

HORIZON 2020
WORK PROGRAMME 2016 – 2017

*Europe in a changing world –
Inclusive, Innovative and Reflective Societies*

DRAFT

(European Commission Decision C (2015)XXXX of XX September 2015)

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CALL CO-CREATION FOR GROWTH AND INCLUSION

H2020-CO-CREATION-2016/2017

CO-CREATION-2016-1: Education and skills: empowering Europe's young innovators

Specific challenge: Creativity, entrepreneurship skills, adaptability and innovation capacity, problem solving skills, skills related to effective teamwork and sharing information and knowledge, may all be key competitive advantages for Europeans, starting from young children growing up in multicultural environments. To make the best of this potential, it is essential that schools and educational institutions, as well as non-formal ways of learning, empower Europe's young innovators with the skills they need from early on in life. Empowering the young through skills for innovation and entrepreneurship, including social entrepreneurship, is particularly important to building more inclusive societies giving opportunities to all, to facing youth unemployment, and to opening up opportunities for new markets and new jobs.

The challenge to be addressed by this topic is to improve learning in innovation-related skills for young people (7-15 years old) through the design and piloting of new innovative ways, including technologies, processes and relations.

Scope: New approaches for educating skills need to be developed, piloted and scaled up. There is a lack of sufficient collaboration with entrepreneurial stakeholders in teaching and students practice, and a lack of inter-generational learning. Young people need to be supported with tools, resources and an environment encouraging experimentation. Effective supporting schemes (with involvement also of business and social enterprises) should guide young people into their entrepreneurial journey.

Building upon existing initiatives in Europe, the consortium (which shall include entrepreneurial partners) shall develop new approaches and innovative models for educating skills targeted at young people. This may include new inter-active methods and new pedagogical modules that will be easily accessible and part of an open platform, which will aim to reach out to thousands of schools and learning sites across Europe. The innovative schemes and new modules will enable the young, future innovators to develop new capabilities and experimentation attitudes and turn their ideas into successful entrepreneurial and social projects.

Promising new models combining technologies with organisational change and building new participatory relations in learning processes - can be tested and adapted in different regions. These innovative models shall be piloted through the schools and/or other communities, providing young people with a practical set of creative and entrepreneurial skills that will open them up to a world of new possibilities.

Within the scope of the action is to investigate and test new mechanisms that the young generation is engaging in for addressing societal challenges coupled with an entrepreneurial spirit as well as effective mechanisms for collecting and promoting innovative ideas from the young people. Particular attention should be paid to gender issues.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

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Expected impact statements: The action will pave the way for innovating learning practices so that innovation skills are part of a person's education, formal and informal, at schools and interacting communities as well as on-line. This will boost innovation and entrepreneurship capacity, bringing together many stakeholders including from education, traditional business, the social economy and volunteering schemes. It will thereby empower young innovators across Europe and give them tools to engage in society and channel their values into concrete opportunities.

Type of action: Innovation Actions

Budget: EUR 5 million

CO-CREATION-2017-2: User-driven innovation: value creation through design-enabled innovation

Specific challenge: With competitiveness being increasingly based on intangibles and a mix of products and services that respond to users' needs, applying design thinking and tools can improve company performance and public sector efficiency. Design-enabled innovation (DDI) can be considered as a prominent example of "user-driven" innovation, where user involvement in the process is central, as in many cases innovation can better succeed through co-creation. User-centred design thinking and the application of design tools, when applied to services, systems and organisations, enable structured service and business-model innovation, organisational innovation as well as other intangible forms of innovation.

The specific challenge to be addressed by this topic is that many public sector organisations and businesses, especially SMEs, miss out on the potential to utilise design as a source for improving efficiency and stimulating growth.

Scope: Building on national and European level actions on design, the consortium should plan and run a European programme including selecting and allocating funding to projects. The emphasis should be on practical experimentation, piloting and demonstrating activities as well as concept testing and incubating to improve organisations' processes, services, products or business models in the private, public or third sectors. The activities will also allow gathering data and metrics concerning the impact of DDI policies and programmes, as well as developing a scalable methodology to evaluate the effectiveness of design in the innovation process. Within the scope of the topic is also the development of a methodology on how actors in different sectors can better connect with design-enabled innovation to increase efficiency and competitiveness in their respective fields. A common impact evaluation methodology and respective indicators shall be developed, to be applied across sectors and scalable to organisational, regional, national and European level. The activities could also involve showcasing success stories and disseminating the accumulated knowledge, particularly illustrating the applicability and potential of design-enabled innovation for all sectors, be they public or private or commercial or non-commercial activities.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

- Robust and commonly accepted guidance on embedding design to the value creation chain and identification of barriers and enablers;
- Creation of data sets and metrics to evaluate impact regardless of sector;
- The methodology developed and the analysis should contribute for further development and implementation of design policies and practices. The results, e.g. the impact evaluation methodology, should be applicable and give clear guidance particularly to SMEs and public administrations;
- Development of new approaches and solutions which translate into new products, services and processes increasing public sector effectiveness and private sector competitiveness, and sustaining innovation capabilities and processes;
- Producing assessment tools to verify results in the increase of efficiency and/or competitiveness through the use of design;
- Mainstreaming design, making it an integral part of value creation and a self-sustaining element of innovation processes;
- Integration of design and user-driven innovation into innovation policies and support mechanisms, including funding programmes.

Type of action: Innovation Actions

Budget: EUR 4 million

CO-CREATION-2016-3: Piloting demand-side measures fostering optimal knowledge circulation in Europe

Specific challenge: Facilitating "optimal knowledge circulation" in Europe would ensure that ideas and knowledge are transformed into socio-economic value for European citizens. An important market failure in Europe is that it has an abundance of unexploited ideas and research results with considerable innovation potential, which is not being transformed into societal impacts efficiently.

Some of the main issues that underlie such market failure are linked to the difficulty in matching demand and supply of ideas due to asymmetry of information and to the great amount of information available. Moreover, the supply and demand for ideas often are conveyed in different languages and with a different focus. The latter can be aggravated by the lack of absorptive capacity and the difficulty of certain actors to formulate a demand for innovative ideas or to adopt/adapt existing innovative ones.

