



The EU Framework Programme for Research and Innovation

**HORIZON 2020**

**ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

**Societal Challenge 6 'Europe in a changing world –  
Inclusive, innovative and reflective societies'**

**Version of 24.02.2017**



**IMPORTANT NOTICE.** This document has been elaborated on the basis of the scoping paper 2018-2020. It contains elements aimed at facilitating the discussions with the Programme Committee configuration for Societal Challenge 6 at its meeting on 10.03.2017. The document does not represent a draft work programme and may undergo changes in both content and structure.

## **ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

### **Societal Challenge 6 'Europe in a changing world – Inclusive, innovative and reflective societies'**

- 1. Call MIGRATION AND THE REFUGEE CRISIS**
- 2. Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS  
OF THE FOURTH INDUSTRIAL REVOLUTION**
- 3. Call GOVERNANCE FOR THE FUTURE**
- 4. OTHER ACTIONS**

**Preliminary draft**



**Not legally binding**

## **ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

**Societal Challenge 6 'Europe in a changing world –  
Inclusive, innovative and reflective societies'**

### **1. Call MIGRATION AND THE REFUGEE CRISIS**

## **Call MIGRATION AND THE REFUGEE CRISIS**

### ***GEOPOLITICAL PROJECTIONS, ROOT CAUSES AND DEVELOPMENT***

- 1–Understanding migration and mobility patterns: elaborating mid and long-term migration scenarios (RIA)**
- 2–Towards a forward looking migration governance: addressing the challenges, assessing capacities and designing future strategies (RIA)**
- 3–Understanding the complex relation between governing legal migration and fighting against irregular migration flows (CSA)**

### ***INTEGRATION OF MIGRANTS: LABOUR MARKET, CULTURE AND ROLE OF LOCAL COMMUNITIES***

- 4–Social and economic effects of migration in Europe and integration policies (RIA)**
- 5–Inclusive and innovative practices for the integration of migrants in cities (RIA/CSA)**
- 6–Mapping and overcoming integration challenges for migrant children (RIA)**
- 7–Management of the migration challenge through ICT-enabled solutions (IA)**

### ***UNDERSTANDING HUMAN MOBILITY AND INTERNATIONAL PROTECTION***

- 8–International protection of refugees in a comparative perspective (RIA)**
- 9–Addressing the challenge of forced displacement (RIA)**

### ***NARRATIVES ON MIGRATION AND ITS IMPACT: PAST AND PRESENT***

- 10–Narratives on migration and its impact: past and present (RIA/IA)**
- 11–Innovative solutions and evidence-based recommendations on migration (CSA)**

## **Call MIGRATION AND THE REFUGEE CRISIS**

### **1–Understanding migration and mobility patterns: elaborating mid and long-term migration scenarios**

Specific challenge: International migration is growing in scope, complexity and diversity, which requires better preparedness and responses. A deeper understanding of its drivers, also in their interrelation with people's propensity to move, is needed as well as projections and scenarios that are essential for appropriate planning and effective policymaking.

Scope: Patterns, motivations and modalities of migration should be explored, with a focus on new geographies and temporalities. This should include the changing nature of flows and factors such as international demand for and supply of labour, aging population in industrialized countries, migration propensity, the emergence of transnational networks, corruption, return migration and forced movements linked to conflicts and environment-related threats. Proposals should capture population estimates and projections for irregular migration flows and identify the distinctive features of trafficking in human beings and smuggling of migrants. They should also reappraise assumptions about migration and identify key uncertainties.

Expected impact: The actions will enhance the knowledge base on migration-related flows, drivers, attitudes and behaviours. Scenarios and projections will inform evidence-based governance and regulatory frameworks at international and EU levels as well as relevant sector policies in EU Member States, e.g. social, health and labour market related policies.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## **Call MIGRATION AND THE REFUGEE CRISIS**

### **2–Towards a forward looking migration governance: addressing the challenges, assessing capacities and designing future strategies**

Specific challenge: Global and EU migration governance regimes are still emerging, with upcoming instruments such as Migration and Asylum Global Compacts and EU Framework Partnerships. There is a pressing need to identify priority areas and strategies to facilitate safe, regular and responsible migration and mobility as foreseen in the SDGs of Agenda 2030.

Scope: In the context of evolving EU migration governance and EU global migration-related perspectives and responsibilities, proposals should assess governance models, including recently established partnership instruments, and the revision of overarching agreements, their limits and scale-up potential. The focus should be on moving from emergency and crisis management to long-term evidence-based policy responses that can address the challenges of economic development and large scale population movements. Legal migration channels, trafficking and smuggling, irregular migration trajectories, the durability and sustainability of return to countries of origin, and the role of diasporas and remittances should also be covered. Inclusion of partners from EU and non-EU transit and destination countries is encouraged.

Expected impact: The actions will inform policies, programming and actions contributing to EU and global migration governance based on human rights and through multilateral development partnerships. They will also contribute to shaping the envisaged UN compacts and critically accompany and appraise the reform process of the EU's asylum regimes.

Type of action: Research and Innovation Actions

Indicative timeline: 2018

## Call MIGRATION AND THE REFUGEE CRISIS

### 3–Understanding the complex relation between governing legal migration and fighting against irregular migration flows

Specific challenge: The EU is involved in the global effort to design multilevel migration governance models applicable to the Union and to its Member States as framed in the SDGs of Agenda 2030. This requires a better understanding of the complex relation between legal and irregular migration channels and the propensity to migrate.

Scope: Proposals should take stock of existing yet scattered and non-comprehensive research results, adopting historical and comparative perspectives as needed. Solid data on international migration flows and inflows towards the EU should be collected and synthesized to identify emerging trends and anticipate future patterns. Proposals will also assess the interplay between legal and irregular migration channels, push and pull factors (e.g. long-term determinants, inequalities, income levels, poor job opportunities in countries of origin, conflict and environmental factors), corruption, and the propensity to migrate.

Expected impact: By collecting and synthesizing existing knowledge on migration governance at EU and Member State level, the action will improve the understanding of the complex interrelation between legal channels, irregular trajectories and the propensity to migrate. It will support EU policy makers in developing migration governance structures, policies and instruments within Europe and in the global context.

Type of action: Coordination and Support Action

Indicative timeline: 2018

## Call **MIGRATION AND THE REFUGEE CRISIS**

### 4–Social and economic effects of migration in Europe and integration policies

Specific challenge: Exhaustive data on the socio-economic effects of migration in Europe are needed for an objective overview of developments and to change perceptions on migration. In the wake of recent and current migratory flows, an assessment of integration policies and efforts is also crucial for ensuring their effectiveness in promoting successful integration and inclusion of migrants in host societies.

Scope: Proposals should take stock of the long-term effects of migration at EU and cross-national level on economic growth and productivity, employment levels and wages, and fiscal and welfare impacts. At the same time, they should analyse policies related to integration of migrants, the local dimension of integration processes and their effects on the provision of local services, workplace conditions, and productivity and innovation. Proposals should also comparatively examine policies of integration (labour market, education, health, civil rights etc), benchmark and estimate their efficiency, effectiveness and social impact, and highlight best practices. Interdisciplinary research with combined insights from disciplines such as sociology, economics, political economy, anthropology, psychology, health, education and labour studies is needed.

Expected impact: The actions will improve the knowledge base on the socio-economic effects of migration. They will provide solutions and recommendations for strengthening the effectiveness of policies targeting the integration of migrants. They will also help build a comprehensive European strategy for integration, conducive to socially inclusive economic growth.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## Call MIGRATION AND THE REFUGEE CRISIS

### 5–Inclusive and innovative practices for the integration of migrants in cities

Specific challenge: The arrival of migrants diversifies the demographic, cultural, linguistic, ethnic and religious makeup of European cities and suburbs. There is a pressing need for effective and customised measures to promote socio-economic integration and inclusion as well as access to rights and services. This includes sustainable and participatory strategies, also with the support of citizens, civil society actors and the private sector.

Type of action: Research and Innovation Actions  
Coordination and Support Action

Indicative timeline: 2020

## Call MIGRATION AND THE REFUGEE CRISIS

### 6–Mapping and overcoming integration challenges for migrant children

Specific challenge: Education systems face many challenges due to growing cultural, linguistic and ethnic diversity and to socio-economic inequalities, at a time when the integration of refugee and migrant children into the societies is most pressing.

