

**QANU Prospective Review 2011-2014
of the Institute for
Innovation and Governance Studies
(IGS-UT)**

QANU, March 2011

Quality Assurance Netherlands Universities (QANU)
Catharijnesingel 56
PO Box 8035
3503 RA Utrecht
The Netherlands

Phone: 030 230 3100
Telefax: 030 230 3129
E-mail: info@qanu.nl
Internet: www.qanu.nl

© 2011 QANU Q303

Text and numerical material from this publication may be reproduced in print, by photocopying, or by any other means with the permission of QANU and if the source is mentioned.

Contents:

1.	Purpose of this review; composition of the Committee; documentation	5
2.	Mission, vision and ambition of IGS	6
3.	Analysis of relevant context: trends in governance and innovation	6
4.	IGS objectives and direction	8
5.	Measures taken and planned	10
6.	Overall conclusions	11
	Appendix: Curricula vitae of the committee members	12

1. Purpose of this review; composition of the Committee; documentation

This review is a prospective assessment for the management of the Institute for Innovation and Governance Studies (IGS) of the University of Twente to adjust the course and the measures to be taken in the near future. Specific questions are:

- Does the strategic programme provide the institute with the direction and ambition it will need in the period 2010 – 2014?
- Are the strategic measures formulated in Chapter 2 sufficient to meet the institute's objectives and ambitions?

To answer these questions, the Committee needed to know:

- what is the mission, vision and ambition of IGS?
- what is their analysis of the relevant context?
- what are the objectives and the chosen direction?
- what measures are taken and planned?

We have tried to answer these questions systematically in this report, along the lines of the documentation provided by IGS and the interviews during the site-visit, and to provide evaluative and constructive comments in each section. The overall conclusions are presented in the final section.

The Committee was composed as follows:

- Prof. Pieter Hooimeijer, Utrecht University
- Prof. Geert Bouckaert, KU Leuven
- Prof. Pierre-Benoît Joly, National Institute of Agronomic Research (INRA) and French Institute for the Studies of Research and Innovation in Society (IFRIS).

A short CV of the committee members is provided in the Appendix.

Roel Bennink of the independent agency Quality Assurance Netherlands Universities (QANU) was appointed secretary of the Committee.

The Institute provided the Committee with the following documents:

- a self-assessment report entitled “Prospective Review 2011-2014, Governance and management of technological and social innovation”
- the UT strategic plan Route 14
- three QANU reports of the reviews of IGS research programmes
 - Science, Technology and Innovation Studies (STIS-UT), 2009
 - Public Administration IGS-UT, 2009
 - Innovation and Entrepreneurship IGS-UT, 2010.

2. Mission, vision and ambition of IGS

IGS mission

The Institute for Innovation and Governance Studies (IGS) is an internationally oriented priority research institute of the University of Twente (UT), conducting multi-disciplinary research and postgraduate research training in the field of the **governance and management of technological and social innovation**. Issues of co-ordination, steering and the operation of (networks of) actors and institutions in both public and private sectors are addressed from a multi-level, multi-actor systems perspective. IGS strives to combine scientific excellence with relevance for stakeholders in public and private sectors.

IGS scientific approach

Research in IGS is grounded in the **social sciences**, and specifically in:

- business administration (including innovation and entrepreneurship studies),
- public administration (including political science, policy studies, legal studies, economics, and sociology), and
- science, technology, innovation and safety studies.

IGS research is characterized by its **interdisciplinary approach**, combining ideas and insights across scientific disciplines. A **multi-level view** of dynamics in society, from micro- to macro level, is widely shared among its researchers.

IGS employs a **systemic approach**, acknowledging the institutional embeddings of any policy and management as a starting point for strategic analysis and action.

The Committee regards the elements of the scientific approach that IGS has adopted as well-chosen, because they are aimed at placing technology in its context and because they can be expected to contribute to fruitful alliances across disciplines and departments.

3. Analysis of relevant context: trends in governance and innovation

The self-assessment report describes the following trends in governance and innovation, from the scientific perspective of the IGS-research.

1. *Networked governance*

The introduction of the term ‘governance’ in the public sector means that the traditional role of governments has changed, and that the traditional distinction between the public and private sector has become less clear. Regardless of the setting in which it takes place, governance increasingly relies on networked activities. This requires a rethinking of all traditional conceptualizations of steering, deciding and managing.