When innovation projects are split among different actors (e.g. open innovation and collaborative innovation projects), it is more difficult to find appropriate sources of funding, since investors might fail to identify the potential of such projects, the actors involved and they might perceive an

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increased level of risk stemming from such configurations. As a consequence, the incentives to invest in such projects are few.

Scope: Facilitating the match between supply and demand for innovative ideas, as well as the development of absorptive capacities within businesses and other knowledge users, would lead to more "optimal circulation of knowledge". Addressing such issues would facilitate knowledge co-creation among actors that better understand each other's needs and language.

Ideas that could be piloted would include at least one of the following aspects:

- Designing systematic ways of connecting local innovation systems across Europe, so that knowledge flows from one to the other easily and meaningfully. One way of achieving this could be by facilitating human capital mobility and therefore the absorptive capacities of the parties involved. This could include ideas such as "Innovation Human Capital Vouchers" aimed at stimulating SMEs to contact higher education institutes in order to find a solution to their problems;
- Focus on the skills and capabilities of businesses to tap into the European knowledge-base, by developing a specific skills-set that allows for an effective monitoring of new relevant knowledge, as well as skills that allow a better formulation of a demand for innovative solutions fit for the companies' needs (facilitating interaction between business and academia and/or between businesses);
- Design and pilot public/private funding mechanisms aiming at increasing private funding participation in collaborative innovation projects, contributing to bring innovative ideas to the market. Such mechanisms could build on or combine existing mechanisms;
- Other measures favouring optimal knowledge circulation from a demand-side point of view.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

- More optimal knowledge circulation leading to increased transformation of ideas and knowledge into socio-economic value for the European citizen;
- Enhanced capabilities and resources particularly for businesses to access the appropriate kinds of knowledge for their innovation processes;
- Enhancing businesses' absorptive capacities in utilising European knowledge-base to increase innovativeness and competitiveness;
- Knowledge circulation mechanisms addressing market needs piloted and ready to be replicated and scaled-up.

Type of action: Innovation Actions

Budget: EUR 5 million

CO-CREATION-2017-4: Towards a new growth strategy in Europe - Better economic and social measurement

Specific challenge: Over the past few decades, the insight has grown among national, European and international policymakers that public action cannot be solely guided by reference to gross domestic product and growth. Research on intangible capital investments together with societal and qualitative development have to be considered and measured.

On the one hand, European growth prospects, job creation and well-being of citizens depend on economically successful innovations which address global and European challenges and create new opportunities for firms. However, the investment in innovation – in all types of intangible capital – has not been fully integrated and measured as investment in the European growth strategies. The inclusion of intangible investment (cf. education, research, skills, branding, management and marketing) in the overall investment rate would improve the understanding about growth and productivity dynamism in knowledge-based and connected economies. Revealing cross-country differences in the intangibles investment rate relative to fixed capital formation would bring important insights to the growth policy but also to cultural and institutional differences. Creation and co-creation of global markets depend on novel business models, use of internet and ICT. Co-creation mechanisms between customers and the companies may allow reducing the risk of innovation failure, i.e firm's investment on co-creation as relational capital and trust is an important intangible asset.

On the other hand, Europe needs to understand and analyse the changing frame of references for the evaluation of the state and development of societies. Official statistics in particular need to be modernised to provide a more complete picture through the incorporation of new metrics, based on new sources and data collection methods, in coherent frameworks delivering consistent evidences and narratives to policymakers. New sources (including social media) offer unparalleled opportunities to elicit information on welfare, wellbeing and societal progress by other means than traditional sample surveys and require the development of modern, innovative methods for official statistics. With all strata of the population being in scope, methodologically sound official statistics ensure that e.g. a “silent majority” (those who do not tweet) or marginalised minorities (those who, e.g., lack bank accounts and credit cards and hence leave no trace in certain electronic systems) remain visible to policymakers when innovative, non-traditional sources are used to measure progress. The protection of individual data is furthermore a concern that should be taken into account.

Scope:

a) Research and innovation Actions

Research will investigate the integration and impact of intangible investment on the overall investment rate and growth and productivity dynamism in Europe while linking measurement to National Accounts methodologies. Measuring intangibles investment and productivity needs to be based on already existing work on intangibles and productivity in Europe. A comparative approach across European and global players is essential which can reveal important heterogeneities. The research takes into account the revised NACE which allows analyse the roles of services and the use

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of ICT and internet more adequately in a connected knowledge economy. Research also needs to address the issue how the rates of return to intangible investment are created and distributed across the value chain in the global context. The rates of return to intangibles in terms of profits and jobs might not be national which needs to be recognised in national growth strategies. Research is needed on the types and combination of firms' intangible investment in global market creation which broadens the concept of organisational capital as reflecting economic competences. In particular, the measurement of intangible investments in market creation and co-creation need to extend the already existing efforts to measure intangibles but also to guarantee its National Accounts consistency. Important dimensions include the digitalisation or big data in business models and creation of markets.

The Commission considers that proposals requesting a contribution from the EU of EUR 2 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

b) Coordination and Support Action

The coordination and support action should focus on the incorporation and alignment of new, possibly unofficial and unstructured, sources with established official statistics. It should build on the rich body of results in the “Beyond GDP” domain – in consistency with National Accounts - covering both novel domains and non-traditional sources as well as innovative data collection approaches. It should incorporate a strong statistical methodological component focusing on obtaining consistency, representativity/social inclusion (in particular when innovative data collection methods are used) and measures of uncertainty. Piloting and proof of concept should be at the forefront. Disaggregation of statistics - geographically, or by other domains (e.g. identifying vulnerable population groups) - to provide greater insights and providing evidence allowing more focused policy decisions should be covered, as should metadata and other aspects of quality of statistics. At the same time data protection concerns should be addressed.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: This topic should provide new knowledge and measurement on intangible (and tangible) investment and productivity dynamism in Europe. This should contribute to European growth strategies by taking account cultural differences, modernisation of existing industries and creation of new industries, with the practical applicability of new sources, frameworks and methods for official statistics across a wide range of aspects regarding social progress, providing a coherent framework of reliable evidence to the benefit of society.