Scope: Proposals should generate quantitative and qualitative data and policy recommendations on the integration in schools of pupils (ISCED 0-3) from current migration cohorts, children of refugees and asylum seekers, and unaccompanied minors, including those residing in camps. Comparisons with local children (with or without migration background) should be made. Ethnological and anthropological perspectives should be used. Social and learning environments should be considered as well as strategies to avoid segregation. Proposals should also address (several of) the following issues: governance and funding, roles and attitudes of families, communities, civil society and local services, preparedness of schools and teaching staff, and innovative practices for language learning and valuing native languages alongside the language used at school. Best practices should be identified with the involvement of stakeholders.

Expected impact: The actions will inform policymakers, families, teachers and other stakeholders on effective practices for integrating migrant children in schools. They will enhance synergies and cooperation amongst these actors for the uptake of innovative practices, for monitoring and data collection and for the definition of research gaps.

Type of action: Research and Innovation Actions

Indicative timeline: 2018 and 2020

## Call MIGRATION AND THE REFUGEE CRISIS

### 7–Management of the migration challenge through ICT-enabled solutions

Specific challenge: The management of the integration of migrants in many Member States remains a challenge for both public authorities and local communities, with many newcomers remaining 'anonymous' and therefore detached from most public services. This 'unmanaged' presence may lead to deepening social divisions, frustration and alienation.

Scope: An efficient management of migrant integration requires clear understanding of their personal and family situation, including their political status, origin, skills, medical records etc. Once available to public services, such information would lessen the societal burden and could benefit host countries, e.g. by matching migrants' skills with those needed in the Member States. Proposals should develop compatible electronic means of identification that would allow for efficient cross-border identification of asylum seekers either during processing or after granting of refugee status. They should also develop ICT tools that would facilitate and ease the access of migrants to public services in view of an efficient and sustainable integration process.

Expected impact: New or enhanced ICT solutions and tools will facilitate the efforts of public administrations at EU, national and local levels to assess the situation of migrants, including their status and their rights. They will allow to develop and deploy the necessary processes and services in view of the efficient identification and integration of migrants. They will also facilitate communication with migrants and their access to training, employment, welfare and healthcare systems within the host communities.

Type of action: Innovation Actions

Indicative timeline: 2018 and 2019

## Call MIGRATION AND THE REFUGEE CRISIS

### 8–International protection of refugees in a comparative perspective

Specific challenge: While policy areas such as development or trade benefit from global governance structures, a global refugee governance regime is still in its infancy. The challenge is to safeguard international law standards on the treatment of asylum seekers, address imbalances in burden sharing, and ensure the EU plays a key role globally while also aligning the reform of its common asylum system with the emerging regime of global asylum governance.

Scope: Proposals should examine the processes and content of the emerging international protection system following the UN commitment for the adoption of a global asylum compact as well as its implementation in comparative perspective, with special focus on the EU's role and engagement. They should examine how burden sharing can be organised as well as the compatibility of the emerging global asylum regime with international law, including international conventions on refugees and human rights. The EU arrangements with refugees' origin and transit countries should be assessed. Proposals should advise on the future development of asylum policies and their implementation both globally and within the EU.

Expected impact: Actions will significantly advance the knowledge base on global migration governance by accompanying and evaluating the process, discourses and outcomes of the planned compact on refugees. They will assist European policymakers with identifying suitable strategies for engagement in the process leading to the global refugee compact and in its implementation. They will also inform the EU's reform process of its common asylum system.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## Call MIGRATION AND THE REFUGEE CRISIS

### 9–Addressing the challenge of forced displacement

Specific challenge: Millions of people live in forced displacement many of them in protracted refugee and displacement situations for several years. This is often accepted, albeit reluctantly, as a semi-permanent state of affairs given that return as a solution to forced displacement rarely takes place. The situation affects life trajectories and poses multiple challenges for social, economic, urban and environmental services and for local investments and labour markets.

Scope: Proposals should investigate the medium and long-term socio-economic dimensions of mass displacement when forcibly displaced persons concentrate in camps and hosting areas or settle in unprotected and underprepared urban settings. Comparative research inside and outside Europe should assess medium and long-term impacts and analyse opportunities and challenges for displaced people and for hosting communities as well as the potential for and resistance to the integration of displaced persons. Proposals should also assess existing practices and develop solutions to ease the pressure on hosting communities. Research should be conducted with participation of partners from third countries experiencing high migration pressure mainly in Africa and the Middle East.

Expected impact: The actions will identify solutions for protracted displacement situations, also in the framework of the EU Partnership Agreements and of the UN migration and refugee compacts. By mapping the dynamics of interactions between the displaced and the host community and bringing it to the attention of policymakers, they will enhance policy responses to integration needs.

Type of action: Research and Innovation Actions  
(INCO flagship)

Indicative timeline: 2018

## **Call MIGRATION AND THE REFUGEE CRISIS**

### **10–Narratives on migration and its impact: past and present**

Specific challenge: The portrayal of migration and migrants in the media and in political and public discourses has an impact on which policies and responses are considered desirable and viable, thereby affecting the social, economic and cultural integration of migrants. The challenge is to enhance access to factual information and improve the participation of migrants in shaping narratives in view of level-headed responses to and nuanced narratives on migration.

Type of action: Research and Innovation Actions  
Innovation Action

Indicative timeline: 2020

## Call MIGRATION AND THE REFUGEE CRISIS

### 11–Innovative solutions and evidence-based recommendations on migration

Specific challenge: Horizon 2020 has funded projects on a wide range of migration-related issues. These projects put forward policy recommendations and innovative solutions that could be of use to policymakers, practitioners, scientists and other stakeholders. The challenge is to improve and accelerate the uptake of project results in both migration-related policymaking and practice.

Type of action: Coordination and Support Action

Indicative timeline: 2020

## **ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

**Societal Challenge 6 'Europe in a changing world –  
Inclusive, innovative and reflective societies'**

### **2. Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### *THE FUTURE OF LABOUR MARKETS, COMPETITIVENESS AND WELFARE*

- 1–Research for inclusive growth: addressing the socioeconomic effects of technological transformations (RIA)**
- 2–Transformative impact of disruptive technologies in public services (RIA)**

### *THE COLLABORATIVE ECONOMY, INNOVATION, AND THE ROLLE OF CITIES AND REGIONS*

- 3–Innovative solutions for inclusive and sustainable cities (RIA/CSA)**
- 4–Innovative approaches to urban and regional development through cultural tourism (RIA/IA)**
- 5–Cities as a platform for citizen-driven innovation (CSA)**

### *CREATIVE INDUSTRIES, THE ARTS AND CULTURAL POLICY*

- 6–Inclusive and sustainable growth through cultural and creative industries and the arts (RIA)**
- 7–The impact of technological transformations on children and youth (RIA/CSA)**
- 8–The evolution of the societal value of culture and the impact of cultural policies in Europe (RIA)**
- 9–Social platform on illicit trafficking of cultural goods (CSA)**

### *EUROPEAN VALUES AND SYMBOLS, CULTURAL HERITAGE AND DIVERSITY*

- 10–Evolving European cultural symbols and identities (RIA)**
- 11–Collaborative approaches to cultural heritage for social cohesion (RIA)**
- 12–Curation of digital assets and advanced digitization (IA/RIA)**

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **1—Research for inclusive growth: addressing the socioeconomic effects of technological transformations**

Specific challenge: Technological transformations such as automation, robotisation and digitisation create both opportunities and challenges for the future of work and employment in Europe. Research is needed to assess the effects of these mutations and to propose policies and interventions aimed at socially inclusive growth.

Scope: Proposals should delineate in an exhaustive, EU-wide and comparative fashion the effects of technological transformations on employment. They should trace the changes in the content of work and the new skills in demand. They should evaluate the potential for increased inequalities and labour market polarisation arising from these changes and explore policies and solutions for a fairer distribution of gains. Proposals should also explore the social investment and protection policies that can lead to human capital growth and productivity gains while promoting access to labour markets. In addition, they could also explore the benefits or challenges of a universal basic income.

Expected impact: The actions will address the potential labour market fallout from technological transformations and will contribute to promoting fairness. They will also identify social investment policies necessary for kick-starting an era of higher skills and productivity and for reaping the benefits of technological transformations. Results will pave the way for a robust European strategy for socially cohesive growth and economic competitiveness.