2. *Networked innovation*

While innovation used to be predominantly conducted within the confines of the industrial firm, nowadays processes of innovation are performed in cooperation with other actors, i.e. other firms, research organizations, and universities. These new configurations (“open innovation”) result in new research questions with respect to the structure of these networks. These new

forms of cooperation also lead to new governance questions (e.g. if such open innovation networks should be more flexible arrangements, or more integrated).

3. Networked science

Questions regarding the relationship between innovation and governance with respect to emerging technologies are gradually developing into a new field of research. The issue here is no longer one of translating new ideas from the development context (such as universities) to the application context (industrial firms). Increasingly the configuration of actors is becoming more complex with changing roles of the universities, research laboratories and governmental laboratories and new phenomena such as research firms.

4. New questions, new answers, new demands

Public sector organizations face new problems that require new answers, and traditional programs and policies need to be redeveloped in the light of new technological possibilities (e.g. in the domain of ICT, medical technology or energy production and conservation). A recurrent question is whether such new policy interventions are effective and cost-efficient. Policymakers and citizens ask whether policies reach their planned goals and at what costs. Furthermore, policymakers oftentimes also want to know beforehand if planned policy measures can reasonably be expected to reach their goal and research can help them to find an answer to this question. In addition to these concerns the public acceptance and the political feasibility of innovations is a persistent issue.

5. New modes of governance

Innovation is also manifested in the development of new ways of organizing and governance in the public domain. New modes of governance can be instigated by the advent of technological innovations, such as information and communication technologies. New technologies in the domain of water management, large infrastructural projects or risk management, imply the need for innovations in the organizational, managerial and governance configurations around such technological applications. This is increasingly recognized, but not yet reflected in a focused effort from the field of public management. In this respect IGS is facing real and important opportunities to contribute, especially in the field of sustainable development and water management.

6. Special role of government

The need for innovations may also originate in changes in the (public opinion about the proper) role of government. After the shift from government to governance (indicating the phenomenon that government has to be seen as one actor in networks among others), we can now see a counter tendency, strengthening the special position of government in these networks. Attention to governance in this respect implies attention to innovation considering the processes of change in the political as well as the administrative processes this entails. This is even more so when the current and persistent discussion about governance in the European context is considered, in particular about the relationships between the various levels of government, i.e. between the European, national and regional levels.

7. New partnerships

Another type of innovation relates to the changing interface between the public and private spheres. In some cases these changes take the form of the privatization of public organizations (such as has happened in the cases of transport, energy and telecom) or the establishment of quasi public agencies – with in the most recent past the counter tendency of a re-establishment of state controls on markets (e.g. the financial markets). In other cases it takes the form of public-private or public – third sector partnerships, for example in local government. Such changes

occur in various policy domains including the health care sector and in the (higher) education sector.

The Committee did not have the task to study the research of the IGS programmes in detail, because this had already been done in the QANU reviews in 2009 and 2010. This means that the Committee is not in a position to comment in detail about the trends in governance and innovation that are described here, in relation to the work in the research programmes. The Committee generally agrees with the trends as described, in the sense that these are interesting developments at various levels and scales, and with differences in speed and impact. On the one hand these trends are precisely what research in governance and innovation has studied and should study, on the other hand it is true that these developments themselves may necessitate strategic repositioning of the research activities in the Institute, in order to maintain the correct focus and complementarity.

The Committee applauds the initiative that IGS has taken to make the perceived trends in governance and innovation a strategic issue for the discussions within the Institute. The Committee regards this as a step towards sharper focus and longer term strategic planning.

4. IGS objectives and direction

According to the self-assessment report, the three reasons for the reorganisation of IGS in 2009 were:

- need for larger and broader programmes with sufficient mass
- need for maintaining and improving quality, also in the new chairs and groups
- need for closer alignment with university aims and technical sciences.

It was decided not to combine IGS with the Institute for Social Sciences and Technology (IBR). The IBR conducts research in the field of human behaviour, focusing on safety, health, learning, design, cognition and communication, and the role of technology in these areas. The orientation is on societal issues and interventions.