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

Indicative Budget: RIA: EUR 2 million; **CSA:** EUR 1 million

CO-CREATION-2017-5: Collaborative, innovative and cultural practices for dynamic urban futures

Specific challenge: By 2050, 83% of the EU's population are expected to live in cities with all its related challenges: concentration of people with different cultural backgrounds, problems of education and health, issues of congestion, management of waste and water. A change of paradigm from ownership to access, from individual consumption to shared functionalities in urban environments can be applied in several sectors from energy to culture and transport.

New methods and approaches are required to face these challenges and to ensure sustainable lifestyles to European citizens. Collaborative economy, creative industries, social enterprises, responsible companies, engaged citizens, social innovations, new ways of producing, consuming, using, educating, learning, caring, moving and living are emerging in cities in Europe. But they remain marginal at the scale of the EU.

Scope: The proposed action aims at taking stock of these new practices in terms of economic, social, cultural and environmental impacts (cf. jobs, growth and investment). It should identify the business models, policy measures and institutional settings that allow these best-practices to flourish in Europe. This SME instrument should be dedicated to the implementation of pilot projects and test cases of these innovative socio-cultural urban practices. The action should include practical, behavioural and esthetical components (cf. feasibility, acceptability, urban landscape, street furniture).

Expected impact statements: This topic should explore the potential benefit of replicability of innovative socio-cultural urban practices all around the EU. It should address both public policies and private experiences. The take-up of these economically feasible and socially acceptable innovative urban practices should be demonstrated. To fill the gap between knowledge and implementation, R&I ideas should move to testing and demonstration especially involving researchers, businesses, social entrepreneurs and non-profit organisations.

Type of action: SME instrument

Indicative Budget: EUR 7.5 million

CO-CREATION-2016/2017-6: Understanding co-creation in the public sector

Specific challenge: Systematic engagement and collaboration with societal actors in public service delivery and policy-making can help governments improve their ability to address user needs and innovate their problem solving capacity. Co-creation in a collaborative and networked government implies important changes for the public sector. It requires organisational, administrative and legislative changes to link departments internally together, but also to engage with users, citizens, businesses, communities and all those who want to interact. It presumes that public administrations share information, resources and assets among themselves and also with third parties. It implies opening up government data and services for re-use in an electronic format as well as opening up the different decision-making processes. This can facilitate collaboration with stakeholders and improve the effectiveness and efficiency of decision-making and service delivery.

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This concept is often referred to as 'government as a platform', where public administrations make tools, assets, data, information and resources available for re-use, while they remain accountable for public value generation. The expected benefits are manifold, but questions still remain. The aim is therefore to better understand how and why collaboration and co-creation in the public sector happen. What are the underlying conditions, enablers, risks and barriers? How can co-creation transform the way public services and policies are designed, produced and delivered? Measured impacts, recommendations and lessons can inform policy-makers' judgement on whether and how they would be able to implement the open and collaborative government 'environment'.

Scope:

a) Research and Innovation Actions

Proposals will explore how the public sector can embrace the collaborative public service and policy co-creation model and become open participation and collaboration platform. Service provision and citizen engagement in the future will largely happen through electronic means. In order to ensure user-friendly public services and effective policies, public administrations need to facilitate linking up inside and with those outside of government and bring together a variety of actors in society, such as for example other public authorities, users, businesses, researchers, social scientists, artists and designers. The actions need to engage multi-disciplinary teams to explore the pre-conditions for public administrations, identify the necessary changes, risks and barriers (e.g. legal and procedural) to implementation, explore feasibility in different public administration contexts and provide a set of concrete recommendations for policy-makers at local, regional and national level.

Proposals need to address at least one of the below aspects:

- Developing methods to understand user needs and requirements in order to provide meaningful public services;
- Developing organisational structures or architectures in public administrations that allow sharing data, information and services internally between departments and with external parties for re-use;
- Analysing the various barriers and risks to 'government as a platform' and developing a set of recommendations for overcoming them;
- Examining the issue of privacy, data protection and security in an open and transparent government context;
- Analysing the drivers and enabling factors for societal actors to engage in public service or policy co-creation and identifying different sustainability models;
- Analysing the usability of tools that facilitate the discovery and aggregation of new services, in particular when using open services;
- Analysing the necessary role, skills and incentives of civil servants in this process.

Proposals may want to validate the prototype developed in any of the above.

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The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts

b) Coordination and Support Action¹

The aim is to bring together actors inside and outside public administrations, including policy makers, politicians, civil society, organisations, initiatives, good practices both in the EU and internationally to identify good practice cases, discuss and exchange on the concept of 'government as a platform' in Europe and discuss the future role of government in this context. Proposals will need to develop a strategic stakeholder engagement plan and a roadmap for future research directions.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 0.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Proposals need to demonstrate how they can achieve significant impact by comparing the current public administration scene with the proposed model. These impacts could be expressed, inter alia, in terms of efficiency gains, transactional cost reduction, productivity growth, stimulating the growth of new businesses as well as administrative burden reduction, user satisfaction, increasing level of civic engagement. Quantitative and qualitative aspects are to be taken into account.

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

Budget: RIA: EUR 8 million in 2016 and EUR 6 million in 2017; **CSA:** EUR 0.5 million in 2016

CO-CREATION-2016/2017-7: Applied co-creation in the public sector

Specific challenge: While efforts have been made to make public services user-friendly and reduce the administrative burden, for example by making them increasingly available online, studies show that service design often does not meet the expectations of citizens and businesses, who require more usability and transparency.

The profound understanding of users, the re-design of services with their approach and preferred delivery channel in mind are important elements for governments to prove their ability to fulfil the needs of citizens and businesses. The 'one-size-fits-all' approach no longer works in all spheres of the public sector; historical, cultural and socio-economic backgrounds play an important role in the expectations of interactions with public administrations. Engaging with stakeholders in the design, production and delivery phases is expected to bring about significant improvements.

