to these authorities. From this point of view, higher education consortia act as associations (meaning representative bodies or lobby organisations as defined in chapter four). Another rationale is more instrumentally in nature: universities simply cooperate because this is demanded by several financial providers. Many of the EU programmes in education and in research provide funding for cooperative research and education under the condition that applications come from multiple universities from multiple countries.

In spite of these alternative explanations, the resource-based view as a new way of looking at cooperation has been valuable. Inherent to strategic management research, the resource-based view is prescriptive in nature, and therefore makes us aware of the opportunities that arise through cooperation in an international context. At the same time, it makes clear that in this perspective, international opportunities remain rather unexploited by the consortia analysed in this study. This was sometimes because universities simply did not aim for it. In other cases, it was clear that many universities

– and countries – are not yet prepared for or able to engage in intense and close collaboration with foreign partners.

13.2.2 *Universities and their Institutional Embeddedness*

The lack of willingness or ability to be involved in close and intense cooperation is related to the institutional contexts in which the universities operate and have developed. We have used this institutional perspective to support the notion that members in a consortium also have to share some similarities in order to cooperate. This proposition was based on the assumption that universities are, much more than for instance firms, embedded in their (nationally and organisationally moulded) institutional contexts. The study has shown that this assumption does not have to be rejected. The impact on cooperation is however less straightforward than we expected.

First, we have seen that different institutional forms influence cooperation in different ways. In all consortia that we have studied, the impact of centralised institutional forms such as national laws and organisational rules were perceived to have a negative impact on cooperation. This was much less the case for decentralised institutional forms like culture, norms and beliefs. The latter were seen by many as one of the interesting factors involved in cooperation. Academic and cultural diversity therefore can – with the right attitude – be a main source of complementarity instead of incompatibility.

We have also observed that non-academics seem to place more emphasis on the institutional differences in their assessment of the performance of the consortia (while academics seem to be place more emphasis on complementarity factors). This would mean that the institutional embeddedness of the university is more apparent in the eyes of non-academics than for academics. This could be explained by the reasoning that the activities on which academics cooperate are of a more universal nature than is the case for non-academics. In this respect it would be interesting to compare cooperation in different academic disciplines. Sciences for example could be assumed to be less context related and more universal than social sciences and humanities, and would therefore, in this line of thinking, present less sources of incompatibility in cooperative activities.

In general, we saw that there is not a strong relationship between performance success and compatibility. Only in cases where institutional fit between the universities is perceived as low, has this hampered cooperation. This leads to the conclusion that a minimum level of institutional fit is required, but that universities and their staff are very well capable of handling obstacles that arise due to incompatibility. On the other hand we also observed that most consortia do not pursue very close cooperation and tight integration. It is likely that if the intensity of cooperation increases, the discrepancies in institutional contexts will become more apparent and obstructive to cooperation. In this regard it is useful to remain focused on compatibility factors in cooperation, especially in cases where tight integration is foreseen, such as (private) joint ventures set up by universities from different countries and (future) mergers between higher education institutions from different countries.

This conclusion and the data do not necessarily point to a convergence of the institutional contexts of universities. On the contrary. The differences in national institutional contexts are still widely apparent and still substantially influence the activities of universities in the eyes of the respondents in this study. What can be observed however is that universities also become embedded in regional contexts. Naturally, this regional institutional context is likely to become a bigger influence in the case where regional institutions are stronger. Even though the national context is evidently predominant, for European universities the regional context has an increasing influence on a university's behaviour. In the case of ASEAN the building of regional institutions is still in the early stages compared to Europe, but aspirations such as joint accreditation and joint credit transfer systems give the impression that this region is heading in a similar direction (albeit not necessary at the same speed). What is especially relevant for our study is the observation that adaptation to this regional context is beneficial to the performance of consortia. The consortia that were very much connected to regional (political) institutions and that had adapted their activities to the programmes and policies (and the available funding) of these institutions (e.g. the European programmes for mobility and cooperation), seem to be more successful. Therefore, as in organisational studies, where adaptation to the external environment of organisations is seen as an important determinant in an organisation's performance, this argument can be extended to consortia as well: regional higher education consortia that adapt to their regional environment are more successful.

Internally, higher education consortia can also be approached from an organisational point of view. If we look at higher education consortia as a specific type of organisation, we can detect characteristics that are also typical for universities. Van Vught (1989: 52-54) in this respect points to the authority of professional experts, the knowledge areas as the basic foci of attention and the related organisational fragmentation, and the extreme diffusion of decision making power. These characteristics are also apparent in higher education consortia. The 'leadership driven' character of these consortia can then partly explain the dissatisfaction found by academics within them. In the case of universities van Vught (1989: 54) puts forward an argument that can easily be extended to higher education consortia:

> *Confronted with detailed regulation and with an extreme restriction of their behaviour, the scientists and teachers within the higher education institutions* (and in our case: higher education consortia; EB) *may feel the disillusionment of not being able to explore the paths their professional consciousness stimulates them to go.*

13.2.3 *The Sequential Model of Collaboration and Coping Mechanisms*

In chapter six and seven, we have introduced a sequential model of cooperation in higher education consortia which portrayed the process of cooperation from their establishment onwards. Here we have approached cooperation as a process where a joint decision on consortium objectives and a corresponding portfolio of activities was made, and where subsequently, activities were implemented in order to make use of value creating resources. After the implementation starts, the consortium can let those activities take their course, with a particular level of performance as the end result.

However, pressures for efficiency and effectiveness will create a demand for more complementarity, which in turn will be handled through the employment of strategic coping mechanisms. Also, pressures for conformity and resistance will create a demand for greater compatibility, for which institutional coping mechanisms will be employed. The employment of such coping mechanisms will then improve the end result of the collaborative activities.

This model was useful as a way of looking at cooperation, but nevertheless it does have some flaws. First of all, it looks at the consortium as a whole, while it might be better to perceive the consortia as a collection of cooperative activities. One of the dimensions that we distinguished was that the HEC's are multi-point alliances, engaged in a wide array of activities. This is also likely to result in different outcomes and different levels of success for different consortium activities. But it is also possible that different types of activities develop in different ways and that it is therefore difficult to develop a general sequential model for the process of cooperation in consortia. We have seen that in some projects in some consortia, the consortium as a whole plays an important role in the initiation of the projects and the facilitation in the early stages, but where they continue more or less outside the framework of the consortium after they have matured.

The most evident flaw in the model was the lack of attention that is paid to the relations between partners. This of course is because we have first identified relational performance as a performance indicator. It has however become clear through the case studies that the relationships among the individuals of the member universities play an important role (in the employment of complex coping mechanisms) and thereby have an impact on the achievement of the consortium objectives. Because of the importance of the interpersonal relationships, communication, organisation and commitment within the consortium become imperative factors in the ultimate outcomes of cooperation. The attention for relational issues should therefore also be incorporated in the model. Improving the relationships between those involved in consortium activities is best achieved through the provision of sufficient and good communication, a clear organisational structure for the activities and promoting the commitment of member universities and their representatives. The attention for the relational issues should be apparent throughout the process of cooperation, from the decision making on broad objectives to the implementation of concrete activities.

A final adjustment that should be made in the sequential model of collaboration and coping mechanisms is the inclusion of 'feedback loops'. Once coping mechanisms are employed, this does not automatically mean that projects can progress or be finalised. The employment of coping mechanisms frequently implies that the consortium needs to take a step backwards. This can take the form of seeking new members, finding new objectives or activities, or using different incentives when implementing activities. In some cases this would imply minor adjustments, while in others this might lead to a whole new direction of the consortium. These mechanisms will then be employed with the expectation that the activities will develop correctly. If further problems are encountered due to incomplementarity or incompatibility, new coping mechanisms need to be employed and one needs to return to the appropriate phase. Subsequently the consortium attempts to arrive at the ultimate result which is satisfactory for all

members. This brings up an important point. Most of the objectives of consortia are rather ambiguous and do not contain a specific and concrete end result. Consortia will not always continue until optimal results are achieved but they will strive to an end result where there is a consensus on the adequacy of the level of goal achievement. In other words, consortia appear more geared towards performance satisfaction than towards performance optimalisation.

These adjustments result in the revised sequential model of collaboration and coping mechanisms as displayed in figure 13-1. The first critique we gave in this section implies that the path followed in this model is likely to differ according to the objectives. Complex activities will require more feedback loops than uncomplicated projects. Also, activities that have a deep impact on the university members will less easily lead to consensus on the required level of performance than activities that hardly impact them.

Figure 13-1: Revised sequential model of collaboration and coping mechanisms
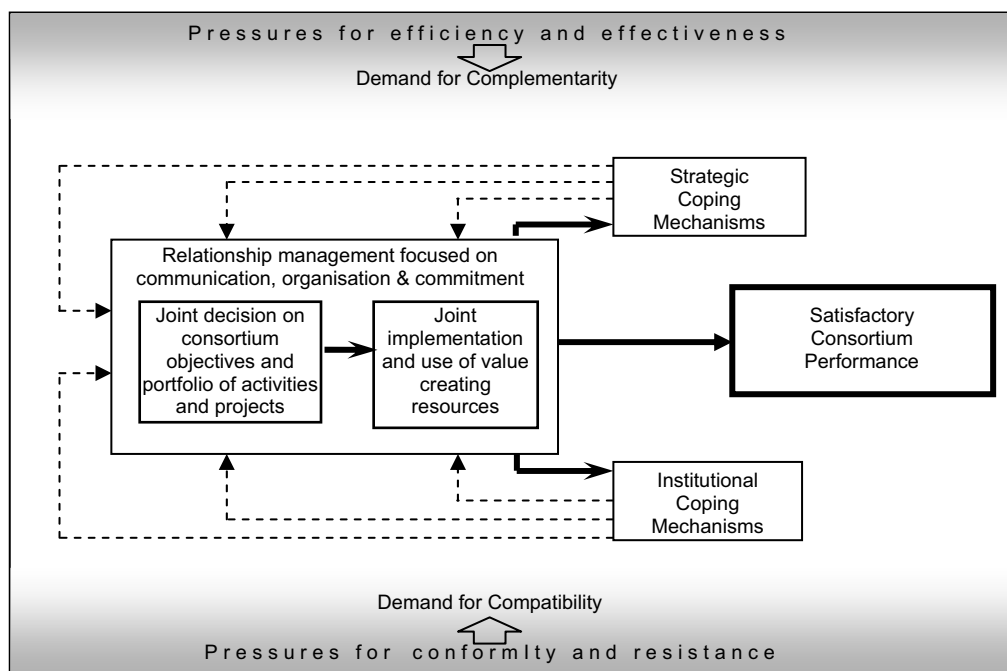
13.2.4 *The Explanatory Model of Collaboration and Coping Mechanisms*

In the explanatory model of collaboration and coping mechanisms, we argued that there is a positive relationship between complementarity and performance and between compatibility and performance. The case studies have shown that this is the case only under particular conditions.

Performance is affected positively by the existence of *complementarity* under the condition that the complementary resources are actually recognised, utilised and exploited, which can be accomplished if the appropriate strategic coping mechanisms are employed. In turn, strategic coping mechanisms can be more effectively applied if there is adequate communication, organisation and commitment. The positive relationship between complementarity and performance can therefore be maintained *under the condition* that suitable coping mechanisms are employed in order to recognise, utilise and exploit the complementarity in resources. Furthermore, this positive effect benefits from the presence of good communication, clear organisation and a high level of commitment.

Compatibility is also related to performance, but is not as linear as we initially proposed. In this case, it might be better to claim that the level of incompatibility is negatively related to performance. To achieve objectives, a minimum level of compatibility is needed. If the level of institutional fit is insufficient this negatively influences performance, though if minimum requirements are met, this influence diminishes. However, it is uncertain whether this is the case for more complex forms of integration. It remains likely that the need for a good level of fit becomes all the more necessary if complex forms of cooperation are aimed for. In our cases, the activities within the frameworks of the consortia in general do not require a high level of integration. It is probable that if tight integration is required, the compatibility of institutional contexts does affect the success of cooperation. Depending on the complexity of cooperation, consortia can employ institutional coping mechanisms in order to make differences transparent and to communicate them to the persons involved. More complex institutional coping mechanisms can be employed when it is necessary to reduce or totally nullify the differences. Such complex mechanisms encompass mutual adjustment or incorporation of differences. Again, such complex mechanisms require adequate communication, organisation and commitment.

The employment of *coping mechanisms* therefore not always has a (positive) impact, but these mechanisms need to be suitable for the level and nature of incomplementarity or incompatibility encountered in the course of cooperation. It is the mixture of existing complementarity and compatibility with the appropriate strategic and institutional coping mechanisms that affect performance. Furthermore, the effectiveness of the coping mechanisms employed will benefit from good relationship management in the form of ample communication, clear organisation and sufficient commitment.

The alteration of our perception on the relationships between complementarity, compatibility and performance result in the revised model displayed in figure 13-2. Compatibility thus matters up till a certain point and coping mechanisms need to be appropriate to the complexity of the objectives. The new variable in the model is the quality of relationship management, or in other words, the satisfaction with the consortium communication, organisation and commitment. Furthermore, the importance of this added variable increases as complexity of the objectives increases.

Figure 13-2: Revised explanatory model of collaboration and coping mechanisms
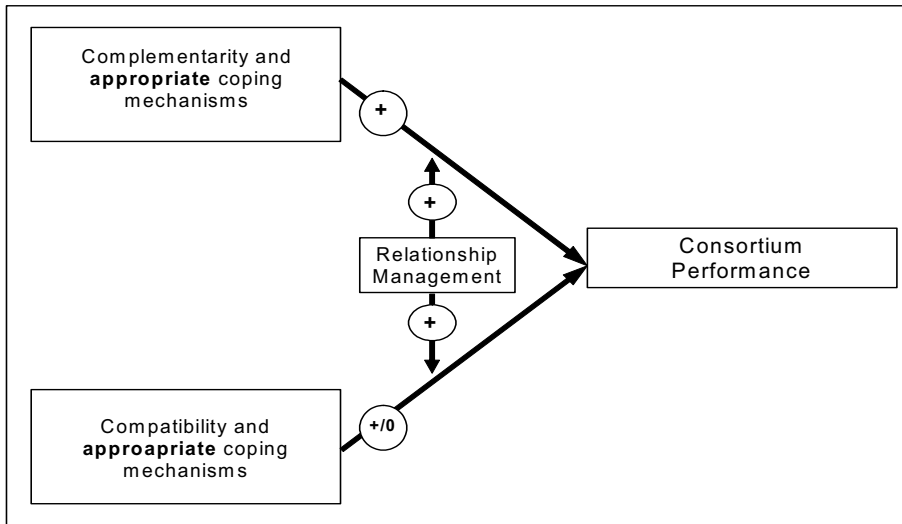
This model differs substantially from the explanatory model in figure 7-2 on four points:

- The model only attempts to explain consortium performance with regards to the attainment of substantial consortium objectives, and does not focus on the impact of cooperation on individual member universities.
- The employment of institutional and strategic coping mechanisms in the new model does not impact the performance of cooperation autonomously. Their impact on the performance in the revised model is situated in their appropriateness or suitability in relation to the level and nature of (in-)complementarity/(in-)compatibility.
- The relationship between compatibility and performance is no longer assumed to be linear. In the new model it is claimed that a certain minimum level of compatibility is required in order for the consortium to perform.
- The most obvious change is the inclusion of 'relationship management', where the management of the relationships between people involved in consortium activities improves the effectiveness of the coping mechanisms employed.

13.3 Studying higher education consortia: Reflections on the Methodology

13.3.1 *Higher education consortia as Objects of Study*

Taking higher education consortia as a unit of analysis in a comparative study has proven difficult in several respects. Comparative studies in higher education usually focus on comparison of countries, universities or sometimes disciplines, or combinations of those. Comparing consortia means that differences in countries,

universities and disciplines are integrated into each particular case and are therefore easily overlooked. Obviously, differences in national systems and university organisation have been the focus of part of the study, but in our approach, these differences have been studied on a meta level. It were not the elements from which the differences were derived that were studied but the differences themselves. For example, if respondent X claimed that the national legal context in the consortium was very diverse, we did not focus on what those differences were or to whom they were most apparent. Instead, we just observed and recorded this perceived difference. In many cases it would have been challenging to analyse such differences in more detail, but for the purpose of this study this would have been practically impossible, considering the large number of countries and universities. It did however create an awareness of the problems involved in studying universities without including their national institutional context. Again this supports our claim that universities indeed are very much embedded in these national institutional contexts and that globalisation has not (yet) proceeded in a way that those differences are alleviated.

The choice for higher education consortia as a unit of analysis has created an opportunity to look at these inter-organisational arrangements as specific types of organisations. On the one hand, it has become clear that the internal university management of international cooperative projects leaves a lot to be desired, and still deserves the necessary attention. However, if we would have taken the university as a unit of analysis, we would have overlooked the importance of the fit between partners and the importance of consortium management. In our approach, a consortium can be seen as an organisation like any other organisation, where different elements are integrated in order to produce an added value. The different elements need to be able to work together, but each element brings its own contribution to the organisation as a whole. The elements however also need to be coordinated and managed in order to improve cooperation and identify and exploit the various contributions that each separate element can bring. This management needs to take both the internal and external environment into account.

13.3.2 The Comparative Case Study Approach

A second methodological choice that we made was the choice for a multiple comparative case study approach. Basically, the choice was between one in-depth case study, multiple case studies or studying a large population of higher education consortia. The latter option would have given us more information on the development of various types of consortia on a macro level. This could have brought valuable insights into the growth of this phenomenon, geographical spread of consortia, disciplinary distribution of consortia, etc. Though useful, it would not have provided the opportunity to identify critical factors in the process of cooperation and the performance of consortia. Also, it would not have uncovered the mechanisms employed in consortia to improve the performance of cooperation.

A single in-depth case study would have solved these shortcomings. An in-depth case study, accompanied by a large number of in-depth interviews, would have provided additional information on the perspective of different groups in the universities, on

cooperation in different disciplines and processes of socialisation that occur in (sub-units of) higher education consortia. With respect to our research questions however, this approach also has its shortfalls. First, it would make it impossible to generalise about critical success factors and appropriate coping mechanisms. Second, it wouldn't have enabled us to look at different regions and see the impact of (the institutionalisation of) regional integration on cooperation between universities. Taking into account different regional circumstances has shown that if higher education consortia want to avoid risks, it is recommendable to adapt and connect to regional developments in higher education and to regional political developments in general. Third, and most important, the multiple case study approach has enabled us to review the dimensions that we have identified on the basis of a typology in chapter four. We already detected that the categories in this typology still allows for a considerable level of diversity between consortia (these dimensions will be discussed further in section 3 of this chapter). A single case study would have given the impression that all arrangements fitting this study's definition of higher education consortia would be homogenous.