Type of action: Research and Innovation Actions

Indicative timeline: 2018

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **2–Transformative impact of disruptive technologies in public services**

Specific challenge: The challenge is to assess the potential, benefits and risks of using disruptive technologies in public services and the social impact of using them for government processes and governance.

Scope: The use of disruptive technologies in public services, public governance, public engagement and policy impact assessment is growing and can be very beneficial. Still, their real potential impact and ways in which they can disrupt the existing landscape of public services and replace present solutions and processes are unknown. That is why deploying disruptive technologies such as block-chain, Internet of Things, virtual reality, artificial intelligence and gamification in public services requires a thorough assessment of their potential, benefits and risks.

Expected impact: The actions will develop new ways of providing public services, ensuring public governance and public engagement with the use of disruptive technologies, specifically for maintaining registers, archiving and decision-making processes in public services and in such services as health, education and mobility.

Type of action: Research and Innovation Actions

Indicative timeline: 2018, 2019, 2020

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **3–Innovative solutions for inclusive and sustainable cities**

Specific challenge: Increased urbanisation makes good governance, inclusive policies, planning and citizen engagement in cities ever more important for ensuring the quality of residents' lives. The impact on European cities of the recent financial crisis is not uniform as cities connect to the production structures of globalised economies in different ways. The challenge is to identify the main drivers of socio-economic inequalities in different urban contexts and to propose measures that ensure the means to upward social mobility.

Scope: Proposals should assess the scale, dimensions and drivers of socio-economic inequalities in urban and peri-urban settings across different city typologies, across Europe and across demographic diversities. They should also assess relevant policies, strategies, planning practices and other interventions aimed at redressing such inequalities at city level, including new models of growth that foster sustainable and equitable prosperity. Knowledge-sharing between researchers, policy makers and practitioners should be facilitated.

Expected impact: By linking research, innovation and policy, the actions will improve urban planning tools, strategies, responses, practices and the uptake of new and alternative growth models. They will contribute to the advancement of the Sustainable Development Goal dedicated to making cities inclusive, safe, resilient and sustainable and of the EU Urban Agenda. They will also contribute to the development of a European urban research agenda.

Type of action: Research and Innovation Actions  
Coordination and Support Action

Indicative timeline: 2018 and 2020

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **4–Innovative approaches to urban and regional development through cultural tourism**

Specific challenge: The level of development of cultural tourism between certain regions and sites is still unbalanced, with deprived or deindustrialised areas lagging behind whereas high demand areas are overexploited in an unsustainable manner. There is also a significant knowledge gap in terms of both quantitative and qualitative data on the phenomenon of cultural heritage tourism and its contribution towards cultural Europeanisation.

Scope: Proposals should assess comparatively how the presence, development, decline or absence of cultural tourism has affected European regions and urban areas. Innovative statistical methods, tools and indicators for measuring the various impacts of cultural tourism should be developed and tested. Proposals should also investigate the relation between intra-European cultural tourism and Europeanisation and whether it impacts identities and belonging. Innovative solutions for using Europe’s cultural and natural heritage to generate social and economic development in high priority areas should be proposed, including management, training and services solutions tested via broad partnerships of stakeholders.

Expected impact: The actions will improve policies and practices on cultural tourism at various levels. They will also provide strategic guidance at European level concerning the efficient use of European Structural Investment Funds. In addition, they will contribute to the establishment of partnerships between public and private stakeholders in this area. Creation of statistical tools and methods will improve available data on the impact of cultural tourism on the EU economic and social development and on cultural Europeanisation.

Type of action: Research and Innovation Actions  
Innovation Action

Indicative timeline: 2019 and 2020

**Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS  
OF THE FOURTH INDUSTRIAL REVOLUTION**  
**5–Cities as a platform for citizen-driven innovation**

Specific challenge: There is a decline of legitimacy of public institutions in Europe, which are increasingly challenged to find new ways to provide public value in an open, transparent way. In a growing number of small and large cities across Europe, citizens are engaged and mobilised to demonstrate their ability to create innovative solutions for important social issues. The challenge is to capture this creativity, these often very local solutions and their market opportunities.

Scope: Successful innovative practices are emerging in Europe particularly from those cities that effectively absorb, develop and create new knowledge and ideas, and turn this knowledge into social and economic development. Cities as policy makers are playing a key role in encouraging citizens to become more engaged in the experimentation and development of new solutions which are blending technological, non-tech and social practices. Citizen-driven innovation also increases the possibilities for a broader range of people to take action across all stages of innovation, thus enhancing co-creation, boosting equal opportunities and promoting social integration.

Expected impact: The action will discover new usages, enhance scaling-up and expand market opportunities for innovations created by citizens across Europe. It will provide a wider EU scale to innovative practices based on experimentation, particularly testing and engaging in local co-creation, in living labs, in designing experimental areas in cities bringing new opportunities to light. It will allow for a smoother sharing of best practices between European cities, thus also enhancing community building.

Type of action: Coordination and Support Action

Indicative timeline: 2018

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **6–Inclusive and sustainable growth through cultural and creative industries and the arts**

Specific challenge: The development of cultural and creative industries (CCIs) is vital for a vibrant economy and as a means of revitalising EU regions. The CCIs employ 7.5% of the EU's workforce, add around EUR 500 billion to GDP and were remarkably resilient in the context of the economic crisis. However, they still do not benefit from the support of a comprehensive sectoral policy scheme in most Member States or at the EU level.

Scope: Proposals should develop a comprehensive and harmonised statistical mapping of CCIs, improving indicators at national at EU level. They should assess knowledge gaps on the role of specific skills and traditional crafts, education and training, and creativity. They should propose business models and innovative solutions to boost employment. The impact of financing models, tax incentives and IPR protection across sectors and the issue of Smart Specialisation Strategies should be addressed. Proposals should also assess how cultural and creative industries relate to and integrate cultural diversity and promote the access of all citizens to products.

Expected impact: Actions will formulate recommendations in support of national and European policies in the field of cultural and creative industries. They will inform, mobilise and connect relevant sectoral and policy stakeholders and increase awareness of the economic and societal issues at stake. They will improve statistical data and methods in cooperation with national statistical institutes, relevant international organisations and Eurostat.

Type of action: Research and Innovation Actions

Indicative timeline: 2018

## Call **SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **7–The impact of technological transformations on children and youth**

Specific challenge: The ICT are generally valued in terms of skill development, learning and future employability of young generations. However, opinions on their impact on health, lifestyles, wellbeing, safety and creativity are mixed. The challenge is to develop a solid knowledge base in support of social, educational, health and online safety policies and of market regulation.

Scope: R&I proposals should assess children's and young people's online behaviour and use of digital devices by socio-economic and age group at home, for leisure and in schools. Participatory approaches should be used, also involving children and youth, parents and educators. Methodologies for measuring long-term impacts in areas such as skills (including online safety, innovation and creativity skills) wellbeing, health and digital literacy should be developed and tested across EU level. Coordination and support action proposals should synthesise a comprehensive knowledge base on safety issues and the risk of exposure to age-inappropriate and/or harmful content and behaviour (e.g. hate messages, cyberbullying). Policy recommendations and strategies should be developed together with relevant stakeholders on how to best protect children and ensure positive online experiences for children and young people.

Expected impact: Actions will inform relevant stakeholders and practitioners on the long-term effects of ICT on child development and on practices that minimise risks and maximise benefits. They will contribute to better regulation (e.g. labelling, evaluation of ICT educational tools, protection of online users) and to a safer and more beneficial use of digital technologies at home, for leisure and in educational settings by children and young people.

Type of action: Research and Innovation Actions  
Coordination and Support Action

Indicative timeline: 2019 and 2020

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **8–The societal value of culture and the impact of cultural policies in Europe**

Specific challenge: Culture is often seen from the angle of economic value added. However, investment and expenditure in culture generates additional societal value in terms of promoting inclusiveness, tolerance and cohesion. The challenge is to develop new or improved methodologies for capturing the wider societal value of culture, including but also beyond its economic impact, and to develop improved cultural statistics in support of effective and inclusive policies and institutional frameworks.