It is therefore important to demonstrate how collaborative service creation and policy-making really take place on the ground; how stakeholders get engaged and how public administrations gather the necessary customer insight, re-define their operational processes and identify appropriate sustainability models.

¹ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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Scope: Proposals will demonstrate and/or pilot co-designing and co-creation of public services and policies. They need to bring together a variety of actors in society, such as for example public authorities, users, businesses, researchers, social scientists, artists and designers, to co-create demand-driven, user-friendly, personalised, public services and make effective decisions. It is assumed that service provision and citizen engagement in the future will largely happen through electronic means. Proposals need to demonstrate the concrete commitment of the piloting sites.

Proposals need to address at least one of the below aspects:

- Using open services provided by public administrations and allowing third parties to design, aggregate, produce and deliver in collaboration with or without government value added complementary or new public services;
- Demonstrating how 'government as a platform' can work in practice by demonstrating and/or piloting use cases for sharing data, services, tools and assets between public administrations (e.g. experiments of hybrid teams in government) and resulting in re-usable services or processes;
- Demonstrating how 'government as a platform' can work in practice by demonstrating and/or piloting use cases for sharing data, services, tools and assets with third parties and generating new or complementary services or making decisions;
- Demonstrating how user requirements can be taken on board through, for example, the use of design principles or behavioural analysis, in the creation of new public services or policies;
- Demonstrating how transparency of government data, information, processes or tools and the engagement of relevant stakeholders can lead to more effective decisions and improved policies;
- Demonstrating how public service discovery and composition could be facilitated for users in order to reduce the administrative burden.

Proposals need to ensure that privacy and data protection issues have been appropriately addressed and that the tools piloted could be re-used. Any policy area may be subject to the piloting, including social policies and those addressing the vulnerable.

Proposals need to demonstrate the feasibility of their service or solution through a number of real-life pilots and need to propose a sustainability approach or model for the period beyond the project.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Proposals need to demonstrate that they can achieve significant impact by comparing the current public administration scene with the situation after the project phase. These impacts could be expressed, inter alia, in terms of efficiency gains, transactional cost reduction, productivity growth, stimulating the growth of new businesses and thereby jobs, greater transparency leading to reduced errors and less public spending, administrative burden reduction,

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increased take-up of electronic public services by citizens, user satisfaction, increasing level of civic engagement. Quantitative and qualitative aspects are to be taken into account.

Type of action: Innovation Actions and SME instrument

Budget: IA: EUR 11 million in 2017; **SME instrument:** EUR 3 million in 2016 and EUR 3 million in 2017

CO-CREATION-2017-8: Policy-making in the age of big data: evidence-informed policy-making and policy-modelling

Specific challenge: As societal challenges are growing more complex and interlinked, effective policies need to consider the available data and evidence to ensure accurate and meaningful information. At the same time, they need to take into account the sociological, political science and economic approaches as well as behavioural aspects to understand what works and what does not. Policy modelling, simulation and testing can help public administrations understand past and current situations (e.g. through descriptive techniques, such as statistics), simulate how the current situation and trends will project into the future if unchanged (e.g. through predictive techniques) and simulate and test ‘what if’ scenarios based on whether specific decisions are taken or policies implemented (e.g. through prescriptive techniques). This can allow policy choices to become more evidence-based and analytical while engaging in co-creation of policies through for example open policy-making approaches, including over online platforms that potentially generate vast amounts of data.

Scope: In order to enable governments - at all levels - to benefit from the availability of relevant data and thereby introduce effective policies, new or improved methods and tools are needed to support and establish new types of evidence-informed policy design.

a) Research and Innovation Actions

Proposals need to work on re-usable tools for improved policy-making, addressing at least one of the following aspects:

- Compile, analyse and visualise data, including relevant open scientific and research data as well as scientific toolbox offered by the official statistics research community;
- Mine, compile, analyse and visualise data from any source, including data related to social dynamics and behaviour;
- Opinion-mining of large data sets;
- Policy modelling and simulation tools and methods;
- Iterative policy design and implementation, including the greater use of randomised controlled trials based on behavioural science.

Proposals may select any public policy area. When using open and big data in order to enlarge the evidence base for effective policy-making, principles such as independence, quality, confidentiality, impartiality and objectivity as well as representativeness and extrapolation to meaningful populations need to be considered. Data protection and privacy issues will also have to be addressed.

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Sociological as well as approaches from behavioural science are encouraged, especially where they aim to develop a deeper understanding of how public policy and services interact with citizens.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 5 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

b) Coordination and Support Action²

The activities should aim at encouraging networking of relevant stakeholders and teams working in these areas and to support constituency building. Following an assessment of the needs of public administrations, the multidisciplinary network will identify emerging technologies and potential applications for their implementation in the public sector, taking into consideration activities also undertaken outside the European Union and considering specificities relevant to different policy domains of public activity. The activities will conclude with the outlining of a roadmap for emerging research directions.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 0.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Proposals need to demonstrate that they can achieve significant impact by comparing current public policies with the situation after the project phase. These impacts could be expressed, inter alia, in terms of effectiveness, efficiency gains, greater transparency and reliance on evidence leading to increased policy compliance.

Type of action: Research and Innovation Actions and Collaboration and Support Actions

Budget: RIA: EUR 11 million in 2017 and **CSA:** EUR 0.5 million in 2017

CO-CREATION-2016-9: Co-creation between public administrations: once-only principle³ and new practices

Specific challenge: Some of the main benefits of co-creation in the public sector are personalised public services that appropriately suit the needs of citizens and businesses. A challenge for co-creation in the public sector is organising the collaboration between the different actors, including between public administrations themselves, in order to share information, knowledge and resources.

Co-creation between administrations can improve their efficiency and effectiveness by opening up and sharing knowledge and resources with the aim to unlock productivity improvements and foster the creation of more public value. Governments can re-use the data already provided by citizens and businesses and thus provide administrative services in a pro-active manner. Administrative burden of citizens and businesses will be reduced, legal obligations will be fulfilled faster and citizen services

² This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

³ The "once-only" principle in the context of public sector can be defined as that citizens and businesses should supply certain standard information only once to a public administration. Public administration offices take action to internally share this data, respecting data protection rules.