13.3.3 *Multiple Methods of Data Collection*

A final methodological choice related to data collection. We have used different methods of data collection for different questions and different target groups. Primarily, we have used documents for the description of the case studies, questionnaires for establishing levels of performance, complementarity and compatibility, and a combination of questionnaires, documents and interviews to identify coping mechanisms. For determining performance, compatibility and complementarity, the use of questionnaires had several advantages over the use of interviews. The questionnaire gave us the opportunity to obtain quantitative data on perceptions of the core variables in the study This in turn enabled the use of aggregate data to rate the consortia in terms of these variables. It enabled a comparative analysis of the consortia on the basis of quantitative data. Obviously interviews can also be used as a source for comparative analysis, but that would have resulted in confining the measurement of variables to a small number of individuals. Finally, considering the geographic spread and the multitude of universities involved in the study, interviews would also be difficult to conduct due to practical and financial considerations. The choice for using questionnaires with a mixture of qualitative and quantitative data (although primarily quantitative) has permitted us to reach the widest possible population (all persons involved) and to obtain data that would on the one hand provide comparable quantitative data and on the other gave respondents the opportunity to introduce alternative sources of complementarity and compatibility and present measures applied in the consortia.

The choice to conduct interviews on the consortium levels was based on the explorative nature of that part of the study. In the interviews, our main aim was to identify coping mechanisms. We also used the questionnaires for this, but in practice, respondents appear to elaborate more in oral statements than in writing. The explorative character of this part of the study was also the reason behind conducting semi-structured interviews. This gave the respondents the opportunity to speak broadly about

developments in the consortium and the measures taken, which could then later be analysed by the researcher and related to various categories of coping mechanisms. The use of multiple methods of data collection has proved very complementary, as one method was able to fill the gaps left by of others.

13.4 Closing Remarks: Global Opportunities and Institutional Embeddedness in Higher Education

This study analysed the performance of higher education consortia in the context of opportunities universities face in the contemporary environment. The behaviour of universities across national and organisational boundaries is fascinating as universities can be considered organisations that are strongly embedded in their national and organisational contexts. This paradox manifested itself in higher education consortia as well. In this respect, the main focus was on the 'diversity paradox' in international cooperation, where partners need to be 'similar yet different'. This study showed that inter-organisational arrangements do not only have to balance similarity and diversity, but also have to find the right balance in the margins between conformity and innovativeness, ambition and reality, and the adages of 'cooperating to compete' and 'cooperating to cooperate'.

It was shown that conformity to both the internal context of participating universities and the external regional context has been a successful strategy in cooperation. Conformity to existing structures might, however, restrict universities in their entrepreneurial behaviour. Universities, and the consortia they are involved in, can decide to avoid the risks of new innovative ventures through compliance with existing policy actors and prevailing attitudes of their stakeholders. This also relates to the balance that needs to be found between ambition and reality. It was observed that activities which correspond with widespread and prevailing ideas, beliefs and attitudes have been more successful than those that challenge the existing order. This however can lead to situations where opportunities and complementary resources in consortia are not (fully) exploited. If ambitions are set too high however, one runs the risk of too much resistance which can ultimately lead to a lack of concrete activities. The adage of 'cooperating to compete' has been repeatedly coined in order to typify the contemporary inter-organisational arrangements in business, but also in higher education. The replication of business models under the heading of strategic alliances, joint ventures and consortia in the field of higher education has illustrated this. Arguments were presented that supported the perception of the contemporary environment as increasingly (internationally) competitive. The study has however indicated that the adage of 'cooperating to cooperate' shows more conformity with existing ideas of the university, at least in the consortia that formed the case studies in this research.

In retrospect, it can be concluded that the opportunities that are available, or could be available, in higher education consortia (and probably also in other inter-organisational arrangements) are rarely fully exploited. The most successful forms of cooperation are still based on rather loose structures that do not significantly impact the organisations of the member universities. This does not imply that they fail in their task, since a tight

integration of activities is not part of their agenda. Where this is the case, non optimal outcomes of projects or activities are more likely. Close cooperation between organisations that attach considerable value to their autonomy and independency will be very difficult, since university leaders will be hesitant to delegate authority to a higher level and academics will be hesitant to shift their loyalties.

Nevertheless in the national domain, national circumstances have frequently led to a move from voluntary cooperation towards imposed amalgamation. Parallel developments on the global or regional level are not likely to occur in the near future, but pressures for increased efficiency and effectiveness alongside demands for broader international opportunities for staff and students are likely to push universities into closer and more solid arrangements with foreign partners. Together with an increasing emphasis on entrepreneurialism and the copying of business practices, this might lead to unanticipated arrangements between universities in the future. If such developments are accompanied by closer integration in the political and European domain, and also in that of higher education, such as in the European Bologna process, obstacles in the way of integration are also likely to be reduced.

For now however, it is clear that cooperation in fields where it is seen as an inherent part of academia is more likely to be the standard than when cooperation is moulded on a business-like model. The cooperation that places emphasis on cross-cultural exchange and intercultural learning for students and staff is still most successful, at least in the higher education consortia in this study.

SAMENVATTING & BEVINDINGEN

MONDIALE MOGELIJKHEDEN EN INSTITUTIONELE INBEDDING
HOGER ONDERWIJS CONSORTIA IN EUROPA EN ZUIDOOST-AZIË

Introductie en Achtergrond

Introductie
Internationalisering van het hoger onderwijs heeft zich de laatste decennia ontwikkeld tot een gangbare beleidskwestie voor zowel overheden als universiteiten, in ontwikkelde zowel als ontwikkelingslanden. In haar inhoud en reikwijdte, heeft de internationalisering in het hoger onderwijs echter belangrijke veranderingen ondergaan. Van der Wende (2002: 34) wijst hierbij bijvoorbeeld op de significante toename van mobiliteit van studenten, docenten en onderzoekers, de verbreding van het scala aan internationaliseringsactiviteiten, en de verschuiving van internationalisering als marginale aangelegenheid naar internationalisering als een centrale beleidskwestie met strategisch belang. Soortgelijke verschuivingen kunnen waargenomen worden als we ons beperken tot internationale samenwerkingsovereenkomsten tussen universiteiten, het onderwerp van deze studie. In het laatste kwart van de twintigste eeuw is er sprake geweest van een sterke groei in het aantal en in de verscheidenheid van dergelijke overeenkomsten of 'arrangementen', veelal opererend onder titels als associaties, netwerken, allianties, consortia, etc. Gebaseerd op disciplinaire, geografische of historische overeenkomsten, hebben universiteiten zich gegroepeerd in de veronderstelling dat men het niet alléén redt in de huidige internationale en competitieve omgeving. Net als bij internationalisering in het algemeen valt er een sterke groei in het aantal internationale arrangementen en een diversificatie in de activiteiten in dergelijke arrangementen waar te nemen. Waar overeenkomsten voorheen met name gesloten werden met het oog op de facilitatie en adsministratie van

studentenuitwisseling en onderzoekssamenwerking, behelzen veel van de huidige overeenkomsten een veelheid aan activiteiten die worden geimplementeerd binnen het kader van één specifiek arrangement. De verschuiving naar internationalisering als strategische activiteit, is ook waar te nemen in dergelijke arrangementen tussen universiteiten.

De mate waarin universiteiten en hun internationaliseringsactiviteiten daadwerkelijk zijn veranderd in deze tijd van mondialisering en regionalisering is een vraag die in deze studie wordt onderzocht door te kijken naar de wijze waarop universiteiten samenwerken over de grenzen heen. Door relaties aan te gaan met partners in andere landen, gaan universiteiten opereren in een omgeving die niet langer volledig bepaald wordt door 'hun eigen' nationale actoren en 'hun eigen' gewoonten, maar zij zullen rekening moeten houden met actoren met een andere nationale traditie en een andere institutionele erfenis. Aangezien de huidige internationaliseringsactiviteiten dieper en breder op de universiteiten inwerken, zullen deze activiteiten een grotere uitdaging vormen voor de bestaande structuren en culturen. Scott (1998: 29), voorziet sterk gedifferentieerde ontwikkelingen, waaronder de opkomst van netwerken van bestaande universiteiten die opereren op een mondiale markt, terwijl ze hun eigen nationale identiteit behouden. Overeenkomstig kan de studie van internationale arrangementen tussen universiteiten worden gezien als een 'microcosmos' voor het bestuderen van de impact van globalisering en internationalisering op universiteiten. Hoewel de huidige veranderingen de universiteiten confronteren met nieuwe strategische mogelijkheden op een mondiale en regionale schaal, zijn het tegelijkertijd organisaties die zijn ontstaan in en opereren in een nationale institutionele context.

Internationale arrangementen tussen universiteiten gebruiken niet alleen verschillende termen, varierend van netwerken en associaties tot de meer bedrijfsmatige terminologie van allianties, joint ventures en consortia, maar nemen ook zeer verschillende vormen aan. Hoewel inter-organisationele arrangementen tussen universiteiten al lange tijd bestaan, valt er meer recentelijk een sterke groei waar te nemen (see Denman, 2002) en ook een verandering in hun aard en structuur (zie Beerkens, 2002). Toch zijn dergelijke arrangementen nauwelijks onderwerp van onderzoek geweest. Eerdere studies zijn verricht op het macro niveau, gericht op populaties van verschillende inter-organisationele arrangementen (Denman, 2002). Anderen hebben de nadruk gelegd op de veranderingen in de mondiale hoger onderwijs omgeving, en stellen dat deze veranderingen de universiteiten dwingen tot meer competitie en tegelijkertijd tot meer samenwerking (bijv. Middlehurst, 2001). Eveneens zijn er studies verricht van universiteiten als elementen van dergelijke arrangementen en hun hun motieven om inter-organisationele arrangementen aan te gaan (bijv. Saffu en Mamman, 2000).
  Deze studie houdt zich echter bezig met het meso-niveau van samenwerking. Het arrangement zelf is het onderwerp van onderzoek, niet de bredere omgeving noch de constituerende elementen van de inter-organisationele arrangementen. Het arrangement wordt gezien als een bijzondere organisatie. Een organisatie die bestaat uit bepaalde elementen (de deelnemende universiteiten) en een eigen organisationeel leven leidt. Terwijl inter-organisationele arrangementen in de bedrijvensector – of het nu fusies of overnames zijn of allianties en consortia – veelvuldig onderwerp van onderzoek zijn geweest (bijv. Parkhe, 1991, Douma, 1997, Schenk, 1997), zijn studies

van dergelijke arrangementen in het hoger onderwijs vrij zeldzaam. Studies zijn verricht op nationale consortia (Neal, 1988) en fusies (Goedegebuure, 1992), maar het internationale facet bleef hierbij buiten beschouwing. Voor het geval van internationale arrangementen in het hoger onderwijs is derhalve weinig bekend over de succes- en faalfactoren. De onderzoeksvraag van het onderzoek is daarom alsvolgt omschreven:

> *Welke kenmerken van internationale, inter-organisationele arrangementen in het hoger onderwijs bepalen de prestaties van dergelijke samenwerkingsvormen?*

Om deze vraag te kunnen benantwoorden, hebben we ons eerst ten doel gesteld om deze ontwikkeling te plaatsen in de context van mondialisering en regionalisering en om het onderwerp van onderzoek op een meer gedetailleerde wijze te duiden.

Hoger onderwijs, mondialisering en regionalisering

In de literatuur wordt mondialisering of globalisering veelal benaderd vanuit verschillende perspectieven. Wij hebben deze benaderingen geïdentificeerd als geografisch, politiek, cultureel en institutioneel van aard. Op basis van deze benaderingen definiëren we globalisering als een proces waarin fundamentele sociale arrangementen worden ontkoppeld van hun ruimtelijke (veelal nationale) context door de groei, versnelling en flexibilisering van transnationale stromen van personen, producten, financien, beelden en infomatie. Dit proces is ook waarneembaar voor fundamentele sociale arrangementen binnen en rondom universiteiten. Regionalisering kan worden gezien als een deelverzameling van globalisering, waar een gelijksoortig proces van ontkoppeling plaatsvindt, maar waar sociale arrangementen weer ingebed raken in een regionale context. Op basis van een algemene verkenning van het concept 'globalisering', hebben we vier brede thema's geïdentificeerd waar globalisering zich manifesteert op het terrein van het hoger onderwijs en welke op hun beurt bijdragen aan de groei en verandering van internationale inter-organisationele arrangementen in het hoger onderwijs:

• *De groeiende wederzijdse verbindingen tussen universiteiten en de groei in stromen tussen hen.* Zowel universiteiten als de samenleving in het algemeen zijn beter met elkaar verbonden door technologische vooruitgang en dit maakt het mogelijk voor hen, en motiveert hen, om relaties aan te gaan met andere universiteiten. Dit is ook het geval voor universiteiten uit verschillende landen. Dit bevordert die activiteiten die we doorgaans plaatsen onder de noemer 'internationalisering van het hoger onderwijs'

• *De veranderende relatie tussen de universiteit en de natiestaat, die heeft geleid tot de opkomst van de 'Competitie Staat'* (Cerny, 1997). De opkomst van de 'Competitie Staat' bevordert internationale samenwerking omdat universiteiten hier minder gebonden zijn aan de nationale wettelijke en financiele context. Internationale samenwerking wordt mogelijk gemaakt door vergroting van de autonomie van de instellingen, waardoor universiteiten meer speelruimte krijgen om internationaal te opereren. Ook worden universiteiten gestimuleerd om meer ondernemend te handelen en krijgen ze meer (hoewel nog steeds marginale) mogelijkheden om internationale financieringsbronnen aan te boren.

• *De bedreiging voor diversiteit versus de rationaliteit van standaardisering.* Hoewel globalisering gevaren voor diversiteit van onderwijssystemen en onderwijstradities met

zich meeneemt, bevordert het ook de standaardisering en harmonisering van nationale structuren en methodes. Beide richtingen stimuleren de samenwerking tussen universiteiten. De erkenning en bewustwording van diversiteit stimuleert het aangaan van relaties om zo te leren van elkaars structuren en methoden, terwijl de rationaliteit van standaardisering het universiteiten mogelijk maakt om nauwer samen te werken, zonder dat deze samenwerking wordt gehinderd door nationale bijzonderheden.

• *De identiteit van universiteiten in een geglobaliseerde wereld.* Vanuit dit perspectief worden universiteiten en het hoger onderwijs als geheel meer ongebonden of 'footloose' en raken zij minder afhankelijk van hun nationale institutionele context. Dit kan het geval zijn voor een universiteit als organisatie maar ook voor de inhoud en methodiek van het onderwijs. In de woorden van Smith (1990: 177) zijn sociale arrangementen niet langer gebonden aan plaats of tijd, maar worden ze context-loos een ware mengeling van ongelijksoortige elementen van overal en nergens ("a true melange of disparate components drawn from everywhere and nowhere").

De verschuivingen die binnen deze vier thema's plaatsvinden door processen van regionalisering en globalisering zijn geïdentificeerd als de voornaamste prikkels voor het ontstaan van internationale inter-organisationele arrangementen. Hoewel we aangeven dat deze ontwikkelingen veelbeduidend zijn, erkennen we dat de huidige maatschappij nog altijd sterk ingebed of verankerd is in haar nationale institutionele context. Dit is des te meer het geval voor universiteiten, waarvan de meerderheid is opgericht en zich heeft ontwikkeld binnen een nationale context. Deze paradox, waar universiteiten worden geconfronteerd met mondiale mogelijkheden, terwijl ze tegelijkertijd sterk zijn ingebed in hun nationale institutionele omgeving, komt ook tot uiting binnen internationale inter-organisationele arrangementen in het hoger onderwijs.

Dimensies van hoger onderwijs consortia
Alvorens over te gaan tot een gedetailleerde analyse van hoger onderwijs consortia, als een specifieke vorm van internationale inter-organisationele samenwerking, dienen eerst de specifieke karakteristieken van dergelijke arrangementen te worden geïdentificeerd. Dit is gebeurd op basis van verschillende classificaties van samenwerking in het hoger onderwijs en gebruikmakend van inzichten vanuit organisatie- en managementstudies. In deze studie richten we ons op hoger onderwijs consortia als 'multi-point' groeperingen van organisaties, met een beperkt aantal leden en waar lidmaatschap exclusief is en is gebaseerd op consensus van de andere leden. Ze worden tevens gekarakteriseerd door een onbepaalde levensduur en zijn derhalve niet gericht op ontbinding op een specifiek moment. Samenwerking richt zich op een veelvoud van activiteiten en behelst meerdere disciplines en/of thema's. Hoger onderwijs consortia, zoals gedefinieerd in deze studie, beperken zich voorts tot horizontale arrangementen tussen hoger onderwijs instellingen die zijn gebaseerd op gelijkheid. Samenwerking vindt plaats op basis van coördinatie, waarmee het zich onderscheid van losse, informele samenwerking enerzijds en fusies anderzijds. De arrangementen zijn niet opgericht met het oog op een eventuele toekomstige fusie. Dimensies van hoger onderwijs consortia kunnen derhalve als volgt worden aangegeven (deze dimensies vormen tevens de criteria voor de selectie van de case studies):

–	Leden:	drie of meer, maar beperkt;
–	Lidmaatschap:	beperkt, gebaseerd op overeenstemming tussen leden;
–	Belangen:	individuele belangen van deelnemende instellingen;
–	Tijdsspanne:	onbepaalde tijd;
–	Activiteiten:	behelzen tegelijkertijd meerdere disciplines en thema's;
–	Integratie:	horizontale integratie tussen hoger onderwijsinstellingen;
–	Relaties:	gebaseerd op gelijke zeggenschap en gelijke verdeling;
–	Intensiteit:	samenwerking gebaseerd op coördinatie.

Op basis van de bevindingen in het empirische deel van de studie is deze lijst aangevuld met de dimensie 'agency', waar hoger onderwijs consortia gekarakteriseerd worden als 'leiderschaps gedreven' of 'leadership driven' arrangementen, in tegenstelling tot professioneel of academisch gedreven 'bottom-up' arrangementen.