Scope: Proposals should perform comparative statistical analyses at national and EU level to map the various forms of cultural engagement, assess the role of cultural participation as a source of wellbeing, and identify the benefits of cultural engagement across population segments, including contributions to intercultural dialogue. Such statistics should explain how cultural values are constructed in the age of social media, internet and television across different socio-economic groups. Proposals should also assess the goals, strategies and effectiveness of cultural policies and institutions in addressing issues such as diversity and inclusion.

Expected impact: Actions will equip policymakers with effective tools for measuring and enhancing the impact of cultural policies. Participatory approaches involving a wide range of stakeholders will contribute to the inclusiveness and sustainability of cultural interventions and institutions.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **9–Social platform on illicit trafficking of cultural goods**

Specific challenge: Initiatives to protect endangered cultural heritage are multiplying, with international bodies, the EU, national governments and other institutions developing useful, though mainly uncoordinated, initiatives. The challenge is to take stock of ongoing initiatives, promote mutual learning and coordination, and identify knowledge and intervention gaps.

Scope: The platform should bring together the research community, public and private actors, and policy makers at national and international levels working on issues related to the illicit trafficking of cultural goods. Traffic routes, provenance research (including satellite imagery), economic losses, heritage memory preservation (including safe heavens and 3D reconstruction), return and restitution, and other responses such as legislation, training, and awareness raising programmes for specialised communities (art curators, galleries, collectors and dealers) and the general public should be considered. The platform should collect, analyse and promote best practices from Europe and beyond and become a major European reference for transnational and interdisciplinary networking in this policy area.

Expected impact: The action will facilitate the uptake and dissemination of research and best practices, thereby contributing to the development of strategic and integrated European and international policies and interventions. It will develop toolkits and recommendations for a variety of stakeholders. It will also build a consensus on future needs and support the EU in developing an innovative and focused research agenda on endangered cultural heritage.

Type of action: Coordination and Support Action

Indicative timeline: 2018

**Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS  
OF THE FOURTH INDUSTRIAL REVOLUTION**

**10–Evolving European cultural symbols and identities**

Specific challenge: The nature and content of European cultural symbols and identities are constantly evolving. Interactions between producers and consumers in the cultural domain contribute to these shifts. The challenge is to identify and map the production and consumption patterns of cultural goods and services according to territorial, demographic and socio-economic variables and to assess possible links to cultural Europeanisation and the creation of a European cultural space.

Type of action: Research and Innovation Actions

Indicative timeline: 2020

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **11 – Collaborative approaches to cultural heritage for social cohesion**

Specific challenge: While a key mission of the cultural heritage sector is to provide inclusive access, some socio-cultural groups are still not sufficiently integrated in cultural heritage experiences. The challenge is to improve the design of cultural experiences by enhancing participatory and collaborative approaches and by fostering mutual cultural understanding.

Scope: Actions should develop strategies for fostering collaborative and participative approaches to cultural encounters via familiar communication channels such as social media platforms. They should research new applications and tools to allow digital tagging of objects or co-authoring of societal memories. The active involvement of different groups or communities such as migrants and other communities at risk of exclusion should be promoted by designing options for them to review or shape content, contribute new material or customise and personalise cultural heritage content in a gameful and effective way. Collaborative tools and applications should help cultural heritage institutions, NGOs, community organisations etc. in Europe and beyond to enhance the analysis and understanding of cultures and communities.

Expected impact: Actions will foster cultural diversity, social cohesion and the recognition of multiple identities and voices. They will also impact positively cultural institutions by attracting new audiences and disciplines such as computing, design, social science and humanities by providing them with new research tools.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## **Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION**

### **12–Curation of digital assets and advanced digitisation**

Specific challenge: Digitisation still focuses mainly on capturing the visual appearance of objects, collections or sites. It is also often centralised and static, with an expert performing digitisation and archiving and with digitised cultural resources rarely updated and consolidated. The challenge is to design solutions for generating a comprehensive picture of the studied assets, capturing and re-creating not only visual and structural information, but also stories and experiences together with their cultural, historical and social context and their evolution over time.

Scope: The challenge is addressed through two types of actions. The first addresses the curation of digital assets and should provide new technologies and methods that enable, among others, richer experiences, storytelling and the linking of physically separated objects and sites. The second pertains to advanced digitisation and should develop new technologies and methods for the production of active digital assets, including through continuous consolidation, the collaboration of multiple actors and the linking of the tangible and the intangible.

Expected impact: New technologies and methods will help to present cultural heritage in a comprehensive and attractive way, thereby supporting the promotion of Europe's cultural heritage. Proposals will also demonstrate how improved preservation of objects, collections and sites will enhance cultural history and cultural tourism. The economic impact for content-owning creative industries and cultural institutions will include gains from use and re-use of digital assets.

Type of action: Innovation Actions  
Research and Innovation Actions

Indicative timeline: 2018 and 2020

**Preliminary draft**



**Not legally binding**

## **ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

**Societal Challenge 6 'Europe in a changing world –  
Inclusive, innovative and reflective societies'**

### **3. Call GOVERNANCE FOR THE FUTURE**

## **Call GOVERNANCE FOR THE FUTURE**

### ***TRUST, JUSTICE, DEMOCRACY AND CITIZENSHIP***

- 1–Trust in governance (RIA)**
- 2–Past, present and future of differentiation in European governance (RIA/CSA)**
- 3–Addressing populism and boosting civic and democratic engagement (RIA)**
- 4–Enhancing social rights and EU citizenship (RIA)**
- 5–New forms of delivering public goods and inclusive public service (RIA/CSA)**

### ***CHANGING ROLES, EVOLVING PARTNERSHIPS AND GLOBAL STABILITY***

- 6–Trends and forward-looking scenarios in global governance (RIA)**
- 7–The Common Security and Defence Policy and the expanding scope of the EU's external engagement (RIA)**
- 8–International dimension of Open Innovation (CSA)**

### ***IDENTITIES, RADICAL IDEOLOGIES AND SOCIAL INCLUSION***

- 9–Addressing radicalisation through social inclusion (RIA)**
- 10–Drivers and contexts of violent extremism in the broader MENA region and the Balkans (RIA)**
- 11–Extreme ideologies and societal polarisation (CSA)**

### ***DIGITAL TRANSFORMATIONS OF GOVERNANCE AND THEIR SOCIETAL IMPACTS***

- 12–Pilot on using the European cloud infrastructure for public administrations (IA)**
- 13–Digital Single Market and European culture: new challenges for IPR, copyright and data protection (RIA)**

## Call GOVERNANCE FOR THE FUTURE

### 1–Trust in governance

Specific challenge: Trust is a fundamental condition for a fair and cooperative society. While a healthy dose of distrust may be required for a well-functioning democracy, the waning trust in governments and other institutions and in the EU poses a challenge for European governance. The challenge is to restore trust for sustainable and legitimate governance.

Scope: Proposals should reappraise definitions and approaches to trust in public authorities and private actors (e.g. the EU, political parties, financial systems, market and regulatory institutions including the Euro, the media). They should investigate possible correlations between the levels of trust in national governments and in the EU across a wide representative section of the Union. The relationship between trust and distrust should be clarified to identify which levels are conducive to stable, sustainable and fair social relations and governance. Proposals should identify potential thresholds of decreasing levels of trust, i.e. junctures when distrust becomes a game-changer. They should also investigate, both empirically and normatively, possible relations between levels of inequalities and trust. The role of the media, news generation and new phenomena such as fake news should also be considered. Scenarios on consequences of (further) decreasing trust should be developed.

Expected impact: By enhancing the knowledge base on trust, including by developing criteria, indicators and early warning mechanisms for detecting weak signals of decreasing trust, the actions will feed into various initiatives to restore and improve trust in governance. They will also facilitate the construction of trust-enhancing narratives for national governments and EU governance.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## **Call GOVERNANCE FOR THE FUTURE**

### **2–Past, present and future of differentiation in European governance**

Specific challenge: Recent challenges faced by the EU raise the question whether Member States will continue on the same integrationist track. Differentiation, which has been core to the constitutional architecture of the EU, has gained prominence in the light of the recent manifestation of strong centrifugal forces. The challenge is to ascertain whether and how much differentiation is necessary, conducive, sustainable and acceptable.