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will be simpler and less cumbersome. Applied on a wide scale it can lead to a smart, inclusive and effective "Once Only principle" at European level.

In order to preserve privacy of citizens and business confidentiality, administration would open up their information to another administration under the control and the consent of the citizen or business, in line with the EU's Data Protection Directive.

Scope: In order to facilitate this personalisation and improve user experience, full digitisation of public services and the sharing of key data only once with public administrations are important aspects. Its implication is that relevant public authorities need to cooperate not just at national level but also at EU level and share such data in a secure and user-friendly manner, respecting data protection and privacy.

a) Innovation Actions

The countries participating in a proposal will need to enable the exchange of business-related information or documents between their public administrations. The project will enable the interaction and co-creation based on the existing national systems, and will re-use when relevant existing cross-border services, in particular services operated by the Connecting Europe Facility (CEF) telecom programme. To demonstrate the robustness and the benefit to businesses the project must pilot the system for at least 12 months in real conditions. The free access to the foreground must be guaranteed to enable access by any Member State to the results specifications. The project will also identify the drivers, barriers and legal issues (such as legal barrier or gaps) for the implementation of the once-only principle for businesses across borders in Europe. The aim is that businesses should supply information only once to any public administration in Europe. Public administration offices take action to share this data also cross-border, thereby contributing to making the Digital Single Market a reality.

The Large Scale Pilot (IA) shall include a minimum of six relevant national administrations (or legal entities designated to act on their behalf) in at least six different EU Member States or Associated Countries.

The Commission expects to finance only one project under this action.

b) Coordination and Support Action⁴

Proposals for a Coordination and Support Action will support networking, discussion, exchange of experience and planning for the implementation of the cross-border application of the once-only principle for citizens, taking into account data protection aspects and the control and consent of citizens. The proposals will need to develop a strategic stakeholder engagement plan and roadmap for future areas of action.

c) Coordination and Support Action

Proposals for a Coordination and Support Action will address the application of other new practices and principles in public administrations across Europe, such as the "right to challenge" principle⁵ or

⁴ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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pilot practices on innovative funding instruments supporting public sector innovators or practitioners. The principles or practices need to have the potential of “game changers” in public administrations, spreading good practices and ensuring that all Member States operate at the knowledge-frontier of public sector innovation.

The Commission expects to finance only one Coordination and Support Action for b) for a maximum value of EUR 1 million and one for c) for a maximum value of EUR 2 million.

Expected impact statements: Proposals need to demonstrate that they can achieve impact, which could be expressed, inter alia, in terms of time savings, administrative burden and cost reduction for businesses, improved service quality and administrative efficiency.

Type of action: Innovation Actions and Coordination and Support Actions

Budget: IA: EUR 8 million and CSA: EUR 3 million

CO-CREATION-2016/2017-10: Better evidence to underpin research and innovation policies

Specific challenge: The growing attention given to research and innovation over the past decades has resulted in increased amounts of public funding being channelled to research and innovation, but also to a variety of policies and funding programmes being put in place in Europe, in order to maximise the quality and impact of this funding.

Investments in R&I must be smart and efficient and obtain the most value for every euro invested. This requires clear strategies at the national level for investing in R&I coupled with quality R&I programmes and strong institutions capable of implementing these programmes in close connection with the business sector. In addition, there is a clear need to improve the overall framework conditions for transforming R&I investments into tangible results in the market.

The challenge for policy makers is to design policies and programmes with targeted funding to address well identified bottlenecks and which are adapted to the specific context of the research and innovation system in question. This is key to improving the efficiency of the European research and innovation system as a whole, as was stressed by the Commission in its Communication on 'Research and innovation as sources of renewed growth'.⁶

A sound evidence base is needed around the performance of research and innovation systems, the impact of research and innovation on economic growth, job creation and societal progress, and on the way in which public funding and policies can influence performance and impact.

Scope: Research will focus on establishing new methodologies for assessing the performance and impact of research and innovation and the ways in which public policies and funding can influence these. This should focus in particular on the following aspects:

- a) (2016) Integration of research and innovation in macro-economic models: fiscal policies are often supported by macro-economic models, including dynamic stochastic general

⁵ This refers to the possibility for an administration to challenge a regulatory provision applied by a government when proving that it has a more efficient solution through innovation of products, services or a process inside a public organisation

⁶ COM(2014) 339 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Research and innovation as sources of renewed growth.

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equilibrium (DGSE) models, to make an ex-ante assessment of the impact of budgetary measures and structural reforms. A common shortcoming of these macro-economic models is that they typically do not account for the long-term benefits of public research and innovation investments and policies, or do so only in a limited manner. Projects should focus on developing new modelling approaches which go beyond the current state-of-the-art by incorporating for instance the existence of distinct public and private research sectors and the different ways in which public funding and policies can incentivise increased activity and quality in these sectors, the fact that quality of research and innovation is not homogenous or the influence public policies can have on the quantity and quality of the stock of highly skilled people, on the link between human capital and the production of knowledge, on the productivity of knowledge production or on spill-over and technology diffusion mechanisms;

- b) (2016) Improving the parameterisation of macro-economic models: in addition to developing novel modelling approaches, further work is also needed on empirically determining the underlying parameters (elasticity factors) used in such models, and notably DGSE models, and which link for instance the human capital stock to knowledge production, the production of knowledge to innovation or which quantify the effect public policies have on these parameters;
- c) (2017) New indicators for assessing research and innovation performance: projects should focus on developing and applying new indicators for assessing the performance of distinct elements of the research and innovation system, which go beyond the typical bibliometric and patenting indicators, as these only offer a limited view, in particular in an evolving landscape in which for instance open access mechanisms, social media or people mobility assume an increasing role. This should allow policy makers to assess in a broader and more comprehensive way evolutions in performance and how these are linked to policy reforms;
- d) (2017) Determining the societal impact of research and innovation funding: policy makers need to justify research and innovation spending by demonstrating the impact it has in terms of broader societal benefits. Projects should build on examples such as the USA's Star Metrics initiative or the European SIMPATIC project by developing and testing new ways to assess the societal impact of public funding allocated to research and innovation. Projects should take a broad approach and go beyond evaluating impacts in terms of productivity growth, economic growth and job creation, by also assessing the impact of public funding on tackling major societal challenges such as those defined in Horizon 2020.