Theoretisch Raamwerk

In het onderzoeken van de determinanten van prestaties van hoger onderwijs consortia, richten we ons in eerste instantie op een uniek aspect dat is gerelateerd aan de karakteristieken van de betrokken partners, namelijk inter-organisationele diversiteit (Parkhe, 1991). Een interessante paradox, welke tevens de kern van het theoretische kader vormt, is dat consortia zijn gebaseerd op complementariteit zowel als compatibiliteit. Onze these is dat het aannemelijk is dat prestaties zullen verbeteren wanneer partners verschillend zijn, doch gelijksoortig. Verschillend, in de zin dat de 'hulpbronnen' waarover de universiteiten in een consortium beschikken, aanvullend ofwel complementair zijn tot elkaar. Gelijksoortig, in de betekenis dat de achtergronden van de deelnemende instellingen verenigbaar zijn ofwel compatibel. Succesvolle consortia vereisen dus partners die gelijksoortige karakteristieken bevatten op sommige aspecten en ongelijksoortige op andere.

Complementariteit
De gedachte dat organisaties samenwerken om zich toegang te verschaffen tot andermans middelen vindt zijn oorsprong in de 'Resource Based View' (RBV) op ondernemingen (Wernerfelt, 1984; Barney, 1991). In de RBV worden organisaties neergezet als een bundel van hulpbronnen. De RBV introduceert een alternatieve benadering voor de strategisch management modellen van de jaren tachtig. Hier werd de nadruk gelegd op het analyseren van de kansen en bedreigingen voor ondernemingen in een competitieve omgeving (Caves en Porter, 1977; Porter, 1980; 1985). Deze benaderingen gaat ervan uit dat ondernemingen binnen een bepaalde bedrijfstak identiek zijn in termen van de hulpbronnen die zij bezitten en de strategieën die zij nastreven. Waar heterogeniteit voorkomt, zal deze tijdelijk zijn omdat de hulpbronnen zeer mobiel zijn. Volgens Barney (1991) worden in de RBV deze uitgangspunten ingewisseld voor twee alternatieve uitgangspunten. Ten eerste gaat de RBV ervan uit dat ondernemingen binnen een bedrijfstak heterogeen kunnen zijn met betrekking tot de hulpbronnen die zij beheren. Ten tweede, gaat deze benadering ervan uit dat deze hulpbronnen niet volledig mobiel zijn of verhandelbaar tussen ondernemingen, waardoor heterogeniteit van langdurige aard kan zijn. De RBV

suggereert dat een bepaalde mate van heterogeniteit duurzaam kan zijn (Peteraf, 1993). Barney (1991) identificeert enkele karakteristieken van hulpbronnen, die de tendens naar homogeniteit tegenaan: onvolmaakte mobiliteit (hulpbronnen kunnen niet zondermeer verhandeld worden), onvolmaakte imitabiliteit (hulpbronnen kunnen niet zondermeer nagemaakt worden), en onvolmaakte vervangbaarheid (hulpbronnen kunnen niet zonder meer vervangen worden door alternatieven). Een onderneming, maar ook universiteiten, zullen derhalve een duurzaam competitief voordeel verkrijgen, wanneer zij de beschikking heeft over dergelijke strategische hulpbronnen die niet mobiel, niet imiteerbaar en niet vervangbaar zijn.

De RBV suggereert dat de rationale voor allianties en consortia gelegen is in het waarde creërend potentieel van hulpbronnen die worden samengevoegd binnen één inter-organisationeel arrangement (Das en Teng, 2000). Wederzijdse sterke punten en complementaire hulpbronnen, ofwel een match tussen de partners, worden geïdentificeerd als een voorwaarde voor succesvolle consortia. Een belangrijke implicatie van de RBV is de verwachting dat organisaties op zoek zullen gaan naar partners waarbij een mate van synergie ontstaat tussen de eigen hulpbronnen en die van de partner in kwestie. Deze argumentatie kan ook worden toegepast op de samenwerking tussen universiteiten. De strategische hulpbronnen van een universiteit die interessant kunnen zijn voor potentiele internationale partners, kunnen zeer divers zijn, variërend van materiële hulpbronnen zoals onderzoeksfaciliteiten of bibliotheekcollecties, onderwijs hulpbronnen zoals bepaalde studieprogrammas of onderwijsmethoden, of meer symbolische organisationele hulpbronnen zoals reputatie en prestige. Dergelijke hulpbronnen worden niet verhandeld op markten, maar worden toegankelijk door het aangaan van inter-organisationele verbintenissen.

Compatibiliteit
De theoretische antecedenten van de tweede voorwaarde – compatibiliteit – vinden hun oorsprong in de economische sociologie. Het argument dat compatibele partners meer succesvol kunnen samenwerken komt voort uit Evan's (1963) 'gelijksoortigheid hypothese': hoe meer gelijksoortig de partners in een samenwerkingsrelatie zijn, des te gunstiger is de uitkomst. Terwijl de RBV een economisch rationeel perspectief op organisatiegedrag propageert, zien sociologische theorieën de universiteit als een institutie die is ingebed in sterke cognitieve, normatieve and regulatieve structuren (Scott, 1995). In neo-institutionele en 'embeddedness' theorieën, wordt de sociale, politieke en culturele omgeving van organisaties meegenomen en wordt gesteld dat uitwisseling in markten is ingebed in compexe sociale processen. Dit bouwt voort op het werk van Polanyi (1957) die stelt dat de menselijke economie is ingebed in en verweven met instituties, economische zowel als niet economische ("the human economy is embedded and enmeshed in institutions, economic and non-economic)". De institutionele inbedding van organisaties verschaft zowel mogelijkheden als beperkingen voor hun gedrag. Enerzijds verschaft de context waarin zij zijn ingebed hen de nodige legitimiteit, duidelijkheid en relaties met hun belanghebbenden. Anderzijds plaatst het organisaties in een 'institutionele dwangbuis' of een 'ijzeren kooi' (iron cage; DiMaggio and Powell, 1983). Uzzi (1997: 57) bestempelt dit als de paradox van inbedding: hetzelfde process waarbij de institutionele inbedding een organisatie de vereiste match met zijn huidige omgeving verschaft, kan paradoxaal het aanpassingsvermogen van de organisatie aantasten om zich aan te passen aan nieuwe

omstandigheden. Zo kunnen traditionele kerncompetenties potentieel verworden tot bronnen van verstarring en inflexibiliteit, die vervolgens het aanpassingsvermogen en succes van een organisatie tegenwerken. Wanneer deze argumentatie wordt toegepast op inter-organisationele arrangementen, kan gesteld worden dat de verschillen in de institutionele omgeving van waaruit de organisaties afkomstig zijn, de samenwerking negatief kunnen beinvloeden. Inter-organisationele verschillen die de samenwerking kunnen frustreren worden veelal in relatie gebracht met de historische conformiteit van universiteiten aan hun nationale institutionele omgeving en met de organisatiestructuren, procedures en routines die geleidelijk zijn ontstaan en zijn geinstitutionaliseerd in deze nationale context.

Interventie mechanismen

De paradox die voortkomt vanuit deze twee uitganspunten wordt verduidelijkt als we Parkhe's (1991) terminologie van 'type 1 diversiteit' en 'type 2 diversiteit' toepassen. Type 1 diversiteit refereert aan de diversiteit in hulpbronnen, welke een positief effect heeft op de mate van succes. Bij type 2 diversiteit draait het om de verschillen in de institutionele context waarin de universiteiten zijn geworteld en wordt verondersteld de samenwerking negatief te beinvloeden. Het probleem van deze argumentatie echter is dat, wanneer een consortium eenmaal is opgezet, de mate van effectiviteit vaststaat, zolang de samenstelling van het consortium niet verandert. Echter, net als andere organisaties, kunnen consortia zich aanpassen aan veranderende omstandigheden. In andere woorden, consortia kunnen interventie mechanismen inzetten om de mate van compatibiliteit en complementariteit te verbeteren in situaties waar deze niet optimaal zijn. Mechanismen die worden ingezet om om te gaan met een gebrek aan complementariteit – in deze studie aangeduid als 'strategic coping mechanisms' of startegische interventie mechanismen – zijn instrumenten en maatregelen die het een consortium mogelijk maakt om tot een betere synergie te komen tussen de hulpbronnen van de verschillende partners. Mechanismen die worden ingezet om de compatibiliteit te verbeteren – 'institutional coping mechanisms' of institutionele interventie mechanismen – zijn maatregelen die invloed uitoefenen op de verschillen tussen de institutionele context van de partners of op de obstakels die hieruit voortkomen. De analyse van de empirische gegevens zullen moeten leiden tot meer informatie over de mechanismen die in consortia worden aangewend om complementariteit en compatibiliteit te optimaliseren. Bovenstaand betoog leidt tot een viertal proposties die getest zijn in het empirische deel:

i. Hoe hoger de mate van complementariteit tussen partners in een consortium, des te beter de prestaties van een consortium.
ii. Hoe hoger de mate van compatibiliteit tussen partners in een consortium, des te beter de prestaties van een consortium.
iii. Wanneer de mate van complementariteit in een consortium onvoldoende is, zal een consortium strategische interventie mechanismen aanwenden om prestaties te verbeteren.
iv. Wanneer de mate van compatibiliteit in een consortium onvoldoende is, zal een consortium institutionele interventie mechanismen aanwenden om prestaties te verbeteren.

Methodologie en onderzoeksopzet

Deze veronderstelde relaties zullen empirisch getest worden op basis van case studies. We zijn er daarbij van uitgegaan dat het nodig is om een goed inzicht te krijgen in de aard van de consortia en van de context waarin zij opereren. Yin (1984: 23) geeft aan dat de methode van case studies bruikbaar is wanneer er sprake is van een empirisch onderzoek dat een eigentijds fenomeen verkent in zijn reeele context; wanneer de grenzen tussen fenomeen en context niet geheel duidelijk zijn; en waarin meerdere bewijsbronnen worden aangevoerd. Deze criteria zijn tevens op dit onderzoek van toepassing. Er is gekozen voor vier case studies, daar dit aantal enerzijds groot genoeg is om tot generaliserende uitspraken te komen, terwijl anderzijds het aantal nog voldoende mogelijkheden biedt om de casussen nauwkeurig te analyseren.

De belangrijkste criteria in de keuze van de vier consortia worden geboden door de dimensies van hoger onderwijs consortia zoals we die eerder hebben geïdentificeerd. Binnen de grenzen van deze criteria hebben we gestreefd naar een hoge mate van diversiteit. Aangezien Europa op het gebied van internationale consortia een hoge mate van activiteit vertoont, zijn drie consortia gekozen die zijn voortgekomen uit de Europese context. Daarnaast is gekozen voor één consortium uit Zuidoost-Azië. De keuze voor deze regio is gebaseerd op het feit dat ook deze regio in een proces van regionale integratie betrokken is, namelijk in het kader van de Association of Southeast Asian Nations (ASEAN). Andere praktische criteria waren dat de consortia nog actief dienden te zijn en dat medewerking verleend zou worden aan het onderzoek. Uiteindelijk is een keuze gemaakt voor de volgende vier casussen:

– *ALMA*: een groep van vier universiteiten in de Maas-Rijn Euregio, dat delen van Zuidelijk Nederland, Vlaanderen, Wallonië en het Duitste Noordrijn-Westfalen beslaat. ALMA is opgericht in 1990.
– *ASEAN University Network (AUN)*: een groep van 17 algemene universiteiten uit de tien ASEAN landen, opgericht in 1995. De leden behoren in hun landen tot de meest prestigieuze universiteiten.
– *Coimbra Group*: samenwerkingsverband tussen 39 'traditionele' universiteiten verspreid over Europa (inclusief Centraal en Oost Europa) opgericht in 1987.
– *European Consortium of Innovative Universities (ECIU)*: een consortium van tien universiteiten uit Noord en West Europa. De leden karakteriseren zichzelf als innovatief en ondernemend.

Er is gebruik gemaakt van een combinatie van quantitatieve en qualitatieve data analyse. Als bronnen is gebruik gemaakt van vragenlijsten, interviews and documenten. De vragenlijsten zijn gestuurd aan alle personeelsleden van de universiteiten die bij de consortia betrokken zijn of zijn geweest. Uiteindelijk zijn 188 bruikbare vragenlijsten geretourneerd, een response van minimaal 32.2 % (waarschijnlijke respons: 39,2 %). Voorts zijn een achttal interviews afgenomen met personen die een centrale positie binnen de consortia innemen (bijvoorbeeld voorzitters van dagelijks bestuur, raad van bestuur, directeuren van secretariaten, etc.). Documenten die zijn gebruikt, variëren van oprichtingsakkoorden, verslagen en beleidsplannen tot nieuwsbrieven en websites.

Alvorens over te gaan tot het empirische deel van het onderzoek zijn eerst de drie kernvariablen complementariteit, compatibiliteit en prestatie geoperationaliseerd. Deze

drie variablen zijn gemeten op basis van de individuele percepties van de respondenten. Het gaat daarom dan ook om de gepercipieerde mate van complementariteit, compatibiliteit en prestatie. Complementariteit is gemeten als combinatie van het gepercipieerde belang en de gepercipieerde aanwezigheid van specifieke hulpbronnen van de partner universiteiten. Hierbij is gekeken naar aspecten als nabijheid, land, toegang tot potentiele studentenmarkten, taal, financiële middelen, fysieke infrastructuur, onderzoekskwaliteit, onderwijskwaliteit, kwaliteit van bestuur en management, externe relaties, reputatie en technologische standaard.

De kernvariabele 'compatibiliteit' is onderzocht op basis van twee samengestelde variablen: 'institutionele fit' en 'voormalige samenwerking'. Institutionele fit is een samengestelde van de aanwezige institutionele verschillen en de impact van dergelijke verschillen. Hierbij is gekeken naar wetgeving, nationale cultuur, opvattingen over academisch werk, de distributie van verantwoordelijkheden, formele organisationele procedures en de aard van de universiteiten. Voormalige samenwerking is gebaseerd op de frequentie van eerdere samenwerking met de universiteiten in kwestie en de landen in kwestie. De veronderstelling is dat wanneer personen eerder hebben samengewerkt met personen van de partneruniversiteiten en partnerlanden, zij bekend zullen zijn met de verschillende achtergronden van deze universiteiten of landen. Dit zal op haar beurt de compatibiliteit ten goede komen.

Prestatie is op drie manieren gemeten, resulterend in drie prestatie-indicatoren. De eerste – consortium prestatie – is gemeten op basis van een combinatie van de gepercipieerde relevantie van de formele consortium doelstellingen en de gepercipieerde doelbereiking. Deze indicator is daarom enigzins afhankelijk van de ambitie van de doelstellingen die formeel zijn opgesteld. De tweede indicator – individuele prestatie – meet de impact van samenwerking binnen het consortium op kernprocessen binnen de individuele universiteiten. Hierbij is gekeken naar het effect op onderwijskwaliteit, onderzoekskwaliteit, kwaliteit van management en bestuur, socio-economische ontwikkelingen binnen de omgeving van de universiteit, competenties van afgestudeerden, reputatie van de universiteit, het aantal ingeschreven studenten en op de toegang tot internationale financieringsbronnen. Tenslotte is de tevredenheid met het process van samenwerking als prestatie indicator genomen. Deze 'relationele prestatie' is gemeten op basis van vier relatievariabelen: communicatie, commitment, coordinatie en duidelijkheid over verantwoordelijkheden. De tevredenheid met deze aspecten is gemeten voor interne (binnen de eigen universiteit) zowel als externe (tussen de universiteiten) processen.

Voorts zijn er nog enkele andere variablen in de vragenlijst opgenomen, waarvan aannemelijk kon worden gemaakt dat zij een rol kunnen spelen in de samenwerking. Deze waren bijvoorbeeld de houding ten opzichte van internationalisering en internationale samenwerking, het internationale karakter van individuele professionele netwerken, de mate waarin personen waren betrokken in consortium activiteiten, type van activiteiten waarbij men betrokken was en de aard van hun functie (academisch of niet-academisch). Met name de laatste liet significante verschillen zien en is daarom verder verkend in de empirische analyse.

In het empirische deel van het onderzoek is eerst een beschrijving gegeven van de vier consortia. Hierbij is met name gekeken naar de organisatiestructuur, de doelstellingen en activiteiten en naar de ontwikkelingen in de loop van de tijd. Vervolgens is voor elk

van de vier case studies een gedetailleerde analyse verricht van de relaties tussen complementariteit, compatibiliteit en prestatie. Ook is gedetailleerd gekeken naar de opbouw van deze samengestelde variabelen. Hierbij is ook gekeken naar de verschillen tussen de percepties van academici en niet-academici. Verder is ganalyseerd welke maatregelen op consortium niveau genomen zijn, ofwel welke interventie mechanismen zijn ingezet om om te gaan met een gebrek aan complementariteit en/of compatibiliteit. In het laatste deel van het empirische deel is een vergelijkende analyse uitgevoerd om enerzijds te komen tot algemene uitspraken over de relaties tussen de kernvariabelen en anderzijds om te komen tot een categorisering van strategische en institutionele interventie mechanismen voor consortium managment.

Bevindingen

Kritische aspecten van hoger onderwijs consortia

We hebben beargumenteerd dat de mate van succes van consortia kan worden verklaard door de mate van complementariteit en compatibiliteit in een consortium en door de mate waarin bepaalde strategische en institutionele interventie mechanismen zijn ingezet. Op basis van de analyse van de consortia en de vergelijking ervan, hebben we de volgende doorslaggevende kritieke aspecten van hoger onderwijs consortia geïdentificeerd:

• Het consortium dient te bestaan uit leden die die hulpbronnen bezitten die strategisch waardevol zijn voor de andere leden. Dit betekent dat de partners elkaar iets te bieden moeten hebben. Wanneer dit in het geheel niet het geval zou zijn, zou het consortium als instrument voor de uitwisseling van hulpbronnen zinloos zijn. Over het algemeen hebben we waargenomen dat er altijd enige bronnen van complementariteit gevonden kunnen worden tussen de deelnemende universiteiten. Het feit dat er van complementariteit sprake is, betekent echter niet altijd dat deze bronnen voldoende bekend zijn bij de betrokkenen of dat ze volledig worden gebruikt en geëxploiteerd.