Scope: Proposals should analyse causes and effects of differentiated integration and under what conditions it facilitates policymaking, problem solving and policy implementation. This should include in-depth explorations of the philosophical foundations of different visions and conceptualisations of integration and differentiation as well as reappraising existing models and developing novel theories. Connections with wider constitutional debates, narratives and discourses about European citizenship should be made. Opportunities, benefits and risks of more or less differentiation both normatively and empirically, including the canvassing of perspectives for regional and local authorities, should be identified.

Expected impact: Actions will develop models for assessing adequate levels of integration and differentiation, both vertically and horizontally. They will support policy decisions on different levels of differentiation across a comprehensive range of policy areas. They will also assist in translating complex constitutional analyses into political narratives facilitating identity formation.

Type of action: Research and Innovation Actions  
Coordination and Support Action

Indicative timeline: 2018 and 2020

## Call GOVERNANCE FOR THE FUTURE

### 3–Addressing populism and boosting civic and democratic engagement

Specific challenge: Mainstream political parties are increasingly perceived as not addressing adequately the challenges faced by the EU and its Member States. At the same time, support for populist parties, movements and ideas is on the rise. The challenge is to analyse the phenomenon of populism and its consequences for European democracies and the European project and to identify ways to address it.

Scope: Proposals should analyse populism comprehensively, drawing also on historical and comparative perspectives, philosophical and sociological explanations, and foresight. They should examine to what extent populism is related to structural socio-economic mutations or destabilisations of politico-economic paradigms. The evolving role of political parties should be studied, including changes in political and social functions. A central question should be how the potential of younger citizens in particular to engage in public affairs could be harnessed for constructive democratic engagement. Proposals should also consider to what extent populism in Europe is tied up with negative orientations (e.g. anti-globalisation, anti-EU, anti-immigrants), a sense of nostalgia or nativeness. Comparisons between manifestations of populism inside and outside Europe should be made.

Expected impact: Actions will enhance the knowledge base on populism in comparative and historical perspective. They will develop indicators as well as medium to long-term scenarios of the consequences of populism in support of policies, narrative construction and other actions to address the phenomenon.

Type of action: Research and Innovation Actions

Indicative timeline: 2018

## **Call GOVERNANCE FOR THE FUTURE**

### **4–Enhancing social rights and EU citizenship**

Specific challenge: Boosting social rights can help address divergence in social trends among Member States and reduce the risk of socio-economic shocks. At the same time, social rights are essential for the full realisation of EU citizenship. By mitigating social risks and by assisting people with transitions and escaping vulnerabilities, social rights can restore trust to public governance. The challenge is to integrate the social dimension into European policies and connect it with European citizenship.

Scope: Proposals should examine how European citizens and third country nationals have been exercising social rights (e.g. to social protection, housing, health, education, access to labour markets, working conditions, mobility) in the wake of the economic crisis. They should also analyse how the EU supports citizens' access to social rights. Developments concerning the European Pillar of Social Rights should be studied, including how they contribute to the exercise of social rights and to social cohesion. The merits or pitfalls of harmonisation in social policy among Member States should be investigated. Proposals should also explore conceptualisations and possible content of European social citizenship.

Expected impact: Actions will significantly advance the state of the art and normative content of EU social citizenship. They will put forward recommendations on the exercise of EU social rights as an integral part of EU citizenship and on upward convergence in social issues. They will also contribute to constructing narratives of European citizenship.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

## Call GOVERNANCE FOR THE FUTURE

### 5–New forms of delivering public goods and inclusive public service

Specific challenge: The challenge is to create models, guidelines and standards for services quality for setting up catalogues of open, modular services ('Government as a Service') or shared services between closely located administrations in view of enabling inclusive participation and accommodating diverse needs of different actors in digital governance structures.

Scope: In an open government context, the role of government is changing due to its use of ICT and to the increasing pervasiveness of ICT across all parts of society. Government is becoming a manager of societal assets, a provider of tools, guidance and incentives for co-creation, and as a guarantor of public value over the longer term. Research and innovation actions should re-evaluate the role and responsibility of government in the digital age and identify other actors with responsibilities in digital governance. In addition, for a cost-efficient provision of inclusive digital services, coordination and support actions should identify gaps in accessibility solutions, establish related best practices, and promote training, awareness raising and capacity building.

Expected impact: Solutions for opening up and connecting public administration data and services will have a large impact for both business and citizens, leading to efficiency gains. In addition to support to the implementation of the Web Accessibility Directive, enhanced co-operation on digital accessibility between various stakeholders will provide more affordable accessibility solutions, establish a culture of continuous consultation promoting overall digital accessibility, and result in the widespread recognition of the necessity and benefits of an inclusive Digital Single Market.

Type of action: Research and Innovation Actions  
Coordination and Support Action

Indicative timeline: 2018, 2019, 2020

## Call GOVERNANCE FOR THE FUTURE

### 6–Trends and forward-looking scenarios in global governance

Specific challenge: Recent trends in nationalism, protectionism and regionalism are affecting international commitments and policies. They also put added pressure on the political and operational capacities of global governance institutions created in the mid-twentieth century for critical yet partly different purposes. This raises the prospects of shifts in global governance.

Scope: Proposals should assess developments in key institutions (e.g. UN, NATO, WTO), regimes, processes and partnerships that aim at contributing to collective action and global problem solving and EU's role in these processes. Challenges faced by global governance should be assessed such as representativeness, diverging interests, trust and legitimacy as well as difficulties with burden-sharing and the implementation of agreements. Scenarios of stagnation, transformation or fragmentation should be considered. The impact on the implementation of the EU Global Strategy and the achievement of Sustainable Development Goals should be addressed. Significant participation of international partners strategically targeted by the EU is needed to ensure joint mapping, scenario design and policy recommendations. Relevant actors (e.g. researchers, policymakers, civil society leaders) should be involved to ensure mutual learning and take-up of results.

Expected impact: The actions will equip relevant EU actors and partners with knowledge and tools for navigating and influencing effectively the emerging and future shifts in global governance, thereby increasing their readiness, resilience and capacities for developing globally coordinated strategies.

Type of action: Research and Innovation Actions  
(INCO flagship)

Indicative timeline: 2018

## **Call GOVERNANCE FOR THE FUTURE**

### **7–The Common Security and Defence Policy and the expanding scope of the EU's external engagement**

Specific challenge: There is a pressing need for the EU to improve its capacities and capabilities for conflict resolution, prevention and mediation. As highlighted by the EU's Global Strategy and the European Defence Action Plan, a key challenge is to accommodate multiple action domains in a joined-up external action alongside the Common Security and Defence Policy. An added challenge is to ensure that the EU external policy and the foreign policies of Member States are coordinated when engaging with strategic global partners.

Type of action: Research and Innovation Actions

Indicative timeline: 2020

## Call GOVERNANCE FOR THE FUTURE

### 8–International dimension of Open Innovation

Specific challenge: New and emerging markets outside Europe offer huge opportunities for European industry. To compete effectively in these markets, European companies, especially SMEs, need to develop partnerships with innovation players in these economies from the early phases of the process.

Scope: The action will carry out a large number of viability assessments of innovative solutions for markets outside Europe. Each assessment shall explore the practical, technological and commercial viability of an innovative solution in particular in terms of how it needs to meet local conditions and demands. It should be aligned to business strategies, helping internal growth or targeting a transnational business opportunity. Each assessment shall be led by an EU MS/AC entity and shall include at least one non EU MS/AC entity. Highly innovative SMEs with clear commercial ambitions and potential for high growth and internationalisation should be targeted in particular. The assessments will be selected following open calls organised by the action. The calls should ensure a pre-defined balance between different country groups and regions. The action will involve financial support to third parties, with at least 90% of the EU funding allocated for this purpose. Any IPR generated by these third parties shall rest with them.

Expected impact: Growth and jobs both in Europe and in the target countries. Increased European competitiveness, excellence and participation in international value chains. Greater availability, uptake and use of innovative solutions responding to the specific local needs and circumstances of the target countries and markets.

Type of action: Coordination and Support Actions

Indicative timeline: 2018

## Call GOVERNANCE FOR THE FUTURE

### 9–Addressing radicalisation through social inclusion

Specific challenge: The spread of radical ideologies leading in some cases to violence has prompted the EU and its Member States to develop policies and interventions in support of prevention. A comprehensive evidence base on trends in radical ideologies and extremism and on the drivers of radicalisation is needed in order to further develop policies for social inclusion and effective interventions.