Projects to be funded on the 2016 budget should address either issues a) or b) described above or can combine them in one project. Projects to be funded on the 2017 budget should address either issues c) or d) described above or can combine them in one project.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 1.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Depending on the aspect addressed, projects are expected to respectively deliver the following impact:

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- The development of macro-economic models, including DGSE models, which provide a realistic assessment of the variety of ways in which research and innovation activities transmit into outputs and impact and of the ways in which public funding and policies can influence this transmission;
- An empirical determination of realistic values for the underlying parameters used in macro-economic modelling;
- A monitoring of research and innovation performance which captures the broader spectrum of ways in which research and innovation activities translate into outputs and impact, in which knowledge circulates between public and private sectors and internationally or through which quality of research and innovation can be assessed;
- A reliable assessment of the societal benefits generated by public funding for research and innovation, not only in terms of productivity growth, economic growth and job creation, but also the impact it has on tackling major societal challenges.

Type of action: Research and Innovation Actions

Budget: EUR 3.5 million in 2016 and EUR 3.5 million in 2017

CO-CREATION-2016-11: Coordinating scientific advice for policy making provided by the European academies

Specific challenge: The challenge is to provide scientific advice for evidence-based policy making at European level and to ensure that this advice is contributing to the emergence of a common understanding of European-wide challenges and opportunities. Policy making in the 21st century requires such robust evidence, including foresight evidence, impact assessment and adequate monitoring and evaluation. Scientific advice needs to be independent of political or institutional interests, bring together evidence and insights from different disciplines and approaches, and ensure adequate transparency. High quality scientific advice, provided at the right time in the policy cycle, will improve the quality of EU policy making. In this context, improving the networking and coordination of academies throughout Europe is sought, as evidence-based policy advice from academies plays a major role in policy-making processes in a large number of Member States.

Scope: The activity should:

- Provide a platform for academies to animate the public debate - including the involvement of the wider scientific community - on the scientific basis of major societal challenges;
- Ensure the communication and cooperation between different national academies, encourage them to work together on topics of common interest, and lead to the formulation of joint position papers on key societal challenges;
- Promote the cooperation between academies across scientific domains (e.g. engineering academies, academies of medicine, social sciences and humanities) in order to tackle more efficiently interdisciplinary societal challenges. This should include the organisation of events

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aiming at identifying priorities for collaboration and enhancing the quality and visibility of policy advice;

- Enable academies to work together throughout Europe on topics of European-wide and global relevance through, for example, the organisation of joint policy papers and of events to enhance the networking between academies, the global scientific community, civil society organisations, citizens' groups, private actors, policy-makers, and other networks.

This call is addressed to national academies in the EU and EU wide networks of academies.

The Commission considers that proposals requesting a contribution from the EU in order of EUR 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

- Improve the quality of European policy making by providing timely advice on issues requiring action at European level, thereby facilitating the policy uptake of scientific evidence;
- Create effective links between national academies and the EU wide networks of academies as well as between the scientific debates taking place in different Member States;
- Increase the transparency and public confidence in EU policy making.

Type of action: Coordination and Support Actions⁷

Budget: EUR 2 million

CO-CREATION-2016-12: A European map of S&T excellence in support of an innovation ERA

Specific challenge: A “twin deficit” impedes innovation in many EU Member States. First, on the supply side, the EU suffers from an “excellence gap” whereby EU science fails to produce the high quality research upon which advanced industrial economies have come to rely to fuel innovation effectively, in particular in disciplines with high innovation potential such as ICT or health. This “excellence gap” partly explains the difficulties faced by the EU to transform science into innovation, the so-called “EU paradox.” Second, on the demand side, the EU's industry lacks the necessary absorptive capacity to make the best use of frontier knowledge produced by EU science effectively, largely because the share of high-growth, innovative sectors in the EU economy is lower than in the US, Japan and South Korea. In turn, this “structural deficit” can be largely explained by the fact that the EU is not growing enough firms in these sectors. This hampers the EU’s structural transition towards a genuine knowledge economy, i.e. an economy characterized by enterprises and industry with both a strong appetite for frontier knowledge and a strong capacity for global innovation leadership.

⁷ This activity, directly aimed at supporting the development and implementation of scientific advice for R&I policies and supporting various groups of stakeholders, is excluded from the delegation to the Research Executive Agency and will be implemented by the Commission services.

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Addressing this “twin deficit” in order to start a new 'era of innovation' to make an innovation ERA possible necessitates a strong analytical basis, including fine-grained, sector specific geographical mapping of excellence to design evidence-based R&I policies.

Scope: The aim of a Map of excellence is to create a web-based platform that includes data on all Higher Education Institutions (HEI) and Public Research Organizations (beyond a given volume threshold), defined according to officially validated Authority Files. It should cover data on inputs (basically, various indicators of staff and funding) and outputs (initially, various batteries of indicators from scientific publications with a fine disaggregation by discipline). The platform should have an interactive graphic interface to allow users to quickly parameter their request and obtain European maps of excellence at regional level.

The data on HEIs and PROs shall be appropriately geo-referenced at NUTS 2 and, possibly, NUTS 3 level. The platform shall be fully compliant with all existing definitional standards in the field of S&T and be inter-operable and scalable, from an IT point of view.

Once created, the platform shall allow the integration of a large set of socio-economic indicators at various geographic scales as well as the integration with other indicators of inputs (e.g., European funding) and outputs (e.g., patents, international collaborations, industry-university co-authorship etc.).

The platform shall allow the production of various families of indicators, allowing the analysis of volume, quality and impact, critical mass, specialization, and complementarity. The definition of excellence shall be made variable, according to indicators available and differences across disciplines and territories. Data shall be aggregated and disaggregated following different lines, allowing flexibility in the production of policy-driven indicators.

The Union shall support the initial development of the Map. The Union therefore asks proposers to suggest a convincing, sustainable, commercially viable business model for the operation and further development of the Map in the absence of follow-up support from the Union.