• Dit brengt ons tevens bij het tweede aspect. Bronnen van complementariteit behoren samen te gaan met de geschikte strategische interventie mechanismen. Deze zijn gericht op het verkrijgen, identificeren, dissemineren en exploiteren van complementaire hulpbronnen. Over het algemeen zijn bij hechte samenwerking en nauwe integratie meer complexe interventie mechanismen nodig die zich richten op de exploitatie van complementaire hulpbronnen. Dit kan plaatsvinden door het creëren van voldoende prikkels voor docenten en ander personeel om zichzelf te commiteren aan de consortium activiteiten. Dit commitment kan tot stand komen door de consortium activiteiten zo aan te passen dat zij consistent zijn met de reguliere activiteiten binnen de universiteiten; door het aanpassen van consortium activiteiten aan de bredere regionale (Europese cq. Zuidoost-Aziatische) programmas zodat ook toegang kan worden verkregen tot regionale financieringsbronnen; of door het creeeren van financiële prikkels of verplichtingen voor het personeel om betrokken te worden bij consortium activiteiten.

• Een derde kritisch aspect van hoger onderwijs consortia is gerelateerd aan de verschillen in de institutionele context waarin de deelnemende universiteiten opereren. We hebben beweerd dat een hoge mate van compatibiliteit leidt tot betere prestaties van het consortium. We hebben waargenomen dat de voorwaarde van compatibele achtergronden geldig is voor succesvolle samenwerking. Het is tevens zo dat voor minder complexe vormen van samenwerking, slechts een bepaald minimum niveau van institutionele fit benodigd is. Voor meer complexe vormen van samenwerking, is een hogere mate van institutionele fit nodig.

• De match tussen verschillende institutionele achtergronden, is niet iets waar universiteiten volledig controle over hebben. Zij kunnen echter wel institutionele interventie mechanismen aanwenden om om te gaan met de obstakels die voortkomen uit dergelijke verschillen, om de verschillen af te zwakken, of om de verschillen weg te werken. Het omgaan met obstakels heeft doorgaans plaats middels het doorgeven van informatie over bestaande verschillen in institutionele achtergronden van de partners, en door het zich eigen maken van de achtergronden van de partners, bijvoorbeeld door ontmoetingen, vergaderingen, seminars of cursussen. Een andere manier om bestaande obstakels efficiënt aan te pakken is het opzetten van gezamenlijke administratieve structuren om zo om te gaan met specifieke vereisten voor de uitwisseling van personen. De meer complexe institutionele interventie mechanismen zijn gericht op het actief veranderen van de verschillen tussen achtergronden van partner universiteiten. We hebben waargenomen dat het hierbij met name gaat om wederzijdse aanpassing van universiteiten en het opheffen van verschillen door deze te incorporeren in de eigen organisatie.

• Weer andere aspecten die invloed hebben op de prestaties van consortia zijn gerelateerd aan wat wij hebben betiteld als relatie management. In het geval van integratie van activiteiten en nauwe samenwerking gaat dit een grotere rol spelen. Relatie management heeft betrekking op de verbetering van communicatie, het opzetten van een stabiele en transparante organisatiestructuur, en het vergroten van het commitment. Een goede communicatiestrategie en een duidelijke en transparante organisatie die relatief stabiel is ondersteunt processen van socialisering in subeenheden van het consortium (werkgroepen, taskforces, project groepen e.d.) wat op zijn beurt weer uitstraalt op het consortium als geheel.

• Een laatste punt dat hier genoemd dient te worden is dat een consortium, net als elke andere organisatie, zich moet aanpassen aan zijn interne en externe omgeving. Dit betekent dat, wanneer de activiteiten compatibel zijn met heersende normen en ideeen in universiteiten, en met de lopende ontwikkelingen op het regionale niveau, consortia succesvoller zullen zijn. Echter, wanneer dit tot uitdrukking komt in een risicomijdende strategie, zal dit niet niet altijd overeenkomen met de strategische mogelijkheden en behoeften waarmee een consortium en zijn universiteiten geconfronteerd worden in een toenemend competitieve omgeving. Het aangrijpen van deze mogelijkheden vergt veelal risicovol gedrag wat niet altijd zal corresponderen met de traditionele kijk op universiteiten, maar wat wel effectiever de complementariteit binnen een consortium kan benutten.

Theoretische reflecties

De proposities die vanuit ons theoretische raamwerk zijn voorgelegd kunnen niet volledig gestaafd worden door de empirische ge: evens. De volgtijdige en de verklarende modellen die in de hoofdstukken zes en zeven zijn opgesteld hebben de activiteiten in en prestaties van consortia niet onvoorwaardelijk kunnen voorspellen. Derhalve is het nuttig om terug te kijken op de theoretische uitgangspunten die aan deze modellen ten grondslag lagen.

Universiteiten en de Resource Based View

Onze voorspelde relatie tussen complementariteit en prestatie was gebaseerd op de 'Resource Based View'. Deze benadering komt voort uit de strategisch management literatuur, waar het een veelgebruikt alternatief is geworden voor de heersende strategisch management theorieen met betrekking tot concurrentie voordelen van de tachtiger jaren en waarbij de externe omgeving als startpunt werd genomen. Een RBV benadering van inter-organisationele relaties ziet samenwerking tussen organisaties als een mogelijkheid om toegang te verkrijgen tot strategische hulpbronnen die anders niet beschikbaar zouden zijn omdat zij waardevol, immobiel, niet imiteerbaar en onvervangbaar zijn. Twee valide vragen die naar voren komen, zijn of deze strategisch management benadering ook kan worden toegepast op universiteiten en of het toepasbaar is op hoger onderwijs consortia.

Beginselen uit het strategisch management zijn veelvuldig toegepast op universiteiten en zijn ook regelmatig gebruikt in het hoger onderwijs onderzoek. Toepassing van de RBV op universiteiten en het management daarvan is echter schaars. Een mogelijke verklaring hiervoor is dat het moeilijk is om strategische hulpbronnen te identificeren in hedendaagse universiteiten. Vanzelfsprekend zijn kwalitatief goede onderwijsprogramma's of onderzoekers belangrijke hulpbronnen voor een universiteit, maar tegelijkertijd zijn zij moeilijk te herkennen, laat staan te meten. Verder proberen universiteiten zichzelf ook te onderscheiden door het benadrukken van andere hulpbronnen zoals locatie, hun externe relaties en hun infrastructuur en faciliteiten. We hebben gezien dat de kwaliteit in onderwijs en onderzoek en de reputatie van de partners de belangrijkste kenmerken zijn om naar te zoeken in mogelijke partners voor samenwerking. Ook hebben we gezien dat samenwerking in consortia met name de reputatie van een universiteit gunstig beinvloedt. Dit geeft de indruk dat lidmaatschap van en samenwerking in hoger onderwijs consortia deels symbolisch van aard is en dat over het geheel gezien, er geen additionele waarde wordt toegevoegd aan de hulpbronnen van universiteiten. De weerstand tegen het overdragen van authoriteit naar het consortium niveau, het gebrek aan gevoel van noodzaak om dit te doen en de tegenzin van partners om zich (financieel) te commiteren aan consortium activiteiten lijken deze indruk te bevestigen.

De RBV ziet de uitwisseling van hulpbronnen als belangrijkste rationale voor samenwerking en voor participatie in consortia. We hebben ondervonden dat het niet geheel in overeenstemming is met de realiteit om hoger onderwijs consortia alleen te zien als middel om toegang te verkrijgen tot strategische hulpbronnen. Hoewel het gebruik van deze benadering in de studie nuttig is gebleken, hebben we ook gezien dat andere benaderingen van samenwerking in consortia ook waardevol kunnen zijn. Hoger

onderwijs consortia kunnen bijvoorbeeld gezien worden als constructies om transactiekosten te verminderen, iets dat we met name tegenkwamen in het geval van de Coimbra Group case studie. Door integratie van specifieke activiteiten, kunnen transacties zoals de uitwisseling van studenten en docenten plaats hebben in een administratief kader waardoor deze efficiënter verlopen. Een andere, meer politieke rationale voor samenwerking komt ook naar voren in enkele van de case studies. Dit is de collectieve vertegenwoordiging van universiteiten versus internationale en regionale authoriteiten zoals de Europese Unie of de Association of Southeast Asian Nations. Door collectief te opereren, kunnen consortia beleidskanalen openen om beter toegang te verkrijgen tot deze authoriteiten. Vanuit deze rationale gezien, handelen hoger onderwijs consortia als associaties (in de betekenis van representatieve organen of lobbie organisaties zoals aangegeven in hoofdstuk vier). Een andere rationale is meer instrumenteel van aard: universiteiten werken simpelweg samen omdat dit geëist wordt door verscheidene verstrekkers van financiële middelen. Veel van de EU programmas in onderwijs en onderzoek verstrekken financiële middelen voor onderwijs en onderzoek onder voorwaarde dat de aanvragen komen van een groep van universiteiten uit een aantal verschillende landen.

Ondanks deze alternatieve verklaringen, is de RBV als een relatief nieuwe benadering van samenwerking waardevol gebleken. Inherent aan strategisch management onderzoek, is de RBV prescriptief van aard en het maakt ons daarom bewust van de mogelijkheden die ontstaan door samenwerking in een internationale context. Tegelijkertijd wordt het vanuit dit perspectief duidelijk dat vele van deze internationale mogelijkheden onbenut blijven in de consortia die deel uitmaakten van dit onderzoek. In sommige gevallen was dit omdat universiteiten daar nu eenmaal niet op gericht waren. In andere gevallen werd het echter duidelijk dat veel universiteiten – en landen – (nog) niet klaar zijn of (nog) niet in staat zijn tot intense en hechte samenwerking met buitenlandse partners.

Universiteiten en hun institutionele inbedding
Het gebrek aan bereidwilligheid of capaciteit om betrokken te raken in hechte samenwerking is gerelateerd aan de institutionele copntext waarin universiteiten opereren en zich hebben ontwikkeld. We hebben dit institutioneel perspectief toegepast om de notie te ondersteunen dat partners in een consortium ook enige overeenkomsten moeten delen om goed te kunnen samenwerken. Deze stelling was gebaseerd op de aanname dat universiteiten, meer dan dat bijvoorbeeld ondernemingen dat zijn, zijn ingebed in hun (nationaal en organisationeel gevormde) institutionele context. De bevindingen in deze studie geven geen aanleiding om deze stelling te verwerpen. Het effect van deze inbedding op de inter-organisationele samenwerking is echter niet zo rechtlijnig als we verwacht hadden.

Ten eerste hebben we waargenomen dat verschillende typen van instituties de samenwerking op een verschillende wijze beïnvloeden. In alle onderzochte consortia waren het in de ogen van de respondenten de verschillen in de gecentraliseerde institutie typen (zoals nationale wetgeving en organisationele regels en procedures) die het meest negatief doorwerkten op de samenwerking. Dit was minder het geval voor de gedecentraliseerde typen zoals culturen, normen en opvattingen. Deze laatsten werden

door velen gezien als een van de insteressante aspecten van de samenwerking. Academische en culturele diversiteit kan, bij een juiste instelling van de betrokken personen, verworden tot een bron van complementariteit in plaats van incompatibiliteit.

Ook hebben we waargenomen dat niet-academici meer de nadruk lijken te leggen op de institutionele verschillen bij hun beoordeling van het succes van de consortia, terwijl academici meer de nadruk leggen op de complementaire factoren in de samenwerking. Dit kan er op wijzen dat de institutionele inbedding van de universiteit zich meer manifesteert in de ogen van de niet-academici. Dit kan verklaard worden doordat de activiteiten waarin academici samenwerken van een meer universele aard zijn dan bij niet-academici het geval is. In dit opzicht zou het ook interessant zijn om samenwerking binnen verschillende academische disciplines met elkaar te vergelijken. Verondersteld kan worden dat bijvoorbeeld natuurwetenschappen minder context gevoelig zijn en meer universeel dan sociale wetenschappen en gedragswetenschappen. Samenwerking in de natuurwetenschappen zou in deze denklijn dan ook minder bronnen van incompatibiliteit opleveren.

Over het algemeen hebben we gezien dat er geen sterke relatie is tussen compatibiliteit en prestatie. Alleen in de gevallen waar de institutionele fit tussen universiteiten als laag werd gezien, heeft dit de samenwerking negatief beïnvloed. Deze waarneming leidt ons tot de conclusie dat er een bepaald minimum niveau van institutionele fit nodig is, maar dat universiteiten en hun personeel zeer wel in staat zijn om om te gaan met verdere obstakels die voortkomen uit de incompatibiliteit tussen de universiteiten. Anderzijds zagen we ook dat de meeste consortia in deze studie geen zeer hechte samenwerking en nauwe integratie nastreven. Het is aannemelijk dat, wanneer de intensiteit van samenwerking toeneemt, de variëteit in institutionele achtergronden meer op de voorgrond treedt en meer obstakels zal opwerpen voor inter-organisationele samenwerking. In dit opzicht is het zinvol om aandacht te blijven besteden aan de compatibiliteits factoren, met name in de gevallen waar nauwe integratie wordt voorzien, zoals in (private) joint ventures die worden opgezet door universiteiten en (mogelijk toekomstige) fusies tussen hoger onderwijs instellingen vanuit verschillende landen.

Deze conclusies en de gegevens waarop zij zijn gebaseerd, wijzen niet noodzakelijkerwijs op een convergentie van de institutionele context van universiteiten uit verschillende landen. Integendeel. De verschillen in nationale institutionele context zijn nog steeds volop aanwezig en beïnvloeden het samenwerkingsproces nog steeds substantieel in de perceptie van de respondenten in deze studie. Wat echter kan worden waargenomen is dat universiteiten ook ingebed raken in hun regionale context. Het is aannemelijk dat deze regionale institutionele context meer invloed gaat uitoefenen naarmate de regionale instituties sterker en machtiger worden. Hoewel de nationale context dominant is, heeft de regionale Europese context voor Europese universiteiten een toenemende invloed op hun gedrag. In het geval van ASEAN bevindt de constructie van regionale instituties zich nog in een beginfase in vergelijking met de EU, maar aspiraties als gezamenlijke accreditatie en gezamenlijke 'credit transfer' systemen geven de indruk dat deze regio zich beweegt in een soortgelijke richting (hoewel niet

noodzakelijkerwijs in dezelfde snelheid). Wat met name van belang is voor deze studie is de observatie dat aanpassing aan deze regionale context bijdraagt aan de mate van succes van consortia. De consortia die nauw gerelateerd zijn aan regionale (politieke) instituties en die hun activiteiten toespitsten op regionale programmas en het regionale beleid (en de daarmee gepaard gaande financieringsbronnen) van deze instituties (zoals Europese programmas voor mobiliteiut en onderzoekssamenwerking), lijken dan ook meer succesvol. De stelling in organisatie studies, waar de aanpassing aan de externe omgeving wordt gezien als bepalende succesfactor voor organisaties, kan dus ook worden toegepast of consortia. Regionale hoger onderijs consortia zullen dus meer succesvol zijn wanneer zij zich aanpassen aan hun regionale institutionele context.

Maar ook intern kunnen consortia worden benaderd vanuit het beeld van een organisatie. Als we kijken naar hoger onderwijs consortia als een bijzonder type organisatie, kunnen we karakteristieken identificeren die ook typisch zijn voor universiteiten als bijzondere organisatie. Van Vught (1989: 52-54) wijst in dit opzicht op de authoriteit van professionele experts, de kennisgebieden als primaire aandachtspunten en de hieraan gerelateerde organisationele fragmentatie, en de extreme verspreiding van beslissingsbevoegdheden. Deze karakteristieken komen ook tot uiting in hoger onderwijs consortia. Het feit dat consortia veelal kunnen worden getypeerd als 'leadership driven', ofwel de sterke top down benadering in dergelijke arrangementen, kan deels het gebrek aan tevredenheid verklaren die aanwezig is bij veel van de academici die betrokken zijn bij consortium activiteiten. In het geval van universiteiten brengt van Vught (1989: 45) een argument naar voren dat ook kan worden doorgetrokken naar hoger onderwijs consortia:

> *Geconfronteerd met gedetailleerde regulering en met extreme beperking van hun gedrag, kunnen wetenschappers en docenten in hoger onderwijs instellingen (en in ons geval, in hoger onderwijs consortia; EB) een gevoel van ontgoocheling krijgen daar zij niet meer in staat zijn om die paden te verkennen, die door hun professionele achtergrond worden ingegeven.*

Het volgtijdige model van samenwerking en interventie mechanismen
In hoofdstuk zeven, hebben we een volgtijdig model van samenwerking en interventie mechanismen geïntroduceerd waarin we het proces van samenwerking hebben beschreven vanaf het moment van oprichting. We hebben samenwerking hier bendaderd als een proces waarin een gezamenlijk besluit wordt genomen over de doelstellingen van het consortium en waar een overeenkomstige portefeuille van activiteiten wordt vastgesteld. Vervolgens worden de activiteiten geimplementeerd om zo de toegevoegde waarde van de gezamenlijke hulpbronnen te benutten. Na de start van het implementatieproces, kan het consortium ervoor kiezen om de activiteiten op hun beloop te laten, met een bepaalde mate van succes als eindresultaat. De roep om efficientie en effectiviteit kan echter een hogere mate van complementariteit vergen, en de inzet van strategische interventie mechanismen vereisen. Ook kan de roep om conformiteit en weerstand een hogere compatibiliteit vereisen, zodat institutionele interventie mechanismen worden ingezet. De inzet van dergelijke interventie mechanismen hebben dan tot doel om de prestaties van het consortium te verhogen.

Dit model is nuttig gebeleken als een wijze om samenwerking te benaderen, maar desondanks bevat het enkele tekortkomingen. Ten eerste kijkt het model naar het consortium als geheel, terwijl het soms beter is om een consortium op te vatten als een verzameling van afzonderlijke coöperatieve activiteiten. Eén van de dimensies van hoger onderwijs consortia die we vooraf geïdentificeerd hebben is het feit dat consortia 'multi-point' allianties zijn, wat inhoudt dat ze zich bezighouden met een breed scala aan activiteiten vanuit verschillende disciplines en thema's. Het is dan ook aannemelijk dat dit resulteert in verschillende uitkomsten en verschillende prestatie niveaus voor de diverse activiteiten. Maar het is ook mogelijk dat verschillende typen activiteiten zich op verschillende manieren ontwikkelen en dat het daarom problematisch is om een algemeen volgtijdig model van samenwerking te ontwikkelen voor consortia. We hebben gezien dat voor bepaalde projecten in bepaalde consortia, het consortium als geheel een belangrijke rol heeft gespeeld in het initiëren van projecten en het faciliteren ervan in de beginfase, maar waar dergelijke projecten zich later verder ontwikkelen buiten het kader van het consortium waarin zij zijn ontstaan.