The following key performance indicators have been defined for IGS:

1. The *number of PhD defenses* per tenured research FTE should be 1 per year.
2. The *number of publications in ISI-journals* per tenured research FTE should be 3 to 4 per year.
3. The *number of publications in non-ISI-journals* per tenured research FTE should be 3 or more per year.
4. The *number of books or book contributions* per tenured research FTE should be 3 per year.
5. The *research effort directed at valorisation* should be between 20 and 50 % of the total effort, with a target value of 50 FTE.
6. The *number of spin-offs* per year should be 30, in three types:
 - a. based on IGS-research (target value 2-3)
 - b. supported by Venture lab (number of businesses)
 - c. based on the TOP programme (number of positions)
7. At least 16 points or an average score of 4 in programme assessments, plus implementation of the recommendations.
8. The percentage of external funding should be 60%.

The Committee has the impression that the recent reorganisation of IGS has had important consequences for the focus and mass of the research programmes. An essential consideration is the need for closer alignment with the university aims and with the technical sciences in the university. That alignment must be regarded as an invigorating source of added value both for IGS and for the UT.

The Committee is fully confident that it was a wise decision not to combine IGS with the Institute for Social Sciences and Technology (IBR). Of course, this does not mean that between these Institutes there are no potentially fruitful areas of contact in the domains of behaviour, learning, design processes, communication, safety and the role of technology.

The Committee regards the performance indicators that have been defined and the targets that have been set as a useful basic set of management data for the programmes and the Institute. The Committee has noticed that the performance indicators are not yet fully implemented in the strategy of the SRO's.

In the view of the Committee, the SRO's should define their current situation with a view to the development that is needed to meet the targets. Important indicators are the number of PhD theses completed and the number of articles in ISI-journals.

The programme directors need to be aware of the exact data and there needs to be a general strategy on how to reach the targets in 2014. In order to facilitate and utilise this, IGS needs to improve its grasp on the management information and progress monitoring.

5. Measures taken and planned

To meet the performance indicators and to enhance the focus and mass of the Institute, IGS has defined the following policy measures:

- stimulate coherence and cooperation within the SRO's with "additional strategic funds" of k€ 200 per year
- start an academics skills programme in 2011
- stimulate SRO's to participate in the selective Twente Graduate School (TGS)
- set up a Datalab for data analysis
- stimulate internationalisation by supporting conferences, visits, editorships and networks.

The Committee fully supports these measures. They are essential steps towards greater focus and coherence in the Institute. They will require high-quality management information and progress monitoring, and a shared long-term vision on the core research themes and approaches, not only at the level of the Institutes and the programmes, but also in connection with the research partners in the rest of the University.

The Committee has the impression that the present situation provides a good basis for a fruitful discussion about priorities. Generally speaking, the current four areas of IGS research are Science Policy, Public Administration, Business Administration and Natural Resources. The research in these areas is strong enough to be the driving force for the teaching programmes, or at least to become a stronger factor than seems to be the case at present. The efforts to develop a research master in 2011 are essential in this respect.

The research master seems to be regarded as a necessity for meeting the IGS goals, but the Committee noticed that there is not yet a sufficiently clear outline of the contents and feasibility of such a programme. Ideally, the discussions about this will benefit from and feed into the development of a longer term strategy.

Another strategic element to be considered is the development of a solid infrastructure for the primary research data. The current plan for a Datalab for data analysis is a good idea and the Committee believes that it can be extended to different types of data and software.

6. Overall conclusions

Technology in context

The Committee has come to the conclusion that if IGS did not exist, the University of Twente would have to invent it. The Committee believes that IGS can be regarded as a crucial element in the University of Twente, because it places technology in its context. From a strategic point of view it would be very undesirable not to invest in this Institute.

The Committee has the impression that the recent reorganisation of IGS has had important consequences for the focus and mass of the research programmes. An essential consideration in that reorganisation was the need for closer alignment with the university aims and with the technical sciences in the university. That alignment must be regarded as an invigorating source of added value both for IGS and for the UT.

The Committee was asked to do a prospective review and not to look back, but even so it became clear that the Institute has taken positive actions regarding the programmes. Both on the level of the programmes and on the level of the Institute there is much to be proud of. The Committee was especially struck by the international connections of the groups. These are not only the result of the increasingly international nature of academic research, but they can also be attributed to a careful recruitment policy.

Direction and ambition

Based on the observations outlined in this report, the Committee concludes that the strategic direction and ambition of the IGS are well-chosen and sound. The Committee expects that the measures that have been taken are a good step towards reaching the objectives that are set for the period 2010 – 2014, and should now serve as the starting point for looking even further ahead.