The Commission considers that proposals requesting a contribution from the EU in order of EUR 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The proposed Map of excellence shall provide a more effective basis for evidence-based policy making and policy analysis in the EU, through giving a novel insight to the driving forces bringing about scientific excellence. It will cross over disciplines and territories and go beyond the current state of the art to identify and assess the complete range of parameters linked to measuring research quality, while at the same time capitalising on recent developments in the availability of data and in computational techniques. In such a way, it shall enrich the knowledge base upon which research investment decisions are taken and harness the full power of data visualisation tools by way of collecting large datasets and presenting them in a clear and understandable way, thus allowing essential policy insights quickly, in a flexible manner, and at a reasonable cost.

Type of action: Coordination and Support Actions⁸

Budget: EUR 2 million

CO-CREATION-2016-13: Fostering interoperability and increasing sustainability of transnational research programme cooperation

Specific challenge: Still, only about 1% of national public R&D funding is spent at EU-level for transnational research and innovation activities, making the overall mobilisation of national resources (cash or in-kind/ institutional funding) to jointly address the societal challenges remain modest. Addressing societal challenges was important to capture the imagination of Member States' politicians and clarify the urgency why collaboration was needed, but this seems not to be enough. Reasons for the merely 1% of national funding spent in transnational cooperation are also linked to a lack of common terminology, procedures as well as a lack of awareness of the positive impacts, but also bottlenecks, that cross-border operation of research funders offers.

The question of interoperability of national programmes in ERA is mostly neglected and progressing only slowly outside the Union funded initiatives (ERA-NET, Art. 185). There is currently no agreement on common funding principles - eligible costs, reporting requirements, etc. to make national research programmes compatible, interoperable (cross-border) and simpler for researchers. The Framework Conditions Guidelines for Joint Programming are purely voluntary and their use is not monitored. The possibility of introducing ERA-Mark labelled programmes as one way to signal compatibility for cross-border cooperation between funding agencies could be a way forward and should be further explored.

Scope: A consortium of programme owners and managers active in Public-to-Public Partnerships (P2Ps) shall prepare and implement measures to raise the quality and impact of joint research programmes and resulting actions. These could include concepts like an ERA-Mark label recognising best practice in cross-border research operations, recommendations for common standards to be used in cross border programme collaborations or a stronger focus on integrating institutional funding in P2Ps. Funding will be provided for exploring, preparing and implementing pilot activities.

The Commission considers that proposals requesting a contribution from the EU of a maximum of EUR 0.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

- National programmes/initiative are enabled to indicate their readiness for cross-border cooperation and inter-operability between national programmes/initiatives is improved;
- It will support widening to less-research intensive countries in providing for more connectivity between national research systems;
- As all ERA-marked programmes will be listed at EU-level, transparency at European level about cross-border cooperation possibilities will be increased.

Type of Action: Coordination and Support Actions⁹

⁸ This activity, directly aimed at supporting the development and implementation of evidence-based R&I policies, is excluded from the delegation to the Research Executive Agency and will be implemented by the Commission services.

Budget: EUR 0.50 million

CO-CREATION-2016-14: Boosting investment by European long-term investment funds (ELTIF) in research and innovation

Specific challenge: The persistence of the economic downturn keeps looming over the Europe 2020 R&D investment target of 3 % of GDP as fiscal constraints have reduced Member States willingness to increase their R&D expenditure. The shortfall in public R&D spending will undoubtedly have to be offset by increasing private investment in research and innovation.

In April 2015 a new fund framework for European Long-term Investment Funds will enter into force.¹⁰ The new fund vehicle is designed to boost non-bank investment in the real economy across Europe. ELTIFs will help pension funds, insurance companies and professional and retail investors to make investments in tangible assets (infrastructures, listed and unlisted SMEs) as well as intangible assets (such as IPs, research and development), provided that such investment benefits the EU economy. ELTIFs will focus on alternative investments that fall within a defined category of long-term asset classes whose successful development requires investors' long-term commitment. The new framework could potentially compensate the shortfall in public expenditure by facilitating private investment in R&D.

The benefits provided by this new fund vehicle for research performing organisations are considerable. ELTIFs could allow research performing organisations (RPOs) to offset research and innovation investments to private investors. This will in turn help RPOs to:

- free illiquid assets;
- convert physical assets into working capital;
- offset investments in research infrastructure (buildings, labs, equipment and instruments);
- increase project investments by rallying private capital;
- monetise patents (either by leasing out the royalty rights or offsetting the patent portfolios);
- foster more effective management of infrastructure assets;
- improve overall management of research and innovation.

While research and innovation would be an ideal asset for long term investments, the complex design of the new fund instrument and the lack of awareness among RPOs and fund managers, may hamper the adoption of the ELTIFs as a viable source of R&D funding.

Scope: The call has the objective to explore how ELTIFs can assist research performing organisations in attracting private investments by bringing together fund managers and RPOs in a common stakeholder platform. The aim of the platform should be to develop a best practice framework and an action plan that can be used by stakeholders willing to invest in research. The exercise should facilitate:

⁹ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

¹⁰ COM(2013)462 Regulation of the European Parliament and the Council on European Long-term Investment Funds. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013PC0462&from=EN>

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- partnering between fund managers and RPOs;
- valuation of tangible and intangible assets relating to research and innovation. Valorisation is in this context fundamental for the purpose of finding investors and resources that can support research and innovation projects;
- assessment of risks and opportunities;
- identification of tangible and intangible investments;
- research investments using equity instruments, quasi-equity instruments, debt instruments, loans, direct and indirect holdings of real assets;
- awareness raising among stakeholders.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The introduction of the new fund can potentially have a significant impact on overall research investments and thus mitigate the shortfall in public expenditures. The Commission can play a key role by facilitating cooperation between fund managers and RPOs to ensure that long term investments also contribute to research and innovation.