De meest duidelijke tekortkoming in het model is dat er onvoldoende aandacht is besteed aan de kwaliteit van de relatie tussen de partners. Dit is toe te schrijven aan het feit dat we 'relationele prestatie' in eerste instantie hebben geïdentificeerd als prestatie-indicator. De case studies hebben echter duidelijk gemaakt dat de relaties tussen de individuen van de partner universiteiten een belangrijke rol spelen en een effect hebben op het behalen van de doelstellingen van het consortium. Vanwege het belang van de kwaliteit van de relaties tussen de betrokkenen, worden factoren als communicatie, organisatie en commitment binnen een consortium cruciaal voor de uiteindelijke prestaties van een consortium. De aandacht voor relationele aspecten zal daarom ook moeten worden meegenomen in het model. Het verbeteren van de relaties tussen de betrokkenen kan zich het beste richten op het leveren van voldoende en kwalitatief goede informatie, het opzetten van een duidelijke organisatiestructuur waarbinnen de activiteiten zich kunnen afspelen en het bevorderen van het commitment van de deelnemende universiteiten en hun vertegenwoordigers. De aandacht voor relationele aspecten dient gedurende het gehele samenwerkingsproces zichtbaar te zijn, vanaf de besluitvorming over de algemene doelstellingen tot aan de implementatie van concrete activiteiten.

Een laatste aanpassing aan het volgtijdige model van samenwerking en interventie mechanismen is het opnemen van terugkoppelingen. Wanneer interventie mechanismen worden ingezet, leidt dit niet automatisch tot een goede voortzetting of een afronding van projecten. Het inzetten van interventie mechanismen houdt veelal in dat het consortium een stap terug moet doen. Dit kan zich uiten in het zoeken naar nieuwe leden, het formuleren van nieuwe doelstellingen of activiteiten, of het geven van de juiste prikkels in de implementatiefase van activiteiten. In het ene geval betekent dit slechts een marginale aanpassing, terwijl het in andere gevallen kan leiden tot een volledige koerswijziging van het consortium. Dergelijke mechanismen worden ingezet in de verwachting dat de activiteiten zich verder gunstiger zullen ontwikkelen nadat ze zijn geimplementeerd. Wanneer nieuwe problemen door incomplementariteit of incompatibiliteit zich voordoen gedurende de implementatiefase, moeten nieuwe interventie mechanismen worden ingezet en dient men terug te koppelen naar de juiste

fase in het samenwerkingsproces. Vervolgens zal het consortium zich proberen te begeven naar een eindresultaat dat als toereikend wordt gezien door de leden. De laatste bewering brengt een ander belangrijk aspect naar voren. Veel van de doelstellingen van consortia zijn nogal ambigu en geven geen specifiek en concreet eindresultaat aan. Consortia zullen niet altijd doorgaan totdat de optimale resultaten zijn behaald, maar streven naar een eindresultaat waarbij er een consensus heerst over de mate van doelbereiking.

Deze aanpassingen leiden tot het herziene model zoals weergegeven in onderstaand figuur. In overeenstemming met ons eerste punt van kritiek, zal het pad dat binnen dit model gevolgd wordt, verschillend zijn voor verschillende doelstellingen en activiteiten. Complexe activiteiten zullen meerdere terugkoppelingen vergen dan ongecompliceerde projecten. Ook zullen activiteiten die een vergaand effect hebben op de deelnemende universiteiten, minder makkelijk leiden tot consensus over de mate van doelbereiking dan activiteiten die slechts een matige impact hebben op hen.

Figuur S-1: **Aangepast volgtijdig model van samenwerking en interventie mechanismen**
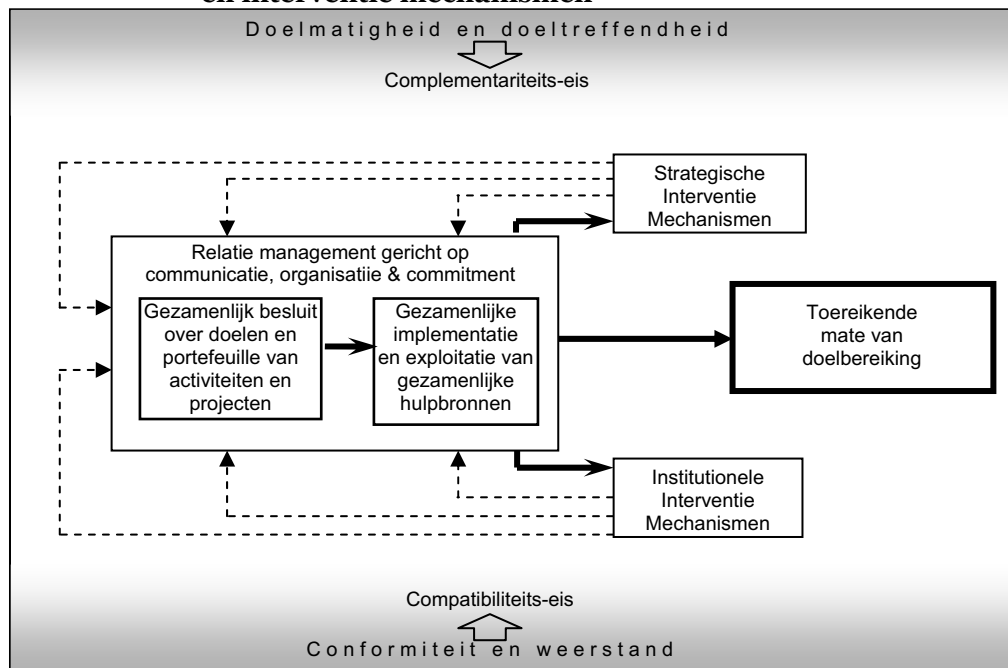
Het verklarende model van samenwerking en interventie mechanismen
In ons verklarende model van samenwerking en interventie mechanismen hebben we beargumenteerd dat er een positieve relatie bestaat tussen complementariteit en prestaties en tussen compatibiliteit en prestaties. De case studies hebben laten zien dat dit alleen onder bepoaalde voorwaarden het geval is.

Prestaties worden positief beinvloedt wanneer er sprake is van complementariteit onder voorwaarde dat de complementaire hulpbronnen daadwerkelijk worden erkend, benut en geexploiteerd. Dit kan verwerkelijkt worden door het inzetten van *passende* strategische interventie mechanismen. Op hun beurt, kunnen strategische interventie mechanismen meer effectief worden ingezet wanneer er voldoende communicatie is, een duidelijke organisatie en voldoende commitment. De voorgestelde positieve relatie tussen complementariteit en prestatie kan derhalve alleen gestaafd worden onder de voorwaarde dat de passende interventie mechanismen worden ingezet om de complementariteit in hulpbronnen te herkennen, benutten en exploiteren.

Prestaties zijn eveneens gerelateerd aan de mate van compatibiliteit, maar minder rechtlijnig dan eerder voorgesteld. We kunnen hier beter spreken over de negatieve relatie tussen incompatibiliteit en prestatie. Voor het behalen van doelstellingen is namelijk een bepaald minimum niveau van compatibiliteit vereist. Wanneer er sprake is van onvoldoende 'institutionele fit', worden prestaties negatief beinvloed. Wanneer aan de minimale voorwaarden wordt voldaan, zwakt deze invloed af. Het is echter onzeker of dit ook het geval is voor zeer complexe vormen van samenwerking en integratie van activiteiten. Het blijft aannemelijk dat de behoefte aan een goede institutionele fit meer tot uiting komt wanneer men zich richt op complexe en hechte samenwerking. In de consortia die in deze studie zijn onderzocht, vereisen de activiteiten die in het kader van het consortium zijn uitgevoerd, nauwelijks of geen zeer hechte samenwerking of integratie. Het is waarschijnlijk dat de compatibiliteit in institutionele context belangrijker wordt naarmate er meer gestreefd wordt naar hechte en complexe samenwerking. Al naar gelang de intensiteit en complexiteit van de samenwerking kunnen consortia institutionele interventie mechanismen inzetten om institutionele verschillen inzichtelijk en herkenbaar te maken. Meer complexe institutionele interventie mechanismen kunnen worden ingezet wanneer er een noodzaak bestaat om de verschillen te reduceren of in zijn geheel te elimineren. Dergelijke complexe mechanismen vereisen opnieuw voldoende communicatie, organisatie en commitment.

Het inzetten van institutionele interventie mechanismen heeft dus niet altijd een (positief) effect, maar zij dienen passend te zijn voor de mate en de aard van incomplementariteit en incompatibiliteit waarmee men wordt geconfronteerd gedurende de samenwerking. Het is dus de mix van bestaande complementariteit en compatibiliteit samen met de *passende* strategische en institutionele interventie mechanismen die de mate van succes beinvloeden. Tevens zal de effectiviteit van de ingezette interventie mechanismen voordeel hebben van goed relatie management in de vorm van een adequate communicatie, een duidelijke en transparante organisatie en voldoende commitment.

De veranderde opvattingen over de relatie tussen complementariteit, compatibiliteit en prestatie leiden tot het aangepaste model zoals weergegeven in figuur S-2. Compatibiliteit is dus van belang tot een bepaald niveau en interventie mechanismen dienen passend te zijn voor de aard en complexiteit van de doelstellingen. De nieuwe variabele in het model is de kwaliteit van 'relatie management', ofwel de tevredenheid over de communicatie, organisatie en commitment in het consortium. Verder zal het

belang van deze toegevoegde variabele toenemen naarmate de doelstellingen van het consortium meer complex worden.

Figuur S-2:   Aangepast verklarend model van samenwerking en interventie mechanismen.
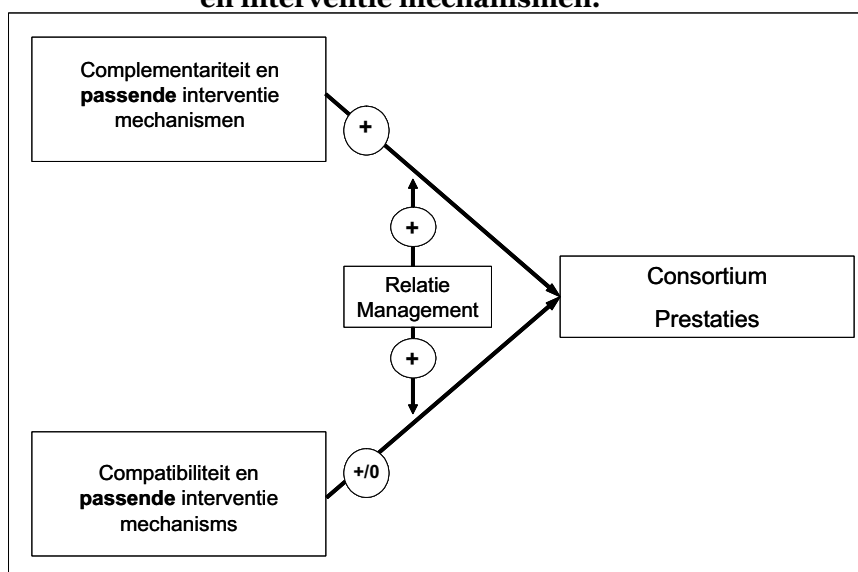
Dit model is, in vergelijking met het voorgestelde model, aangepast op vier punten:

- Dit model richt zich alleen op de prestaties van het consortium als geheel en richt zich daarbij op de mate van doelbereiking. Het model richt zich niet op de effecten van samenwerking op individuele partners in het consortium.
- Het inzetten van institutionele en strategische interventie mechanismen heeft niet langer een autonoom effect op de uitkomst van de samenwerking. Hun effect op de uiteindelijke prestaties van het consortium is gelegen in hun geschiktheid in relatie tot de mate en aard van (in)complementariteit en (in)compatibiliteit.
- De relatie tussen compatibiliteit wordt niet langer verondersteld lineair te zijn. In het aangepaste model wordt aangegeven dat een bepaald minimale mate van compatibiliteit is vereist voor een succesvol consortium.
- De meest duidelijke verandering ligt in het opnemen van relatie management waarbij het op de juiste manier omgaan met de relaties tussen de betrokken personen, een positief effect zal hebben op de effectiviteit van de ingezette interventie mechanismen.

Slotopmerkingen

In deze studie hebben we de prestatie van hoger onderwijs consortia geanalyseerd in de context van de kansen en mogelijkheden waarmee universiteiten geconfronteerd worden in hun hedendaagse omgeving. Het grensoverschrijdende gedrag van universiteiten – waarbij zowel nationale als organisationele grenzen worden overschreden – is een fascinerend onderwerp van onderzoek juist omdat universiteiten kunnen worden beschouwd als organisaties die sterk zijn ingebed in hun nationale en organisationele context. Deze paradox manifesteert zich ook in het hoger onderwijs. In dit opzicht hebben wij ons met name gericht op de 'diversiteits paradox' in internationale samenwerking, waar verondersteld is dat partners 'anders maar gelijk' dienen te zijn. Deze studie heeft laten zien dat inter-organisationele arrangementen niet alleen een evenwicht moeten vinden tussen overeenkomstigheden en verschillen, maar ook het juiste evenwicht tussen conformiteit en innovativiteit, tussen ambitie en realiteit en tussen de adagia 'samenwerken om te concurreren' en 'samenwerken om het samenwerken'.

We hebben gezien dat het conformeren aan zowel de interne context van de deelnemende universiteiten als ook aan de externe regionale context een succesvolle strategie vormt in internationale samenwerking. Het conformeren aan bestaande structuren kan universiteiten echter beperken in hun strategische en ondernemende gedrag. Universiteiten, en de consortia waarin zij participeren, kunnen besluiten om de risico's, die gepaard gaan met nieuwe innovatieve activiteiten, te ontwijken door zich te voegen naar bestaande beleidsactoren en naar de heersende attitudes van hun belanghebbenden. Dit is ook gerelateerd aan de balans die gevonden dient te worden tussen ambitie en realiteit. We hebben gezien dat die activiteiten, die corresponderen met wijdverspreide en heersende ideeen, opvattingen en attitudes, meer succesvol zijn dan activiteiten die een uitdaging vormen voor gevestigde opvattingen. Dit kan echter leiden tot situaties waar de mogelijkheden en de complementariteit in hulpbronnen niet (volledig) worden benut. Echter, waar de lat te hoog wordt gelegd, loopt men het risico sterke weerstand op te roepen, wat uiteindelijk kan leiden tot een gebrek aan concrete activiteiten. Het adagium 'samenwerken om te concurreren' wordt veelvuldig naar voren gebracht om hedendaagse inter-organisationele arrangementen tussen bedrijven – maar ook tussen hoger onderwijs instellingen – te karakteriseren. Wij hebben argumenten gegeven die de perceptie van de huidige omgeving van universiteiten als een van toenemende (internationale) concurrentie ondersteunen. De studie geeft echter ook aan dat het adagium 'samenwerken om het samenwerken' meer overeenkomstig is met de heersende opvattingen binnen universiteiten, tenminste in de consortia die in deze studie onderzocht zijn.

Terugblikkend, kunnen we concluderen dat de aanwezige mogelijkheden en kansen zelden ten volle benut worden binnen hoger onderwijs consortia (en andere inter-organisationele arrangementen). De meest succesvolle vormen van samenwerking zijn gebaseerd op vrij losse structuren die slechts een matig effect hebben op de organisatie van de deelnemende universiteiten. Aangezien vergaande integratie van activiteiten geen doelstelling is, betekent dit niet dat zij falen. Waar vergaande integratie wel het oogmerk is, worden niet-optimale uitkomsten van de samenwerking meer

waarschijnlijk. Hechte samenwerking tussen organisaties die veel waarde hechten aan hun autonomie en onafhankelijkheid kan moeizaam zijn omdat hun leiders aarzelend zullen zijn in het overdragen van authoriteit naar een hoger niveau.

Desondanks hebben binnen het nationale domein, nationale ontwikkelingen vaak geleid tot een verschuiving van vrijblijvende samenwerking naar opgelegde fusies. Hoewel paralelle ontwikkelingen op het mondiale of regionale niveau niet waarschijnlijk zijn in de nabije toekomst, is het aannemelijk dat door een toenemende roep om effectiviteit en efficiëntie en door de vraag naar meer internationale mogelijkheden van studenten, docenten en wetenschappers, universiteiten meer gestimuleerd worden om hechtere relaties met buitenlandse partners aan te gaan. Samen met de groeiende nadruk op ondernemend gedrag en de imitatie van bedrijfsmatige concepten, kan dit in de toekomst leiden tot nieuwe samenwerkingsarrangementen in het hoger onderwijs. Wanneer dit gepaard gaat met een toenemende integratie op regionaal niveau – zoals het geval is in het Europese Bologna proces – kunnen obstakels voor hechte samenwerking ook verder worden gereduceerd.

In de huidige situatie is het echter duidelijk dat samenwerking op die gebieden, waar het wordt gezien als onderdeel van de academische werkelijkheid, waarschijnlijk meer de standaard zal zijn dan de meer zakelijk en bedrijfsmatig geïnspireerde samenwerkingsvormen. Tenslotte is – in de consortia die in deze studie zijn onderzocht – samenwerking waar culturele diversiteit en interculturele uitwisseling benadrukt wordt, meer succesvol gebleken.