Long-term strategy

To be fully prepared to meet the objectives and ambitions towards 2014 and beyond, the Committee believes that IGS needs to develop a longer term strategy which allows the current Strategic Research Orientations to become strong research programmes. That will involve reducing some of the diversity and flexibility, and making clear choices. In the past years small steps were taken that each gave new choices, but in the opinion of the Committee now the whole IGS research programme needs to be thought through completely, on the basis of the principles that were outlined in the reorganisation of 2009.

Building on the strengths and achievements of the programmes, a shared long-term vision needs to be formulated. Where does IGS want to be in 2020 and what needs to be done to get there?

In the view of the Committee, the present short-term strategy largely determines the long-term strategy, which is not a sustainable situation. An example of this is the fact that at one point it was decided that IGS needed to be selective, later it was decided that IGS needed to be inclusive, and more recently it was decided that IGS needs to become more selective again. Without supposing that such unpredictable dynamics can be totally avoided, the Committee believes that a long-term strategy is needed to guide IGS through the years in a rapidly changing context. The core of such a strategy should be a shared understanding of where to be flexible and where not.

Performance indicators

In the view of the Committee, the SRO's should define their current situation with a view to the development that is needed to meet the performance targets that have now been set. Important indicators are the number of PhD theses completed and the number of articles in ISI-journals.

Appendix: Curricula vitae of the committee members

Pieter Hooimeijer is Full Professor of Human Geography and Demography at Utrecht University. He is specialised in household demography, residential mobility/migration and housing market modelling. He has published widely in international journals, such as *Urban Studies*, *Environment & Planning A*, and *TESG (Journal of Economic and Social Geography)*. He is active chair of the “Social Sciences Council” of the Royal Netherlands Academy of Arts and Sciences (2001) and of the steering committee for the NWO research programme “Environment and Behaviour”, GAMON (2003).

He is member of among others: The Social Science Division of NWO (2007); the standing Committee for the Social Sciences ESF (2008); and the Advisory council for research on “Spatial Planning, Nature and the Environment” RMNO (2002). He was visiting Professor in Leicester (UK) and Adelaide (Australia).

Geert Bouckaert is Director of the Public Management Institute, KU Leuven, Belgium. He is specialised in public sector reform in general and financial management and performance measurement in the public sector in particular. Currently he is President of the European Group of Public Administration (EGPA) and of the Flemish Association of Public Administration; coordinator of several research projects (e.g. on the Governmental organization in Flanders, for the Policy Research Centre); member of several international editorial boards; advisor to the public sector both national and international; member of several scientific organisations and working groups (ENA, EPAN; EAPAA; ...).

He was awarded the Alexis de Tocqueville Prize by the Maastricht based European Institute of Public Administration (EIPA) in 2003 (with EU Commissioner Neil Kinnock). He was awarded *doctor honoris causa* degrees from Aix-Marseille III Paul Cézanne University at Aix-en-Provence, France, and from Tallinn Technical University at Tallinn, Estonia.

Pierre-Benoît Joly, economist and sociologist, is senior research fellow (*Directeur de recherche*) at the National Institute of Agronomic Research (INRA), and Director of the French Institute for Studies of Research and Innovation in Society (IFRIS). Paris, France. He holds a degree in agronomy (1982), a PhD in economics (1987) and the “*Habilitation à diriger les recherches*” (1995).

His research activities are focused on the governance of collective risks, socio-technical controversies, the use of scientific advice in public decision making and the forms of public participation in scientific activities. He has participated in numerous European Research Projects and coordinated several of them. He has published about one hundred articles (of which more than 40 in refereed journals), two books and he has coordinated five special issues of social sciences journals.

He has been a member of the Scientific Board of INRA (1998-2002), President of the Scientific Board of the GIS « *Risques Collectifs et Situations de Crise* » (2001-2004), member of the Board of AFSSA (2005-2010), member of the expert group “Science and Governance”, at the European Commission. He is member of the board of the Science and Democracy Network (SDN) based at Harvard University and member of the Council of the European Association for the Study of Science and Technology (EASST). He lectures at *Ecole des Hautes Etudes en Sciences Sociales* (EHESS) on “Science, expertise and public debate” and at Sciences Po Paris on “Risk Governance”.