Type of action: Research and Innovation Actions

Indicative timeline: 2020

## Call GOVERNANCE FOR THE FUTURE

### 10–Drivers and contexts of violent extremism in the broader MENA region and the Balkans

Specific challenge: Parts of the broader Middle East and North Africa (MENA) region and of the Balkans have been experiencing conflicts and civil wars as well as a rise in violent extremism fueled or justified by religious interpretations. More empirical and interdisciplinary research is needed to understand the various historical, geopolitical, socioeconomic, ideological, cultural, psychological and demographic factors that drive violent extremism in these regions and the impact of this phenomenon on Europe.

Scope: Proposals should assess the interplay between religion, politics and identities through country and regional comparisons. Religious extremism in particular should be addressed from angles such as enabling drivers, narratives, authority figures and formal leadership. Radical interpretations of religion and their impact on (women's) rights should be studied. The issue of foreign fighters and transnational extremist groups should be addressed. Concrete proposals should be made on which preventive measures are effective and should be stepped up. Research should be conducted jointly with participants from relevant third countries. participation of third country partners and should involve an appropriate range of relevant actors to ensure mutual learning and take-up of results.

Expected impact: Actions will improve the knowledge base on violent extremism in the broader MENA region and the Balkans. They will ensure a step-up in mutual learning between the EU and third countries in light of common challenges.

Type of action: Research and Innovation Actions  
(INCO flagship)

Indicative timeline: 2019

## Call GOVERNANCE FOR THE FUTURE

### 11–Extreme ideologies and societal polarisation

Specific challenge: Extreme ideologies and accompanying behaviours affect the social fabric, bonds and cohesion of our societies, communities and cities. A better, more operational understanding of why, when and how extreme ideologies lead to societal polarisation and develop into violent extremism is needed.

Scope: Proposals should take stock of knowledge and best practices at EU, national and local level in response to extreme ideologies and tendencies (e.g. extreme right-wing or left-wing nationalism, nativism, neo-Nazism, jihadism). They should systematise knowledge on drivers, on potential links with other types of polarisations (e.g. socio-economic inequalities, stigmatisation, discrimination, affective polarisation) and on societal impacts. Influences between various extreme ideologies should be addressed. An integral analytical framework as well as models and cross-national indicators on societal polarisation should be developed. Analysis of policies for counteracting polarisation should be undertaken to assess effectiveness and possible gaps. Best practices for mitigating and decreasing societal polarisation should be identified and disseminated to relevant actors.

Expected impact: The action will equip key stakeholders with knowledge and tools that allow for improved analysis, forecast, interventions and policies. Concrete solutions for abating the sense of antagonism, fostering meaningful debates and expanding the spectrum of commonalities will contribute to decreasing the degree of social polarisation in at-risk contexts.

Type of action: Coordination and Support Action

Indicative timeline: 2018

## Call GOVERNANCE FOR THE FUTURE

### 12–Pilot on using the European cloud infrastructure for public administrations

Specific challenge: Testing the use of cloud infrastructure (open and big data) by public services with the aim of defining and managing their policies and actions in areas such as migration management, health, emergency, weather warning etc.

Scope: The availability of open and big data, in particular as facilitated by high-performance computing capabilities offered by the "European cloud", would provide possibilities and methods for forecasting the movement of people from outside the European Union, for managing new demands once they are inside the Union, and for simulating various policy options and better predicting future movement (e.g. climate change). The appropriateness, feasibility and scalability of such an infrastructure needs to be piloted to understand how to ensure a connected eco-system of data with the start of large-scale piloting in the European cloud infrastructure, e.g. in areas where large amounts of public sector data are collected and need HPC computing capabilities for being processed.

Expected impact: Actions will propose new ways and methods of using the cloud infrastructure for public administrations for policy modelling, policy making and policy implementation. They will also create re-usable models allowing for a better, more accurate and more efficient development and management of migration-related policies, health, emergency, weather warning etc.

Type of action: Innovation Actions

Indicative timeline: 2019 and 2020

## Call GOVERNANCE FOR THE FUTURE

### 13–Digital Single Market and European culture: new challenges for IPR, copyright and data protection

Specific challenge: There is a 'digital fracture' in terms of access to and use of digital cultural goods and services. In addition, some citizens do not appreciate the economic and moral costs of IPR violation. The challenge is to safeguard IPR and data protection and to improve the prevention of breaches while also enhancing access to digitally produced culture.

Scope: Proposals should assess the impact of digitisation on access to European cultural goods and services, and whether this change may have democratised cultural creativity and influenced the formation of social identities in the EU. They should provide a comparative cross-national mapping of differences in the governance and implementation of processes for both IPR and the digital access and for personal data protection. They should also develop innovative solutions to address practices jeopardising IPR and data protection. Pricing policies should be assessed with a view to maximising access and stimulating production. Proposals should make recommendations on appropriate communication activities on the importance of IPR protection and the Digital Single Market.

Expected impact: By proposing solutions and policy recommendations, the actions will contribute to a better regulated and fairer accessibility of digitalised cultural goods and services. They will also advise on appropriate levels of harmonisation of IPR and data protection, thereby contributing to the development of the Digital Single Market.

Type of action: Research and Innovation Actions

Indicative timeline: 2019

**Preliminary draft**



**Not legally binding**

## **ELEMENTS OF DRAFT WORK PROGRAMME 2018-2020**

**Societal Challenge 6 'Europe in a changing world –  
Inclusive, innovative and reflective societies'**

### **4. OTHER ACTIONS**

## OTHER ACTIONS

### 1 - Horizon 2020 Policy Support Facility

The Policy Support Facility was launched in 2015 to support Member States and Associated Countries in the design, implementation and evaluation of their national R&I policies. It offers, on a voluntary basis, high level expertise and tailor-made advice to national public authorities.

The provision serves to implement the framework contract by providing support to peer reviews of national R&I systems, specific support activities, mutual learning exercises, and communication and dissemination activities.

Type of action: Public Procurement

Indicative timetable: 2018-2020

## OTHER ACTIONS

### 2 - Policy experimentation

Allowing policy makers to conduct controlled trials on and experiment with (aspects of) their R&I policies before these are put into large scale implementation will broaden the evidence base on the impact of these policies and will therefore help to make R&I investment more impactful.

This provision will support the development of a pilot activity on the use of policy experimentation to increase the impact of the EU's research and innovation policy and programme. It will allow to optimise the further implementation of Horizon 2020, by designing and conducting a limited number of experiments on implementation parameters, but also to prepare for a more wide scale use of policy experimentation in the next EU programme for research and innovation.

Type of action: Grant to identified beneficiary – Coordination and Support Action

Legal entity: to be confirmed

Indicative timetable: 2019

## OTHER ACTIONS

### 3 - Implementation and analysis of the joint Commission-OECD international survey on STI policies

As a major step towards reducing the burden on Member States and Associated Countries to report on evolutions in their Science, Technology and Innovation (STI) policies, the Commission and the OECD launched, for the first time, in 2015 a joint international survey on STI policies. This survey underpins the OECD's two-yearly STI Outlook report and feeds into the Commission's European Semester analysis.

Through a grant provided from the 2016-17 work programme, substantial progress is being made towards making the survey and analysis process fully digital, interactive and more user-friendly, notably with a view towards the 2018 joint survey. This provision will support further development of the infrastructure underpinning the survey and its analysis capabilities, with a view towards the 2020 and 2022 joint surveys.

Type of action: Grant to identified beneficiary – Coordination and Support Action

Legal entity: The Organisation for Economic Co-operation and Development  
2, rue André Pascal, 75775 Paris, France

Indicative timetable: One grant in 2018 and one grant in 2020

## OTHER ACTIONS

### 4 - Analysing the R&I productivity-inequality nexus

Most of the developed economies have over the past decade been faced with a productivity paradox: a range of new technologies (e.g. robotics, internet of things, artificial intelligence) have emerged offering large potential for productivity gains while, at the same time, productivity growth in the economy has stagnated. OECD is at the forefront of analysing the reasons behind this productivity paradox and how it links to technology diffusion, inequality and job polarisation.

This grant will support further analysis of the productivity paradox across the EU Member States, what are its main determinants and how evolutions in productivity link to evolutions in R&I policies.