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APPENDICES

Appendix I: The Four Consortia and their Members

ALMA Network

Limburgs Universitair Centrum	Belgium
University of Liege	Belgium
RWTH Aachen	Germany
University of Maastricht	Netherlands

ASEAN University Network

University Brunei Darussalam	Brunei Darussalam
Royal University of Phnom Penh	Cambodia
Universitas Indonesia	Indonesia
Universitas Gadjah Mada	Indonesia
National University of Laos	Laos
Universiti Sains Malaysia	Malaysia
Universiti Malaya	Malaysia
Institute of Economics	Myanmar
University of Yangon	Myanmar
University of the Philippines	Philippines
De La Salle University	Philippines
National University of Singapore	Singapore
Nanyang Technological University	Singapore
Chulalongkorn University	Thailand
Burapha University	Thailand
Vietnam National University -Hanoi	Vietnam
Vietnam National University-Ho Chi Minh City	Vietnam

Coimbra Group

University of Graz	Austria
Catholic University of Leuven	Belgium
Catholic University of Louvain	Belgium
Charles University of Prague	Czech Republic
University of Aarhus	Denmark
University of Tartu	Estonia
University of Turku	Finland
Abo University	Finland
University of Lyon	France
Montpellier I	France
Montpellier II	France
Montpellier III	France
University of Poitiers	France
Georg-August University of Göttingen	Germany
University of Heidelberg	Germany
Friedrich Schiller University of Jena	Germany
University of Würzburg	Germany
University of Thessaloniki	Greece
Eötvös Loránd University of Budapest	Hungary
University of Dublin, Trinity College	Ireland
National University of Ireland, Galway	Ireland
University of Bologna	Italy
University of Padova	Italy
University of Pavia	Italy
University of Siena	Italy
University of Groningen	Netherlands
Leiden University	Netherlands
University of Bergen	Norway
Jagiellonian University of Kraków	Poland
University of Coimbra	Portugal
Universitat de Barcelona	Spain
University of Granada	Spain
University of Salamanca	Spain
University of Uppsala	Sweden
University of Geneva	Switzerland
University of Bristol	United-Kingdom
Cambridge University	United-Kingdom
University of Edinburgh	United-Kingdom
Oxford University	United-Kingdom

European Consortium of Innovative Universities

Aalborg Universitet	Denmark
Joensuun Yliopisto	Finland
Université de Technologie de Compiègne	France
Technische Universität Hamburg-Harburg	Germany
Universität Dortmund	Germany
Universiteit Twente	Netherlands
Universidade de Aveiro	Portugal
Universitat Autonoma de Barcelona	Spain
University of Strathclyde	United Kingdom
University of Warwick	United Kingdom

Appendix II: Categories of Consortium Objectives

Categorisation of consortium objectives (as applied in the comparative analysis in chapter twelve).

1 Objectives related to education

ALMA	Euregional cooperation in education and continued training The encouragement of student mobility Euregional integration of educational programmes Creation of new types of educational programmes with euregional partners Stimulation of language courses
AUN	Promotion of collaborative study programmes in ASEAN Promotion of cooperation and solidarity among scientists and scholars within the ASEAN region Development of ASEAN study programmes Establishment of ASEAN Studies scholarships Development of student exchange in the ASEAN region Development of staff exchange in the ASEAN region
Coimbra	Facilitation and stimulation of student mobility within Europe Facilitation and stimulation of staff mobility within Europe Recognition of study periods spent by students in other European universities The establishment of joint educational programmes with other European universities
ECIU	Development of flexible educational programmes Broadening the scope of student mobility Cooperation with respect to ICT in education Development of entrepreneurship modules Establishment of joint European doctorates

2 Objectives related to research

ALMA	Euregional cooperation in research Systematic exchange of information on research within the Euregion Joint euregional scientific projects
AUN	Promotion of collaborative research programmes in ASEAN Promotion of cooperation and solidarity among scientists and scholars within the ASEAN region Development of staff exchange in the ASEAN region
Coimbra	Facilitation and stimulation of staff mobility within Europe Promotion and encouragement of joint research projects among European researchers
ECIU	Establishment of European research schools European cooperation in research

3 Objectives related to external cooperation & community services

ALMA	Euregional cooperation in services to the community Building a bridge between universities and society in the Euregion through cooperation with Polytechnics and intermediary organizations
AUN	Development of a regional identity Development of academic and professional human resources in the ASEAN region Cooperation between ASEAN and EU Cooperation between ASEAN and other Asian countries
Coimbra	The encouragement of additional cultural and sporting activities (such as exchange visits of choirs, orchestras, theater groups, teams of sportsmen, etc. , composed of students and staff) Providing wider opportunities for non-European students in a European university to experience other European universities, in order to broaden their understanding of European culture
ECIU	Closer cooperation between European regions Knowledge transfer between university and surrounding society Cooperation between European science parks Integration of regional development, research and education

4 Objectives related to organization & management

ALMA	Building a bridge between universities and society in the Euregion through cooperation with Polytechnics and intermediary organizations Euregional cooperation in information and publication activities
AUN	Establishment of an 'ASEAN University' Promotion of the development of a common quality assurance system in ASEAN region Information networking between ASEAN Universities
Coimbra	Arrangements that enable free tuition for students of other European universities Recognition of study periods spent by students in other European universities
ECIU	Further development of a quality review system Structured exchange of experience in teaching and administrative staff development System for joint investment in facilities and ICT Seminars and other forms of information exchange in university management Thematic conferences on the nature of innovative universities Development of cooperation with international higher education consortia Cooperation with other universities in negotiating with the EU and other authorities

Appendix III: Descriptive Statistics for Control Variables

These descriptive statistics provide the quantitative background for the introductory sections of chapter eleven (sections 11.2.1, 11.3.1, 11.4.1 and 11.5.1).

Table 1: Types of activities that respondents are involved in (absolute numbers; multiple activities possible)

Activities	alma	aun	coimbra	eciu
Co-ordination of consortium activities	11	21	26	13
Strategic decision making on consortium activities	6	9	17	12
Student mobility & exchange	11	20	34	11
Staff mobility & exchange	8	24	25	4
Establishment of joint education programmes	9	17	25	12
Joint research	11	16	14	6
University-industry relations	3	5	5	10
Regional development	4	7	5	8
Organisation of conferences/seminars/workshops	9	25	27	18
Credit transfer and recognition	5	5	19	0
ICT in education	1	7	16	11
Library services	0	4	0	2
Quality Assurance	2	11	9	1
Cultural activities	1	13	15	1

Table 2: Amount of time spent on consortium activities (in % of all respondents of the consortium)

Hours per month spent on consortium activities (average on annual basis)		Percentage Of respondents
ALMA	0-5 hours	85.2
	5-10 hours	11.1
	10-20 hours	3.7
AUN	0-5 hours	60.0
	5-10 hours	27.3
	10-20 hours	7.3
	20-40 hours	5.5
Coimbra	0-5 hours	51.6
	5-10 hours	26.6
	10-20 hours	9.4
	20-40 hours	9.4
	more than 40 hours	1.6
ECIU	0-5 hours	52.4
	5-10 hours	28.6
	10-20 hours	14.3
	more than 40 hours	4.8

Table 3: Position of the respondents (in % of all respondents of the consortium)

Position	ALMA	AUN	Coimbra	ECIU
Rector/Vice-chancellor/President	11.1	7.3	12.5	9.5
Local Coordinator of consortia activities	11.1	14.5	15.6	9.5
International Relations Office	7.4	9.1	21.9	7.1
Dean		12.7	1.6	4.8
Manager/Administrator	18.5	1.8	12.5	23.8
Other	3.7	9.1	4.7	14.3
Total Non-academic	51.9	54.5	68.8	69.0
Professor	37.0	25.5	25.0	21.4
Other Academic	11.1	20.0	6.3	9.5
Total Academic	48.1	45.5	31.3	31.0

Table 4: Importance of internationalization and international relations (in % of all respondents of the consortium)

In your opinion, how important is internationalisation of higher education and the existence of a network of international relations for:

		Your university as a whole	Your faculty / department / unit	You as an academic or professional	The quality of education	The quality of research
ALMA	Not important	3.7	3.7	0.0	3.7	0.0
	-	0.0	3.7	3.7	3.7	3.7
	o	3.7	0.0	3.7	18.5	11.1
	+	22.2	22.2	18.5	33.3	14.8
	Very important	70.4	70.4	74.1	40.7	70.4
AUN	Not important	0.0	0.0	0.0	0.0	0.0
	-	5.5	3.6	0.0	1.8	0.0
	o	0.0	3.6	3.6	0.0	5.5
	+	20.0	29.1	29.1	29.1	21.8
	Very important	74.5	63.6	67.3	69.1	72.7
Coimbra	Not important	0.0	0.0	0.0	0.0	1.6
	-	0.0	0.0	0.0	1.6	1.6
	o	1.6	3.1	4.7	4.7	4.7
	+	15.6	12.5	10.9	45.3	15.6
	Very important	81.3	81.3	81.3	46.9	75.0
ECIU	Not important	0.0	0.0	0.0	0.0	0.0
	-	2.4	2.4	0.0	4.8	0.0
	o	2.4	9.5	9.5	11.9	7.1
	+	19.0	23.8	28.6	42.9	23.8
	Very important	73.8	61.9	59.5	38.1	66.7

Table 5: Importance of types of international linkages (in % of all respondents of the consortium)

For you personally, what is the importance of the following different types of international linkages:

		The international contacts of your university	The international contacts of your faculty / department / unit	Your personal international professional contacts
ALMA	Not important	0.0	0.0	0.0
	-	25.9	11.1	3.7
	o	18.5	18.5	3.7
	+	22.2	33.3	18.5
	Very important	33.3	37.0	74.1
AUN	Not important	0.0	0.0	0.0
	-	3.6	0.0	1.8
	o	7.3	5.5	5.5
	+	29.1	32.7	32.7
	Very important	60.0	61.8	60.0
Coimbra	Not important	1.6	1.6	0.0
	-	1.6	3.1	0.0
	o	15.6	7.8	4.7
	+	18.8	29.7	17.2
	Very important	62.5	56.3	78.1
ECIU	Not important	0.0	0.0	0.0
	-	11.9	4.8	2.4
	o	19.0	14.3	2.4
	+	23.8	38.1	23.8
	Very important	42.9	40.5	69.0

Table 6: Spatial scope of activities (in % of all respondents of the consortium)

How would you characterise the spatial scope of your activities:

		With respect to the **content** of your work	With respect to your personal network of **professional contacts**
ALMA	Not relevant	0.0	
	Local	0.0	0.0
	National	3.7	3.7
	Sub-European/Euregional	18.5	14.8
	European	37.0	33.3
	Global	40.7	48.1
AUN	Not relevant	1.8	
	Local	0.0	0.0
	National	16.4	3.6
	Sub-ASEAN	3.6	7.3
	ASEAN	21.8	21.8
	Global	56.4	67.3
Coimbra	Not relevant	1.6	
	Local	0.0	1.6
	National	1.6	0.0
	Sub-European/Euregional	1.6	0.0
	European	10.9	21.9
	Global	84.4	76.6
ECIU	Not relevant	0.0	
	Local	0.0	0.0
	National	11.9	2.4
	Sub-European/Euregional	0.0	7.1
	European	19.0	21.4
	Global	66.7	66.7

**Table 7: Country of Respondents
(in % of all respondents of the consortium concerned)**

Consortium	Country	%
ALMA (N=27)	Belgium	25.9
	Germany	33.3
	Netherlands	40.7
AUN (N=55)	Brunei Dar-Es-Salaam	5.5
	Cambodia	3.6
	Indonesia	16.4
	Laos	5.5
	Malaysia	23.6
	Philippines	10.9
	Singapore	10.9
	Thailand	14.5
	Vietnam	5.5
	Birma	3.6
Coimbra (N=64)	Austria	3.1
	Belgium	9.4
	Switzerland	3.1
	Chech Republic	3.1
	Germany	7.8
	Denmark	3.1
	Spain	3.1
	Finland	14.1
	France	3.1
	Ireland	1.6
	Italy	25.0
	Netherlands	4.7
	Norway	3.1
	Poland	1.6
	Sweden	3.1
	United Kingdom	10.9
ECIU (N=42)	Germany	14.3
	Denmark	16.7
	Spain	9.5
	Finland	9.5
	Netherlands	21.4
	Portugal	11.9
	Sweden	2.4
	United Kingdom	14.3

Appendix IV: Statistics for the Case Studies Grouped by Position

Table numbering in this appendix resembles the numbers in chapter eleven. Table 11-8, for instance is equal to table 8 in this appendix, controlled for position. The significance of the differences in means between academics and non-academics are calculated on the basis of independent sample t-tests. The significance levels are indicated below the tables.

ALMA Network

Table 1: Mean priority, attainment and performance per objective (by position)

ALMA Objectives:	Priority		Attainment		Performance	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Euregional cooperation in education and continued training	0.73	0.75	2.69	2.22	2.02	1.93
The encouragement of student mobility	0.76	0.85	2.43	2.67	1.84	2.42
Euregional integration of educational programmes	0.67	0.75	2.31	2.00	1.69	1.77
Creation of new educational programmes with euregional partners	0.69*	0.72*	2.58	2.25	2.02	1.80
Stimulation of language courses	0.59	0.68	2.58	2.75	1.75	2.10
Euregional cooperation in research	0.63	0.66	2.71	2.89	1.81	2.27
Systematic exchange of information on research within the Euregion	0.64	0.57	2.62	2.57	1.74	1.49
Joint euregional scientific projects	0.67	0.66	2.57	2.56	1.71	2.04
Euregional cooperation in services to the community	0.50	0.54	2.36	2.60	1.27	1.56
Euregional cooperation in information and publication activities	0.47	0.63	2.33	2.67	1.28	2.00
Cooperation with Polytechnics and intermediary organizations	0.61	0.54	2.55	3.00	1.80	2.13
Overall Performance					1.74	2.00

* *Difference in mean significant for p<.05*

Table 2: Mean individual performance (by Position)

Affected Areas:	Non-academics	Academics
Impact on the quality of teaching	3.31	3.10
Impact on the quality of research	3.11	3.10
Impact on the regional socio-economic environment of the university	3.36	3.14
Impact on organisation & management within the university	3.20*	2.57*
Impact on the competencies of graduates	3.09	2.71
Impact on the reputation of university	3.67+	3.13+
Impact on enrolment in the university	3.11	2.57
Impact on the access to international funding opportunities	3.50	3.13
Overall Individual Performance	3.43	3.08

* *Difference in mean significant for p<.05*
\+ *Difference in mean significant for p<.1*

Table 3: Mean relational performance (by Position)

Relational Items:	Non-academics	Academics
Communication within my university (on ALMA strategies and activities) has been sufficient	2.50	2.00
Communication between us and our partners (on ALMA strategies and activities) has been sufficient	2.43	2.27
The division of labour and authority within the university (on ALMA activities) has been clear	2.64+	2.00+
The division of labour and authority between us and our partners (on ALMA activities) has been clear	2.85	2.33
The internal coordination of ALMA activities has been effective	2.43	2.25
The coordination of ALMA activities on ALMA level has been effective	3.17+	2.11+
There is strong commitment on ALMA activities within my university	1.92	2.45
Other ALMA partners are strongly committed to ALMA Activities	2.55	2.57
Overall Relational performance	2.55	2.23

+   *Difference in mean significant for p<.1*

Table 4: Mean importance, presence and complementarity of resources (by Position)

	Importance of resources		Presence of resources		Complementarity in resources	
	Non-acad.	Acad.	Non-acad.	Acad.	Non-acad.	Acad.
Proximity of the partner	0.65	0.68	4.14	4.50	2.65	3.02
Positive country characteristics of partner	0.59	0.58	3.71	4.11	2.21	2.36
The partners' access to student markets	0.70	0.60	2.57	3.10	1.76	2.02
Language of instruction at partner	0.84	0.71	3.29	3.91	2.74	2.89
Financial resources of partner university	0.61	0.54	2.50	3.20	1.57	1.64
Physical infrastructure/facilities of partner	0.70	0.68	3.00	3.40	2.11	2.42
High quality in research	0.84	0.88	3.57*	4.45*	3.04*	4.00*
High quality in education	0.92+	0.78+	3.64	4.09	3.32	3.27
Quality of management in partner university	0.77	0.72	3.43	3.70	2.69	2.66
Existing external relations of the partner	0.63	0.58	2.85	3.55	1.74	1.96
Reputation of partner	0.81	0.80	3.21	3.55	2.63	2.80
ICT-standards of the partner university	0.61	0.67	2.79	2.78	1.69	2.00
Overall Complementarity					2.35	2.71

+   *Difference in mean significant for p<.1*
*   *Difference in mean significant for p<.05*

Table 5: Relation between complementarity and performance (grouped by Position)

		Consortium Performance		Individual Performance		Relational Performance	
		Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)
Complementarity	Non-academic	-0.441	0.066	-0.334	0.133	-0.243	0.223
	Academic	0.104	0.387	-0.108	0.376	0.202	0.255

Table 6: Institutional fit in ALMA (by Position)

	Impact of differences		Consortium heterogeneity		Institutional Fit	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Differences in legislation	-0.61	-0.35	4.23	4.18	-2.71	-1.58
Differences in national culture	-0.07	0.00	3.69	3.64	-0.36	0.08
Differences in conceptions of academic work	0.07	-0.12	3.54	3.45	0.21	-0.54
Differences in the division of authority	-0.39	-0.08	3.77	3.56	-1.86*	-0.08*
Differences in organisational procedures	-0.25	-0.08	3.67	4.11	-1.27	-0.25
Differences in the character of universities	0.10	0.05	3.92	3.80	0.40	0.41
Overall Institutional Fit					-0.92	-0.31

*   *Difference in mean significant for p<.05*

Table 7: Former Cooperation in ALMA (by Position)

	Non-academics Mean	Academics Mean
Former cooperation with partner countries	2.90	3.21
Former cooperation with partner universities	2.19	2.05
Former cooperation	2.55	2.63

Table 8: Relation between Compatibility and Performance in ALMA (grouped by Position)

		Consortium Performance	Individual Performance	Relational Performance
Institutional Fit	Non-academics	0.277	0.321	-0.006
	Academics	0.558*	-0.057	-0.715**
Former Cooperation	Non-academics	0.319	-0.114	0.299
	Academics	-0.032	-0.017	0.660**

*   *Correlation is significant at the 0.05 level (1-tailed).*
** *Correlation is significant at the 0.01 level (1-tailed)*

ASEAN University Network

Table 10: Mean priority, attainment and performance per objective (by position)

AUN Objectives:	Priority		Attainment		Performance	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Promotion of collaborative study programmes in ASEAN	0.80	0.80	3.48+	2.86+	2.78	2.29
Promotion of collaborative research programmes in ASEAN	0.87	0.82	3.30*	2.60*	2.90*	2.18*
Development of a regional identity	0.79	0.70	3.58+	2.95+	2.96*	2.05*
Establishment of an 'ASEAN University'	0.74	0.67	3.36+	2.74+	2.82*	1.89*
Promotion of cooperation and solidarity among scientists and scholars within the ASEAN region	0.53	0.63	2.65	2.73	1.99	2.20
Promotion of the development of a common quality assurance system in ASEAN region	0.84	0.74	3.61**	2.44**	3.01**	2.00**
Development of academic and professional human resources in the ASEAN region	0.85	0.80	3.80**	2.89**	3.31**	2.20**
Development of ASEAN study programmes	0.77	0.74	3.67*	2.95*	2.95*	2.18*
Establishment of ASEAN Studies scholarships	0.79	0.74	3.26	2.79	2.59	2.11
Development of student exchange in the ASEAN region	0.87	0.83	3.68+	3.14+	3.30*	2.57*
Development of staff exchange in the ASEAN region	0.89	0.84	3.48+	3.00+	3.11+	2.52+
Information networking between ASEAN Universities	0.91+	0.82+	3.57+	3.00+	3.21*	2.48*
Cooperation between ASEAN and EU	0.77*	0.63*	3.26**	2.20**	2.62**	1.40**
Cooperation between ASEAN and other Asian countries	0.88*	0.77*	3.65**	2.67**	3.23**	2.16**
Overall Consortium Performance					2.90*	2.35*

+   *Difference in mean significant for p<.1*
*   *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 11: Mean individual performance (by Position)

Affected Areas:	Non-academics	Academics
Impact on the quality of teaching	3.57	3.61
Impact on the quality of research	3.60	3.55
Impact on the regional socio-economic environment of the university	3.05	3.37
Impact on organisation & management within the university	3.44	3.47
Impact on the competencies of graduates	3.35	3.67
Impact on the reputation of university	4.08*	3.61*
Impact on enrolment in the university	2.80	2.95
Impact on the access to international funding opportunities	3.42	3.05
Overall Individual Performance	3.49	3.43

* *Difference in mean significant for p<.05*

Table 12: Mean relational performance (by Position)

Relational Items:	Non-academics	Academics
Communication within my university (on AUN strategies and activities) has been sufficient	3.45**	2.33**
Communication between us and our partners (on AUN strategies and activities) has been sufficient	3.34**	2.39**
The division of labour and authority within the university (on AUN activities) has been clear	3.52**	2.52**
The division of labour and authority between us and our partners (on AUN activities) has been clear	3.42**	2.61**
The internal coordination of AUN activities has been effective	3.82**	2.58**
The coordination of AUN activities on AUN level has been effective	3.89**	3.00**
There is strong commitment on AUN activities within my university	3.96**	2.83**
Other AUN partners are strongly committed to AUN Activities	3.85**	3.00**
Overall Relational performance	3.65**	2.63**

** *Difference in mean significant for p<.01*

Table 13: Mean importance, presence and complementarity of resources (by Position)

	Importance of resources		Presence of resources		Complementarity in resources	
	Non-acad.	Acad.	Non-acad.	Acad.	Non-acad.	Acad.
Proximity of the partner	0.59	0.67	4.11*	3.48	2.42	2.38
Positive country characteristics of partner	0.59	0.70	4.23+	3.71+	2.40	2.54
The partners' access to student markets	0.60	0.66	3.50	3.64	1.88	2.40
Language of instruction at partner	0.80	0.85	3.79	4.00	3.00	3.37
Financial resources of partner university	0.82	0.79	3.54	3.74	2.88	2.99
Physical infrastructure/facilities of partner	0.78	0.78	3.73	3.92	2.90	3.08
High quality in research	0.88	0.92	3.68*	4.38*	3.27**	3.97**
High quality in education	0.89	0.89	3.68*	4.28*	3.26+	3.78+
Quality of management in partner university	0.82	0.78	3.62	4.05	3.00	3.15
Existing external relations of the partner	0.71	0.74	3.68	3.74	2.59	2.83
Reputation of partner	0.82	0.84	3.74	4.16	3.05	3.50
ICT-standards of the partner university	0.70	0.73	3.54	3.74	2.47	2.67
Overall Complementarity	0.75	0.78	3.81	3.93	2.82	3.10

+ *Difference in mean significant for p<.1*
* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 14: Relation between complementarity and performance (grouped by Position)

		Consortium Performance		Individual Performance		Relational Performance	
		Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)
Complementarity	Non-academic	0.186	0.177	-0.062	0.382	-0.044	0.414
	Academic	0.515**	0.005	0.411*	0.023	-0.066	0.377

* Correlation is significant at the 0.05 level (1-tailed).
** Correlation is significant at the 0.01 level (1-tailed)

Table 15: Institutional fit in AUN (by Position)

	Impact of differences		Consortium heterogeneity		Institutional Fit	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Differences in legislation	0.07	-0.14	3.54	3.71	0.29	-0.19
Differences in national culture	0.27	0.10	3.61	3.72	0.97	0.44
Differences in conceptions of academic work	0.15	0.02	3.67	3.33	0.36	0.10
Differences in the division of authority	0.13	-0.04	3.74	3.52	0.34	-0.18
Differences in organisational procedures	0.13	0.00	3.38	3.44	0.52	-0.17
Differences in the character of universities	0.12	-0.01	3.60	3.41	0.27	-0.12
Overall Institutional Fit					0.39	-0.06

Table 16: Former Cooperation in AUN (by Position)

	Non-academics Mean	Academics Mean
Former cooperation with partner countries	2.20*	1.67*
Former cooperation with partner universities	2.12**	1.50**
Former cooperation	2.16**	1.59**

* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 17: Relation between Compatibility and Performance in ALMA (grouped by Position)

		Consortium Performance	Individual Performance	Relational Performance
Institutional Fit	Non-academics	0.254+	0.051	0.114
	Academics	-0.184	-0.166	0.023
Former Cooperation	Non-academics	0.094	0.143	0.516**
	Academics	0.037	0.063	-0.088

\+ *Correlation is significant at the 0.1 level (1-tailed).*
** *Correlation is significant at the 0.01 level (1-tailed)*

Coimbra Group

Table 19: Mean priority, attainment and performance per objective (by position)

AUN Objectives:	Priority		Attainment		Performance	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Facilitation and stimulation of student mobility within Europe	0.86	0.77	4.10**	3.07**	3.56*	2.69*
Facilitation and stimulation of staff mobility within Europe	0.78	0.76	3.63*	2.93*	2.92+	2.29+
Arrangements that enable free tuition for students of other European universities	0.66	0.61	3.53*	2.83*	2.58	2.23
Recognition of study periods spent by students in other European universities	0.76	0.74	4.14**	2.93**	3.45*	2.45*
The establishment of joint educational programmes with other European universities	0.81	0.72	3.88*	3.00*	3.36*	2.39*
Promotion and encouragement of joint research projects among European researchers.	0.75	0.85	3.25	3.07	2.58	2.64
The encouragement of additional cultural and sporting activities	0.52+	0.41+	3.03*	2.18*	1.86	1.29
Providing wider opportunities for non-European students in a European university to experience other European universities, in order to broaden their understanding of European culture	0.70	0.73	3.25	2.73	2.47	2.35
Overall Consortium Performance					2.80**	2.25**

+ *Difference in mean significant for p<.1*
* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 20: Mean individual performance (by Position)

Affected Areas:	Non-academics	Academics
Impact on the quality of teaching	3.40	3.82
Impact on the quality of research	3.38*	4.00*
Impact on the regional socio-economic environment of the university	2.93	2.25
Impact on organisation & management within the university	3.57	3.36
Impact on the competencies of graduates	3.43	3.42
Impact on the reputation of university	4.31	4.40
Impact on enrolment in the university	3.65+	3.10+
Impact on the access to international funding opportunities	3.67	3.67
Overall Individual Performance	3.65	3.67

+   *Difference in mean significant for p<.1*
*   *Difference in mean significant for p<.05*

Table 21: Mean relational performance (by Position)

Relational Items:	Non-academics	Academics
Communication within my university (on Coimbra strategies and activities) has been sufficient	3.32*	2.42*
Communication between us and our partners (on Coimbra strategies and activities) has been sufficient	3.42+	2.89+
The division of labour and authority within the university (on Coimbra activities) has been clear	3.58	3.12
The division of labour and authority between us and our partners (on Coimbra activities) has been clear	3.60	3.07
The internal coordination of Coimbra activities has been effective	3.70*	3.06*
The coordination of Coimbra activities on Coimbra level has been effective	3.60	3.25
There is strong commitment on Coimbra activities within my university	3.33	2.88
Other Coimbra partners are strongly committed to Coimbra Activities	3.45	3.33
Overall Relational performance	3.34*	2.97

+   *Difference in mean significant for p<.1*
*   *Difference in mean significant for p<.05*

Table 22: Mean importance, presence and complementarity of resources (by Position)

	Importance of resources		Presence of resources		Complementarity in resources	
	Non-acad.	Acad.	Non-acad.	Acad.	Non-acad.	Acad.
Proximity of the partner	0.42	0.35	2.65	3.18	1.12	1.02
Positive country characteristics of partner	0.63	0.65	3.60	3.63	2.26	2.35
The partners' access to student markets	0.64**	0.42**	3.10	2.95	1.95**	1.19**
Language of instruction at partner	0.68	0.67	3.73	3.53	2.54	2.36
Financial resources of partner university	0.59	0.51	3.41	3.16	1.99	1.60
Physical infrastructure/facilities of partner	0.68**	0.50**	3.79	3.58	2.60**	1.80**
High quality in research	0.92	0.89	4.67	4.33	4.28	3.83
High quality in education	0.91*	0.82*	4.62	4.47	4.21*	3.65*
Quality of management in partner university	0.73	0.69	3.89	4.00	2.84	2.73
Existing external relations of the partner	0.74**	0.60**	4.00	3.95	3.02**	2.28**
Reputation of partner	0.85	0.79	4.38	4.42	3.79	3.52
ICT-standards of the partner university	0.71	0.66	3.94	3.63	2.91	2.39
Overall Complementarity					2.77*	2.40*

* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 23: Relation between complementarity and performance (grouped by Position)

		Consortium Performance		Individual Performance		Relational Performance	
		Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)
Complementarity	Non-academic	0.479**	0.001	0.044	0.393	-0.213+	0.088
	Academic	0.126	0.321	-0.016	0.476	0.107	0.336

+ *Correlation is significant at the 0.1 level (1-tailed).*
** *Correlation is significant at the 0.01 level (1-tailed)*

Table 24: Institutional fit in Coimbra (by Position)

	Impact of differences		Consortium heterogeneity		Institutional Fit	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Differences in legislation	-0.29	-0.28	3.50**	4.06**	-1.23	-1.11
Differences in national culture	0.31	0.30	3.76	4.06	1.25	1.25
Differences in conceptions of academic work	-0.05*	0.20*	2.58	3.06	-0.16+	0.63+
Differences in the division of authority	0.09+	-0.16+	3.47	3.75	0.27	-0.61
Differences in organisational procedures	-0.07	-0.11	3.32+	3.75+	-0.33	-0.68
Differences in the character of universities	0.13	0.16	2.54	2.70	0.32	0.45
Overall Institutional Fit	0.02	0.03	3.20*	3.53*	0.03	0.04

+ *Difference in mean significant for p<.1*
* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 25: Former Cooperation in AUN (by Position)

	Non-academics Mean	Academics Mean
Former cooperation with partner countries	2.94	2.73
Former cooperation with partner universities	2.50	1.94
Former cooperation	2.72	2.33

* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 26: Relation between Compatibility and Performance in ALMA (grouped by Position)

		Consortium Performance	Individual Performance	Relational Performance
Institutional Fit	Non-academics	0.059	0.033	0.052
	Academics	-0.133	0.166	0.094
Former Cooperation	Non-academics	0.465**	-0.161	0.070
	Academics	0.175	0.108	0.180

+ *Correlation is significant at the 0.1 level (1-tailed).*
** *Correlation is significant at the 0.01 level (1-tailed)*

European Consortium of Innovative Universities

Table 28: Mean priority, attainment and performance per objective (by position.)

ECIU Objectives:	Priority		Attainment		Performance	
	Non-ac.	Acad.	Non-ac.	Acad.	Non-ac.	Acad.
Development of flexible educational programmes	0.75+	0.60+	2.52	2.80	1.91	1.80
Broadening the scope of student mobility	0.79**	0.57**	3.13	3.75	2.60	2.65
Cooperation with respect to ICT in education	0.73	0.65	3.40	3.00	2.67	2.40
Development of entrepreneurship modules	0.62	0.51	2.72	2.00	1.77	1.80
Further development of a quality review system	0.66**	0.45**	2.00	-	1.37	-
Structured exchange of experience in teaching and administrative staff development	0.71**	0.52**	2.68	4.00	2.07	3.20
Establishment of European research schools	0.55	0.54	2.29	3.00	1.48	1.80
Establishment of joint European doctorates	0.64	0.51	2.56	2.00	1.77	1.20
System for joint investment in facilities and ICT	0.51+	0.37+	2.73	1.00	1.73	0.20
European cooperation in research	0.71	0.80	2.72	2.67	2.18	2.43
Closer cooperation between European regions	0.62	0.68	2.62	3.00	1.51**	3.00**
Knowledge transfer between university and surrounding society	0.73	0.74	2.72	2.50	2.15	2.50
Cooperation between European science parks	0.55	0.49	2.13	2.00	1.30	2.00
Integration of regional development, research and education	0.64	0.62	2.71	1.50	1.86	1.50
Seminars and other forms of information exchange in university management	0.69*	0.48*	3.15	3.00	2.37	2.40
Thematic conferences on the nature of innovative universities	0.62	0.52	2.76	3.00	1.71	1.96
Development of cooperation with international higher education consortia	0.72	0.68	2.89	3.00	2.24	2.20
Cooperation with other universities in negotiating with the EU and other authorities	0.72	0.62	3.06	3.00	2.28	1.50
Overall Consortium Performance	0.66*	0.57*	2.64	2.76	1.89	1.95

+ *Difference in mean significant for p<.1*
* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 29: Mean individual performance (by Position)

Affected Areas:	Non-academics	Academics
Impact on the quality of teaching	3.32	3.33
Impact on the quality of research	3.11	3.44
Impact on the regional socio-economic environment of the university	3.00	2.86
Impact on organisation & management within the university	3.50	3.17
Impact on the competencies of graduates	3.27	3.25
Impact on the reputation of university	3.95*	3.45*
Impact on enrolment in the university	3.00	3.00
Impact on the access to international funding opportunities	3.40	3.00
Overall Individual Performance	3.35	3.33

* *Difference in mean significant for p<.05*

Table 30: Mean relational performance (by Position)

Relational Items:	Non-academics	Academics
Communication within my university (on ECIU strategies and activities) has been sufficient	2.24	2.38
Communication between us and our partners (on ECIU strategies and activities) has been sufficient	2.62	2.22
The division of labour and authority within the university (on ECIU activities) has been clear	2.89	2.90
The division of labour and authority between us and our partners (on ECIU activities) has been clear	3.00	2.50
The internal coordination of ECIU activities has been effective	3.19	3.00
The coordination of ECIU activities on ECIU level has been effective	3.25+	2.56+
There is strong commitment on ECIU activities within my university	2.93	2.85
Other ECIU partners are strongly committed to ECIU Activities	3.00*	2.20*
Overall Relational performance	2.87	2.66

** *Difference in mean significant for p<.01*

Table 31: Mean importance, presence and complementarity of resources (by Position)

	Importance of resources		Presence of resources		Complementarity in resources	
	Non-acad.	Acad.	Non-acad.	Acad.	Non-acad.	Acad.
Proximity of the partner	0.52	0.48	3.40	3.36	1.72	1.55
Positive country characteristics of partner	0.68**	0.48**	3.29	3.18	2.34**	1.31**
The partners' access to student markets	0.60	0.51	3.46	3.40	2.09	1.86
Language of instruction at partner	0.66	0.65	3.58	3.25	2.43	2.42
Financial resources of partner university	0.57	0.54	3.50*	2.56*	2.06	1.27
Physical infrastructure/facilities of partner	0.68*	0.54*	3.50	3.63	2.40	1.95
High quality in research	0.86	0.86	4.48	4.10	3.80	3.58
High quality in education	0.87+	0.74+	4.35	4.08	3.76*	2.98*
Quality of management in partner university	0.80**	0.62**	4.04	4.10	3.18	2.56
Existing external relations of the partner	0.66	0.60	3.88	3.33	2.60	2.00
Reputation of partner	0.82	0.78	4.12	4.08	3.38	3.20
ICT-standards of the partner university	0.71*	0.57*	3.92	4.00	2.81	2.48
Overall Complementarity					2.69+	2.27+

+ *Difference in mean significant for p<.1*
* *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 32: Relation between complementarity and performance (by Position)

		Consortium Performance		Individual Performance		Relational Performance	
		Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)	Pearson R	Sign (1-tailed)
Complementarity	Non-academic	0.001	0.499	0.018	0.466	-0.236	0.118
	Academic	0.675*	0.023	0.111	0.359	0.423+	0.075

+ *Correlation is significant at the 0.1 level (1-tailed).*
* *Correlation is significant at the 0.05 level (1-tailed)*

Appendices

Table 33: Institutional fit in ECIU (by Position)

	Impact of differences		Consortium heterogeneity		Institutional Fit	
	Non-academics	Academics	Non-academics	Academics	Non-academics	Academics
Differences in legislation	-0.45	-0.42	4.04	3.90	-1.66	-1.79
Differences in national culture	0.17	0.04	3.76	3.55	0.58	0.15
Differences in conceptions of academic work	0.07+	-0.12+	3.30	3.20	0.29+	-0.35+
Differences in the division of authority	-0.11	-0.19	3.55	3.30	-0.27	-0.73
Differences in organisational procedures	-0.16	-0.19	3.73	3.55	-0.35	-0.81
Differences in the character of universities	0.08	0.04	2.97	2.86	0.25	0.18
Overall Institutional Fit	-0.07	-0.14	3.53	3.35	-0.16	-0.52

+   *Correlation is significant at the 0.1 level (1-tailed).*

Table 34: Former Cooperation in AUN (by Position)

	Non-academics Mean	Academics Mean
Former cooperation with partner countries	3.28	3.03
Former cooperation with partner universities	1.78*	1.22*
Former cooperation	2.53**	2.13**

*   *Difference in mean significant for p<.05*
** *Difference in mean significant for p<.01*

Table 35: Relation between Compatibility and Performance in ALMA (by Position)

		Consortium Performance	Individual Performance	Relational Performance
Institutional Fit	Non-academics	0.035	0.120	-0.186
	Academics	0.098	0.187	-0.117
Former Cooperation	Non-academics	-0.383*	0.237	-0.078
	Academics	0.292	-0.160	0.272

** *Correlation is significant at the 0.01 level (1-tailed)*

Appendix V: Questionnaire

Below, the 'paper'-version of the questionnaire is displayed. Respondents also had the opportunity to fill out a web-based questionnaire.