Type of action: Grant to identified beneficiary – Coordination and Support Action

Legal entity: The Organisation for Economic Co-operation and Development  
2, rue André Pascal, 75775 Paris, France

Indicative timetable: 2018

## OTHER ACTIONS

### 5 - Implementation of the OECD-European Commission administrative arrangement

The Commission and the OECD have signed an administrative arrangement aiming to exploit synergies between their respective strands of work on monitoring and analysis of R&I funding, policies and their impact.

The arrangement identifies a number of priority areas for cooperation, including the digitisation of R&I, the productivity-inequality nexus and assessing the impact of R&I. This grant will support further analytical work in these priority domains, with a view to producing evidence to underpin further EU policies in these areas.

Type of action: Grant to identified beneficiary – Coordination and Support Action

Legal entity: The Organisation for Economic Co-operation and Development  
2, rue André Pascal, 75775 Paris, France.

Indicative timetable: 2020

## OTHER ACTIONS

### 6 - Development of the European Innovation Scoreboard

This provision will support the preparation and further development of the yearly European Innovation Scoreboard, which assesses countries' overall R&I performance on the basis of a set of key indicators.

It will also support optimising the approach and data used in developing the Scoreboard by exploring new ways to gather data in a more timely manner and reflecting the changing nature of the innovation process.

Type of action: Public Procurement

Indicative timetable: 2019

## **OTHER ACTIONS**

### **7 - Development of the Science, Research and Innovation Performance of the EU report**

Expert support will be used to contribute to the scientific and economic analysis underpinning the 2018 version of the Science, Research and Innovation Performance of the EU report. This report, which is published every two years, provides an indicator-driven analysis of the state of science, research and innovation in the EU and how it links to productivity and economic growth, while at the same time investigating the drivers underpinning this performance.

The specialist skills required and demanding nature of the work requires highly qualified experts, which will be selected on the basis of objective criteria.

Type of action: Expert Contracts

Indicative timetable: 2018 and 2020

## OTHER ACTIONS

### 8 - Industrial Research and Innovation Monitoring and Analysis (IRIMA)

This provision will support the continuation of the Industrial Research and Innovation Monitoring and Analysis activity. This includes the preparation of the annual European Industrial R&D Investment Scoreboard, which analyses industrial R&D investment patterns using company reporting. The Scoreboard is complemented by a yearly survey of top R&D investing companies in Europe, which analyses drivers and determinants of investment, and by a series of analytical studies and conferences. This activity has been in existence since 2003 and the work will therefore exploit the dataset that has been collected since then and it will further improve information on the location of company R&D activities.

Type of action: Grant to identified beneficiary - Coordination and support actions

Legal entities: Joint Research Centre

Rue du Champ de Mars 21, 1050 Brussels, Belgium

Indicative timetable: One grant in 2018 and one grant in 2020

## OTHER ACTIONS

### 9 - Econometric analyses and indicators on the impact of R&I (INNOVA)

This provision will support the continuation of an activity which is aimed at the development and regular production of composite indicators on research and innovation performance (e.g. innovation output, research excellence, knowledge circulation and structural change) and at econometric analyses on firm level data to evaluate for instance the effect of innovation on growth, competitiveness and employment.

Type of action: Grant to identified beneficiary - Coordination and Support Actions

Legal entities: Joint Research Centre

Rue du Champ de Mars 21, 1050 Brussels, Belgium

Indicative timetable: 2019

## **OTHER ACTIONS**

### **10 - Expert support for the use of novel and big data methodologies for R&I performance monitoring**

A number of novel methodologies are currently under development to make the monitoring of R&I performance more accurate and up to date. This includes for instance the use of big data techniques.

This provision will support the development and implementation of an EU agenda for the use of novel and big data methodologies in the monitoring of R&I performance by first setting up an expert group to provide recommendations on where and how such methodologies can be used in this context.

The specialist skills required and demanding nature of the work requires highly qualified experts, which will be selected on the basis of objective criteria.

Type of action: Expert Contracts

Indicative timetable: 2018

## OTHER ACTIONS

### 11 - Implementation of new methodologies for R&I performance monitoring

Support will be provided to implement the recommendations made by an expert group on where and how novel methodologies, including big data techniques, can be used in the context of R&I performance monitoring. This provision will be implemented in close cooperation with Eurostat to ensure full alignment with the European official statistical system.

Type of Action: Grant to identified beneficiary - Coordination and Support Actions

Legal entities: TBC

Indicative timetable: 2019

## OTHER ACTIONS

### 12 - Further optimisation of QUEST III

Implementation of the macro-economic modelling agenda: A public procurement was launched in 2015 to improve the integration of R&I in QUEST III, the macro-economic model used by DG ECFIN. This concerned notably looking at issues such as technology diffusion, the difference between public and private research and the endogenisation of skills, while attention was also paid to updating the parametrisation of the model.

This provision will support further work on the optimisation of QUEST III to ensure that it takes due account of the long term positive impact of R&I.

Type of action: Public Procurement

Indicative timetable: 2018

## **OTHER ACTIONS**

### **13 - Expert group to advise on a new macro-economic modelling concept**

While it continues to be important to improve the integration of R&I in QUEST III, as it is currently widely accepted in EU policy making, the basic modelling concept used in QUEST III does not allow for an optimal integration.

This provision will support the setting up of an expert group to advise the Commission on what could be a new macro-economic modelling concept allowing for better integration of the long term positive impact of R&I investments. The expert group will base its work on the preparatory work that has been carried out to improve QUEST III and the outcome of a call for proposals launched as part of the work programme 2016-17.

The specialist skills required and demanding nature of the work requires highly qualified experts, which will be selected on the basis of objective criteria.

Type of action: Expert Contracts

Indicative timetable: 2018

## **OTHER ACTIONS**

### **14 - Implementation of a new macro-economic modelling concept**

Based on the experience gained with improving R&I integration in QUEST III, the outcome of a call for proposals launched as part of the work programme 2016-17 and the recommendations provided by an expert group advising on a new macro-economic modelling concept, this provision will support the implementation of this new modelling concept, including building a micro-economic evidence base to support the estimation of its basic parameters and the testing of the validity of the model.

Type of action: Public Procurement

Indicative timetable: 2019

## OTHER ACTIONS

### 15 - Support to Open Science, Open Access and Open Data

The activities foreseen under this action will help monitor Open Science trends and support awareness raising and uptake by stakeholders; explore incentives for researchers to engage in Open Science and for institutions to support Open Science; remove barriers to Open Science, including addressing legal uncertainty on the (re)use of research results and adapting quality assurance systems and the metrics of science to an Open Science framework; stimulate and embed open science in science and society; and remove obstacles to researchers' mobility and improve labour market matching.

This includes in particular the development of indicators or metrics for engagement of researchers with Open Science, and analyses of the costs and cost-savings of doing open science vs 'closed' science. This would take the form of public procurement to address up to six specific policy issues under the scope described above, as well as low value contracts.

Type of action: Public Procurement

Indicative timetable: 2018, 2019 and 2020

## OTHER ACTIONS

### 16 - Support to Open Science, Open Access and Open Data

Expert contracts will support the work of the Open Science Policy Platform along its eight action lines: Citizen Science, European Open Science Cloud, Incentives & Rewards, Skills, Measuring Quality and Impact, Altmetrics, Future of Scholarly Publishing, Research Integrity, and FAIR Open Data.

Type of action: Expert Contracts

Indicative timetable: 2018, 2019 and 2020

## OTHER ACTIONS

### 17 - Support to EU policy in the field of research and innovation

Within the broad policy scope defined by the Commission's priorities (Open Science, Open Innovation and Openness to the world) the studies will investigate specific issues related to e.g. the impact of R&I policies and funding; the incentives for R&I actors; the dynamics of open innovation ecosystems; the economics of innovation; the contribution of R&I policies to broader EU objectives; the involvement of society and citizens; the global outreach; cooperation and competition; the finance structures for research and innovation; the synergies across funding instruments; the link between supply and demand measures; and market creating innovations.

Their aim will be to gather new or more robust evidence and to produce analyses in support of future policy discussions and decision-making. Where issues are particularly pressing but limited in scope, the studies will take the form of low value contracts. For more substantive studies, requiring more efforts and time, the normal public procurement procedure will be used.