1	Significance of international co operation

1a.	In your opinion how important is internationalisation of higher education and the existence of a network of international relations for:

	Not important				Very important
The university as a whole	☐	☐	☐	☐	☐
Your unit / facultuly / department	☐	☐	☐	☐	☐
You as an academic or professional	☐	☐	☐	☐	☐
The quality of education	☐	☐	☐	☐	☐
The quality of research	☐	☐	☐	☐	☐

1b.	For you personally, what is the importance of these different kinds of international linkages:

	Not important				Very important
The international contacts of your university	☐	☐	☐	☐	☐
The international contacts of your department / unit	☐	☐	☐	☐	☐
Your personal international professional contacts	☐	☐	☐	☐	☐

1c.	**How would you characterise the spatial scope of your activities:**

With respect to the *content* of your work:	With respect to your personal network of *professional contacts*
☐ Global	☐ Global
☐ European	☐ European
☐ Sub-European / sub-ASEAN	☐ Sub-European / sub-ASEAN
☐ National	☐ National
☐ Local	☐ Local
☐ Not relevant	

Motives for cooperation

2a.	**In your international relations, to what extent do the following characteristics of universities play a role in choosing partners for international cooperation?**

	Not important				Very important
Proximity of a partner university	☐	☐	☐	☐	☐
Country of a partner university	☐	☐	☐	☐	☐
Access to new student markets	☐	☐	☐	☐	☐
Language of instruction in a partner university	☐	☐	☐	☐	☐
Financial resources of a partner university	☐	☐	☐	☐	☐
Physical infrastructure and facilites of a partner university	☐	☐	☐	☐	☐
Academic quality in research of a partner university	☐	☐	☐	☐	☐
Academic quality in education of a partner university	☐	☐	☐	☐	☐
Management and leadership quality in a partner university	☐	☐	☐	☐	☐
The exisiting external relations of a university	☐	☐	☐	☐	☐
The reputation of a partner university	☐	☐	☐	☐	☐
Standard of the use of ICT in a partner university	☐	☐	☐	☐	☐

Other characteristics:

(xiii).

(xiv).

2b. To what extent would you rate these characteristics [i / xv] as positive for the partners in the CONSORTIUM?

	Positive for <u>none</u> of the partner universities			Positive for <u>all</u> of the partner universities		Don't know
Proximity of the CONSORTIUM partner	☐	☐	☐	☐	☐	☐
Country of the CONSORTIUM partner	☐	☐	☐	☐	☐	☐
Access to new student markets through CONSORTIUM partners	☐	☐	☐	☐	☐	☐
Language of instruction at CONSORTIUM partners	☐	☐	☐	☐	☐	☐
Financial resources of the CONSORTIUM partners	☐	☐	☐	☐	☐	☐
Physical infrastructure and facilites at the CONSORTIUM partners	☐	☐	☐	☐	☐	☐
Academic quality in research in the CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
Academic quality in education in the CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
Management and leadership quality in the CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
The existing external relations of the CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
The reputation of CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
Standard of the use of ICT in CONSORTIUM partner universities	☐	☐	☐	☐	☐	☐
Presence of other characteristics (mentioned in 2a)						
Characteristics mentioned in 2a (xiii)	☐	☐	☐	☐	☐	☐
Characteristics mentioned in 2a (xiv)	☐	☐	☐	☐	☐	☐

CONSORTIUM Activities

3a.	In what type of CONSORTIUM activity / activities are you involved? (multiple answers possible)

☐ Co-ordination of CONSORTIUM activities

☐ Strategic decision making on CONSORTIUM activities

☐ Student mobility & exchange

☐ Staff mobility & exchange

☐ Establishment of joint education programmes

☐ Joint research

☐ University-industry relations

☐ Regional development

☐ Organisation of conferences/seminars/workshops

☐ Credit transfer and recognition

☐ ICT in education

☐ Library services

☐ Quality Assurance

☐ Cultural activities

☐ Other: _____

3b.	How did you become involved in CONSORTIUM activities?

☐   My involvement naturally arises from my position
            (e.g. as rector/vice-chancellor, administrator, manager, coordinator)

☐   Through my previous personal contacts with staff from CONSORTIUM universities

☐   Instigated on personal initiative

☐   Through appointment or invitation by superiors

☐   Otherwise:

4	Objectives

4a. **Below, you can find several objectives of cooperation between universities.**

Can you state how high these objectives are on your agenda?

	Low priority				High priority
(i) Consortium objective-1 (different for the four consortia)	☐	☐	☐	☐	☐
(ii) Consortium objective-2 (different for the four consortia)	☐	☐	☐	☐	☐
(…)	☐	☐	☐	☐	☐
(n) Consortium objective-n (different for the four consortia)	☐	☐	☐	☐	☐

4b. Can you state how these activities are developing within the CONSORTIUM

	Not satisfactory				Very satisfactory	Don't know
(i) Consortium objective-1 (different for the four consortia)	☐	☐	☐	☐	☐	☐
(ii) Consortium objective-2 (different for the four consortia)	☐	☐	☐	☐	☐	☐
(…)	☐	☐	☐	☐	☐	☐
(n) Consortium objective-n (different for the four consortia)	☐	☐	☐	☐	☐	☐

5.	**Effects of cooperation**

How has CONSORTIUM cooperation affected the following areas?

	Negative effect				Positive effect	Don't know
The quality of teaching in your university	☐	☐	☐	☐	☐	☐
(i) The quality of research in your university	☐	☐	☐	☐	☐	☐
The socio-economic development of your region	☐	☐	☐	☐	☐	☐
The quality of organisation & management in your university	☐	☐	☐	☐	☐	☐
The competencies of the graduates in your university	☐	☐	☐	☐	☐	☐
The reputation of your university	☐	☐	☐	☐	☐	☐
The enrolment of students in your university	☐	☐	☐	☐	☐	☐
Your university's access to other funding agencies	☐	☐	☐	☐	☐	☐

Other areas affected:

(ix).

(x).

(xi).

| **6** | **Partner characteristics in international cooperation** |

| **6a.** | **In general (based on your past international activities) do the following differences have an impact on the effect of cooperation?** |

	Negative effect				Positive effect	Don't know
(i) Differences in legislation on higher education and the national higher education systems	☐	☐	☐	☐	☐	☐
(ii) Differences in national culture of the country in which the university is located	☐	☐	☐	☐	☐	☐
(iii) Differences in conceptions of academic work and ideas about how academic work should be organised	☐	☐	☐	☐	☐	☐
(iv) Differences in the division of authority between government / universities / faculties / academics	☐	☐	☐	☐	☐	☐
(v) Differences in formal organisational procedures of the universities	☐	☐	☐	☐	☐	☐
(vi) Differences in scope of the universities (comprehensive versus specialised universities)	☐	☐	☐	☐	☐	☐
(vii) Differences in size (large versus small universities)	☐	☐	☐	☐	☐	☐
(viii) Differences in age (old, traditional vs. recently established universities)	☐	☐	☐	☐	☐	☐

| **Are there other important differences – either between countries or universities – that have an impact on the effectiveness of co operation?** |

(ix)

(x)

6b.	**Taking these issues into account would you say the CONSORTIUM is largely homogeneous or is the network heterogeneous on those issues?**

	Homo- geneous			Hetero- geneous	Don't know	
(i) Diversity in legislation on higher education and the national higher education systems	☐	☐	☐	☐	☐	☐
(ii) Diversity in national culture of the countries in which the universities are located	☐	☐	☐	☐	☐	☐
(iii) Diversity in conceptions of academic work and ideas about how academic work should be organised	☐	☐	☐	☐	☐	☐
(iv) Diversity in the division of authority between government / universities / faculties / academics	☐	☐	☐	☐	☐	☐
(v) Diversity in formal organisational procedures of the universities	☐	☐	☐	☐	☐	☐
(vi) Diversity in scope of the universities (comprehensive versus specialised universities)	☐	☐	☐	☐	☐	☐
(vii) Diversity in size (large versus small universities)	☐	☐	☐	☐	☐	☐
(viii) Diversity in age (old, traditional vs. recently established universities)	☐	☐	☐	☐	☐	☐

Are there other important differences – either between countries or universities in the consortium – that have had an impact on the effectiveness of cooperation in the consortium?

(ix)

(x)

7.   Former Relations

CONSORTIUM Countries:

7a.	Before cooperating within CONSORTIUM had you been working with colleagues from this country?

	Never				Frequently
(i) Partner Country 1	☐	☐	☐	☐	☐
(ii) Partner Country 2	☐	☐	☐	☐	☐
(…)	☐	☐	☐	☐	☐
(n) Partner Country n	☐	☐	☐	☐	☐

CONSORTIUM Universities:

7b.	Before cooperating within CONSORTIUM had you been working with colleagues from this university

	Never				Frequently
(i) Partner University 1	☐	☐	☐	☐	☐
(ii) Partner University 2	☐	☐	☐	☐	☐
(…)	☐	☐	☐	☐	☐
(n) Partner University n	☐	☐	☐	☐	☐

8.	**Implementation of cooperation**

Do you agree with the following statements?

	Strongly disagree				strongly agree	Don't know
a. Communication						
Communication <u>within my university</u> (on CONSORTIUM strategies and activities) has been sufficient	☐	☐	☐	☐	☐	☐
Communication <u>between us and our partners</u> (on CONSORTIUM strategies and activities) has been sufficient	☐	☐	☐	☐	☐	☐
b. Division of responsibilities						
The division of labour and authority <u>within my university</u> (on CONSORTIUM activities) has been clear	☐	☐	☐	☐	☐	☐
The division of labour and authority <u>between us and our partners</u> (on CONSORTIUM activities) has been clear	☐	☐	☐	☐	☐	☐
c. Coordination						
The <u>internal coordination</u> of CONSORTIUM activities within my university has been effective	☐	☐	☐	☐	☐	☐
The coordination of CONSORTIUM activities <u>on CONSORTIUM level</u> has been effective	☐	☐	☐	☐	☐	☐
d. Commitment						
There is a strong commitment on CONSORTIUM activities <u>within my university</u>	☐	☐	☐	☐	☐	☐
<u>Other CONSORTIUM partners</u> are strongly committed to CONSORTIUM activities	☐	☐	☐	☐	☐	☐

9.	Measures

9a.   Have measures been taken to deal with the following issues?
If measures have been taken, please state WHAT measures were taken and by WHOM (e.g. network as a whole, university's central level, faculty level, individual measures, etc). If no measures were taken leave the box blank.

1. Problems in cooperation due to distances

2. Problems in cooperation due to differences in national culture

3. Problems in cooperation due to language differences

4. Problems in cooperation due to financial difficulties

5. Problems in cooperation due to legal difficulties

6. Problems in cooperation due to different ideas about the organisation of academic work

7. Problems in cooperation due to a lack of communication between different partner universities

8. Problems in cooperation due to an unequal distribution of work between the different partner universities

9. Problems in cooperation due to a lack of coordination between different partner universities

10. Problems in cooperation due to a lack of commitment between different partner universities

11. Problems in cooperation due to a lack of information about the partner universities

12. Measures for other issues

13. Measures for other issues

9b.	**Could you give any recommendations on measures to improve cooperation between the CONSORTIUM partner universities**

(i) Recommendation:

(ii) Recommendation:

10.	**Personal Data**

10a.   **Name:**

10b.   **Position:**

☐ Rector / President / Vice-chancellor

☐ Coordinator of CONSORTIUM activities

☐ Staff member of international relations office

☐ Dean

☐ Administrator / manager

☐ Professor

☐ Other Academic

☐ Other:

10c.   **University**

10d.   **Department/ Faculty/Subunit**

10e. **How many hours per month do you spend on CONSORTIUM Activities (estimated average per month for the past year)**

☐ 0-5 hours

☐ 5-10 hours

☐ 10-20 hours

☐ 20-40 hours

☐ more than 40 hours

10f. If you would like to be informed on the results of the study, please fill in your e-mail address:

Additional comments:

Appendix VI: Interview Guidelines

Below are the general guidelines for the interviews. In the individual interviews, questions were sometimes focused on specific activities within the consortia. The interviews were conducted in a semi-structured manner.

1 Governance and Strategy

***Establishment* of the Consortium**
- Initiative and en procedures for partner choice

- Strategic benefit for participating universities

Changes in *strategies and policies*, both formally and informally
- Why have strategies and policies been changed

- How have strategies and policies changed

Administrative structure and procedures
- Tasks of varuious bodies

- Distribution of (financial) means.

2 Management

***Relational* issues in cooperation**
- Have measures been taken in case of asymmetry in cooperation in terms of effort and commitment of the partner universities

***Financial* issues and solutions**

- Have problems arised due to uneven distribution of costs

- Has the consortium sought for external sources of funding

***Legal problems* and solutions**

- In the field of educational differences

- Legal problems in mobility

- Legal problems due to organisational differences and personnel

Other problems

- Due to linguistic differences

- Due to cultural differences (both national and organisational culture)

- Due to technological differences and standards

- Other measures for improving cooperation

3 External developments

Changes due to external developments
- Due to national developments in the member countries

- Due to national programmes in the field of internationalisation of higher education

- Due to European/ASEAN changes in the field of Higher Education

- Due to (new) European/ASEAN cooperation programmes

- Due to changes at the global level (general changes, GATS, World Bank, OECD)

4 Future expectations

Changes foreseen in

- The portfolio of activities of the Consortium

- Membership of the Consortium

- The perceived importance of the consortium for the member universities

Appendix VII: Consortia Documents

List of documents of the consortia consulted for the case studies:

ALMA

ALMA Website *http://www.alma-emr.nl/*

ALMA (1990). *ALMA agreement*. Maastricht, November 1990.

Nuffic (2000). *Voorlopige Synthese van Culturele Aspecten van Grensoverschrijdende Onderwijssamenwerking*; Interim Rapport. Maastricht/Den Haag: Universiteit Maastricht/Nuffic.

ALMA (2001) *Eureview; the student guide to the Euregion Meuse-Rhine*. Maastricht: ALMA

Universiteit Maastricht/Fontys (2001) *Verslag Slotconferentie 'Euregional Grensoverschrijdende Samenwerking: Goede Buren, Nabije Vrienden'*. Venlo, 9 November 2001.

ASEAN University Network

AUN Website: http://www.aun.chula.ac.th/

AUN Virtual University Website: http://aunvirtualu.dlsu.edu.ph/

ASEAN Secretariat (1991-2002) *ASEAN Annual Report* 1991-1992 / 2002/2003. Jakarta: ASEAN Secretariat.

AUN (2000-2004) *AUN Newsletters*. Volume I (2000), Volume II (2001), Volume III-1 (2002), Volume III-2 (2002), Volume IV (2003). Bangkok: AUN Secretariat.

AUN (1995) *Charter of the ASEAN University Network*. Bangkok: AUN

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AUN (2000) *The Bangkok Accord on AUN-Quality Assurance*. Bangkok, 12-13 November 2000.

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AUN (2001) *AUN the First Five years: Paving the Path for Partnership and Progress*. Bangkok: AUN.

AUN (2001) *Report of the First Workshop on AUN-QA For Chief Quality Officers*. Kuala Lumpur, 18-20 April 2001.

AUN (2001) *Report of the Second Workshop on AUN-QA For Chief Quality Officers*. Bangkok and Chonburi, Thailand, 18-20 October 2001.

AUN (2002) *Report of the Third Workshop on AUN-QA For Chief Quality Officers*. Yangon, Myanmar, 28-30 March 2002.

AUN (2003) *Minutes of the Fifth Workshop on AUN-QA For Chief Quality Officers*. Bandar Seri Begawan, Brunei Darussalam, 24-25 March 2003.

Severino, R.C. (2002) *ASEAN Today And Tomorrow. Selected Speeches of Rodolfo C. Severino, Jr., Secretary-General Of the Association of Southeast Asian Nations*. Jakarta: ASEAN Secretariat.

Coimbra Group

Coimbra Group Website: *http://www.coimbra-group.be/*

Task Force Documents: *http://www.coimbra-group.be/04_documents.htm*

Coimbra Group (1991-2003) *Coimbra Group Newsletters*: Nr. 1 (November, 1991); Nr.2 (June 1992); Nr.3 (February 1993); Nr. 4 (May, 1993); Nr. 5 (December, 1993); Nr. 6

(May, 1994); Nr. 7 (May, 1995); Nr.8 (December, 1995); Nr.9 (May, 1996), Nr.10 (December, 1996); Nr.11 (May, 1997); Nr.12 (December, 1997); Nr.13 (May, 1998); Nr.14 (December, 1998); Nr. 15 (January, 2000); Nr.16 (June, 2000); Nr.17 (January, 2001); Nr.18 (December, 2001); Nr.19 (Summer 2002); Nr. 20 (Winter 2002-2003); Nr.21 (Autumn, 2003). Brussels: Coimbra Group Office.

Coimbra Group (1987) *Combra group Charter*. Pavia, 24 September, 1987.

Coimbra Group (1999) *Charter, Declarations and Organizational Structure; Revised and adopted at the Pavia General Assembly*. June, 1999

Coimbra Group SWOT Analysis Committee (2002) *Coimbra Group SWOT Committee Final report and Recommendations*.

Coimbra Group (2002) *European Union Policies and Strategic Change for E-learning in Universities; Report of the Project "Higher Education Consultation in Technologies of Information and Communication" (HECTIC)*. Brussels: Coimbra Group Office.

European Consortium of Innovative Universities

ECIU Website: *http://www.eciu.org/*

ECIU (1997). *ECIU Charter*. Dortmund, 18 November, 1997.

ECIU (1997/1999). ECIU Research Survey (1997; updated 1999).

ECIU Executive Board (1999). Report of the Second Meeting. Barcelona, 3 December, 1999.

ECIU Executive Board (1999). *ECIU strategy for the years 2000 - 2002*. Barcelona, 3 December, 1999.

ECIU/EQRC (2001) *ECIU/EQRC Quality Review Program 2001*. Part I: Organization and Policies; Part II: Evaluation & Accreditation Criteria; Part III: Evaluation & Accreditation Procedures.

ECIU/WSL (2001). *Action Plan for ECIU Web Supported Learning Pilot Project*. September 2001- April 2002.

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