Type of action: Public Procurement

Indicative timetable: 2018, 2019 and 2020

## OTHER ACTIONS

### 18 - Support to EU policy in the field of research and innovation

A first expert group, the High Level Group on Research, Innovation and Science policy (RISE), provides strategic support and advice on policy orientation to the European Commissioner for research, innovation, and science. A second expert group addresses more specifically the Economic and Societal Impact of Research and Innovation (ESIR) to provide economic analyses and recommendations in view of supporting policy implementation. Together these two expert groups deliver analysis, insight and recommendations for the further elaboration of policies (e.g. framework conditions and funding instruments) that can enhance the contribution of research and innovation to the overall EU policy agenda.

These two expert groups are the continuation of existing groups. Their mandate and composition will be adapted in 2019, but their scope and tasks will remain largely the same. The activities carried out by the two groups will be essential to the development of the mentioned policy areas, and without them the EU reference policy framework concerned would not be achieved. The experts in both groups will use their professional experience to develop, through thorough analysis of evidence and synthesis of state of the art knowledge, specialized analyses and policy briefs on pertinent issues.

Type of action: Expert groups

Indicative timetable: 2019

## OTHER ACTIONS

### 19 - European Capital of Innovation 2018–2020

Specific challenge: New approaches to undertake and deploy innovative practices are gaining support, marking the shift from traditional top-down schemes to stronger bottom-up practices, where citizens are increasingly demanding to co-shape public policies in an open, transparent way.

Scope: An increasing number of cities are willing to propose themselves as test-beds for innovative practices and run citizens-driven initiatives to find solutions for their relevant societal challenges.

Expected impact: A European prize to the most innovative city ecosystem builds on past successful competitions and on the relevant impact. The ultimate goal is to provide European recognition to those cities that make the most to promote innovation within their communities.

Type of action: Recognition Prize - every year from 2018 to 2020

Indicative timetable: Yearly competitions for eligible cities, to be launched within the first three months of a given year and concluded by the end of the same year

## OTHER ACTIONS

### 20 - Horizon Prize for Social Innovation in Europe

Objectives: For selecting the specific challenge to be addressed, the European Commission invited citizens to "vote" through an easy to use on-line system. The general public were invited to cast their vote online via the ec.europa.eu domain from all across Europe on among following five topics: Obesity in children, Aging population, Immigrants in the labour market, Women entrepreneurship and women-led enterprises, and Citizens for clean energy.

Expected results: The prize will pull together society's resources from different spheres including the public, private and social economy to deliver new solutions to the challenge of Aging Population. The aim is to spur interest and citizen's engagement, incite new collaborations, incentivize behavioural change towards a particular issue, attract new dynamic innovators to the area, mobilise additional private investment for innovation, generate social solutions and encourage a European social innovation "doers" community, while creating jobs and opening markets in new areas and create new social value, relationships and collaborations.

Type of action: Inducement Prize

Indicative timetable: 2019 award

## **OTHER ACTIONS**

### **21 - Evaluation of the European Innovation Council pilot**

The Horizon 2020 work programme for 2018-2020 contains preparatory actions for a potential European Innovation Council: the bottom-up calls for the SME instrument, FTI and FET Open, inducement and recognition prizes, the extension of coaching and introduction of mentoring for SMEs, the exploring of blended finance. The results will be monitored and inform future work programmes.

Type of action: Study – Public procurement

Indicative timetable: 2018 and 2019

## **OTHER ACTIONS**

### **22 – Expert Group to advise in designing a European Innovation Council**

It is envisaged that the High Level Group of Innovators ('expert group'), which was established in January 2017 with an initial duration of two years, could be renewed for the period 2019-20 in order to complete its work in advising the Commission services in designing a European Innovation Council (working title).

An EIC could form an integral part of the Commission's proposals for a successor programme to Horizon 2020. The work of the expert group will build on early experience gained with the implementation of preparatory measures for the 2017-2010 period under Horizon 2020. Advice provided by the HLG will ensure future EU-level support for innovation takes advantage of existing best practices for innovation support in Europe and that it responds to the needs of entrepreneurs/innovators. The experts have in-depth knowledge in the field of market-creating innovation and related financial instruments, national innovation programmes, and start-up/scaling up of innovative companies. They act in their personal capacity and in the public interest.

Type of action: Expert Contracts

Indicative timetable: 2019 and 2020

## OTHER ACTIONS

### 23 - Service Facility in support of the strategic development of international cooperation in research and innovation

Description: Continuation of the existing Service Facility with the objective to provide services that support the policy development, priority setting, follow-up and implementation of the strategy for international cooperation in research and innovation.

Type of action: Public Procurement

Indicative timetable: 2018, 2019 and 2020

## OTHER ACTIONS

### 24 – e-Government related studies, conferences and other events

In addition to calls for proposals, other actions are also expected to be undertaken on specific activities that Directorate General for Communications Networks, Content & Technology of the European Commission will support.

These include: studies including socio-economic and impact analysis studies, policy support activities, benchmarking activities as well as studies to support the monitoring, evaluation and strategy definition for e-Government, new forms of delivering public goods and the transformative impact of disruptive technologies in public services, the organisation of events related to e-Government, publications and support to other events (e.g. information, communication, dissemination), either through the use of existing Framework Contracts or the launch of new calls for tenders. Details will be provided in the texts of the relevant calls for tender.

Type of action: Public Procurement

Indicative timetable: 2018, 2019 and 2020

## **OTHER ACTIONS**

### **25 - Pan European supplementary pension funds 2014- 2018: Retirement Savings Vehicle for European Research Institutions (RESAVER)**

A Framework Contract (2014-2018, EUR 4 million) was launched in 2014 to provide four years of technical support to a consortium of employers (RESAVER Consortium) to set up the RESAVER Pension Fund. Operational from 2017, the pension fund will be rolled-out across the European Economic Area.

The cross-border pension arrangement aims at removing pensions as a barrier to researchers' mobility, but in order to achieve such a goal, it is fundamental that as many research institutions as possible join RESAVER Pension Fund. Therefore, services covered by the fourth specific contract will include: technical advice to the Pension Fund, communication activities and support services to potential participants in order to enrol additional countries and institutions in the Pension Fund.

Type of action: Public Procurement

Indicative timetable: First quarter of 2018

## **OTHER ACTIONS**

### **26 - Data gathering and analysis of the policy developments and reforms**

The aim is to provide internationally comparable data and indicators to monitor progress towards a genuine European Research Area, to support further evidence-based policy developments.

This action will be managed by the European Commission as directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders.

Type of action: Public Procurement

Indicative timetable: 2019

## **OTHER ACTIONS**

### **27 - Study on the future of the European Research Area in the context of the next Framework Programme**

The aim is to provide a comprehensive study on the future of the European Research Area (ERA) in the context of the next Framework Programme. Furthermore, the aim of the study is to investigate policy developments in ERA in the context of Open Science.

Type of action: Expert Group

Indicative timetable: 2018

## **OTHER ACTIONS**

### **28 - Support for the future orientations of EU research and innovation policy**

This line of activity aims to develop the future orientations of EU research and innovation (R&I) policy, in particular under the next EU R&I Framework Programme. Future orientations of EU R&I policy will be supported through horizon scanning, strategic intelligence, sense-making, and scenario building bringing together and building upon existing forward looking activities in the EU with regard to R&I priority setting.

Further analyses of foresight knowledge and anticipatory intelligence will be carried out to support the implementation of the future EU R&I Framework Programme. For this purpose, relevant future orientations for EU R&I policy and funding will be developed and options, boundary conditions and pathways for the implementation of this vision will be provided. In areas where there is a lack of existing data and knowledge, specific studies will include data collection, literature scanning and analysis.

Type of action: Public Procurement

Indicative timetable: 2018, 2019 and 2020

## **OTHER ACTIONS**

### **29 - External Expertise**

This action will support the use of appointed independent experts for the monitoring of running projects, as well as for the evaluation of applications submitted to prize contests. The Research Executive Agency (REA) will also use independent experts for the monitoring of running projects under the topics delegated to REA.

Type of action: Expert Contracts

Indicative timetable: 2018, 2019 and 2020

## OTHER ACTIONS

### 30 – Presidency events (to be confirmed)

### 31 – COST

COST was established as an intergovernmental framework in 1971 for promoting cooperation among researchers across Europe. Within COST, research carried out at national level is funded by the COST Member States, while the EU funds central administration, coordination and networking.

Indicative timetable: 2018-2020