Type of action: Coordination and Support Actions

Budget: EUR 1 million

CALL REVERSING INEQUALITIES AND PROMOTING FAIRNESS

REV-INEQUAL-2016/2017

REV-INEQUAL-2016-1: Contemporary radicalisation trends in Europe

Specific challenge: Radicalisation is on the rise, not just in Europe. It is manifest not only in the increased success of radical political parties and movements at both ends of the political spectrum, but crucially also in an increased resort to violence seemingly motivated by extremist ideologies and religion. Stark examples include the involvement of radicalised young people born and raised in the EU in atrocities committed in the name of the so-called Islamic State as well as highly visible terrorist attacks of political nature. In parallel to these trends, xenophobic, anti-Semitic and islamophobic radicalism and violence are also increasing. The reasons for these trends seem multifarious and complex, involving growing inequalities in European societies and their expressions such as unemployment and the absence of concrete life perspectives for younger populations, the increasing and permanent exposure to social media and life in a virtual world as well as disappointments with existing democratic regimes. The challenge for research is to better and more fundamentally understand the scope of these phenomena, as well as their origins, causes and dynamics at play in the increased radicalisation of young Europeans, and to identify ways in which to reverse them.

Scope: The research to address this challenge should in particular focus on the following key dimensions. Proposals can comprehensively address one dimension or combine them. They may include additional aspects which are relevant to addressing the specific challenge.

1) Radicalisation, violence and hate crime

Research should map out and provide a sound overview of the scope of recent radicalisation trends, also through comparisons across time. It should explore the origins, dynamics and drivers of radicalisation, as well as effective barriers to its spread, in particular in relation to the young. In this context, the phenomenon of self-radicalisation specifically needs to be much better understood. Research needs to investigate both structures and agency, also in relation to each other: it should ask on the one hand which contexts, ideologies and environments, and, on the other hand, which mind-sets and individual, including psychological, dispositions are conducive to self-radicalisation. The influence of inequalities and discriminations and their connections with ideologies ought to be scrutinised. In particular research should uncover how enduring and sustained inequalities of certain groups lead to stigmatisation and discrimination and how this impacts upon radicalisation. Research also needs to enhance the understanding of preparedness to commit acts of (extreme) violence and atrocities, often deliberately conducted to maximise visibility and media attention. The drivers which push individuals beyond a certain threshold to commit violence and hate crimes need to be studied, also as a basis for identifying possible remedies and strategies aimed at preventing radicalisation or at favouring de-radicalisation. Gender aspects should be included when relevant. This requires multidisciplinary collaborative research, drawing from psychology, criminology and anthropology, among others.

2) Radicalisation and religious fundamentalism

Projects under this dimension should study the possible roles and significance of religion in radicalisation in various guises, e.g. religion as a radicalising ideology in itself, as a potential (ideological) justification or legitimation for violent attacks against others, including groups and/or entire cultures and ideologies seen as encroaching upon a particular religion or radical/extreme interpretation thereof. Research should also investigate whether, how and to what extent religion might be exploited for political pursuits. This may require investigation of the evolution of religious fundamentalism in and outside of Europe and its embeddedness into broader global phenomena. Research also needs to examine the contexts and dynamics of recruitment strategies and initiatives, including the motivations and receptiveness of targeted groups and individuals. The additional role of networks, organised crime, prisons and social media and, when relevant, the gender dimension must be explored, too. At a policy level, possible migration, asylum and integration policies need to be examined and solutions identified for preventing and countering radicalisation in the name of any religion.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic will considerably enhance the knowledge base on the scope, origins, causes and dynamics of radicalisation, in particular in relation to young people. Research will provide the bases for evaluating policies with regard to their effects on radicalisation and (dis)integration. Research will also furnish recommendations on how to address religious fundamentalism in and outside of Europe in particular. Projects will also produce profiles of recruiters and targeted individuals. Recommendations on effective strategies and practices of de-radicalisation and for the prevention of radicalisation will be made.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

REV-INEQUAL-2016-2: An empirically based European theory of justice and fairness

Specific challenge: The ongoing financial, economic and social crises in Europe have brought the issue of rising inequalities to the fore. Whilst increases in inequalities vary between (Member) States and have evolved at different speeds at different times, it is clear that inequalities have been on the rise generally over the last three decades, both in Europe and globally. There is increasing evidence and awareness that rising inequalities have both contributed to the crises and been a consequence of them. Despite evidence showing that more equal societies fare better on core quality of life indicators, there continue to be differences in perceptions of inequality. It is therefore high time to address, and possibly reappraise, the concepts and realities of equality, justice and fairness at a fundamental level, both normatively and empirically. The specific challenge is to formulate a theory of justice and fairness which is normatively sound, reflective of European values and at the same time rests on solid empirical ground with regard to citizens' attitudes and views.

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Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Towards a European Theory of Justice and Fairness

Research should take stock of and, if necessary, issue with existing theories of justice with a view to constructing a, possibly specifically European, theory which is in tune with European values and reflective of the achievements and shortcomings of the European integration process. In particular, such conceptualisations should adopt a historical perspective in various European countries and consider whether novel, alternative conceptions of justice and, linked to this, fairness are called for in attempts to reinvigorate democracy. Apart from (re)distributive approaches, other resources for building just and fair societies such as the significance of recognition in society and of individual and collective capabilities should also be considered. The meaning of 'equal opportunities' should be normatively reassessed and substantiated. Whilst the focus of the research should lie on theory building and development, the ambition of the theory should also be to serve as an inspiration and reference point for policies designed to reverse inequalities.

2) How Europeans perceive and experience inequalities

Building on existing data, including projects financed by the European Union, notably the European Social Survey, research should conduct comprehensive empirical, quantitative and qualitative investigations on the scale of inequalities accepted and acceptable to Europeans. This should encompass the attitudes regarding inequalities at least in relation to wealth, income, education and health and cover a representative range of EU countries. If justified, non-European countries may also be covered, especially with a view to comparing them with European perceptions. The central questions that should be addressed are how much inequality people accept, find appropriate or perhaps regard as beneficial and why. Evidence on people's attitudes should be set into relation to their real-life experience with inequalities. Research should also explore attitudes about the precept of 'equality of opportunities' versus 'equality of outcomes'. How do people understand these notions? What expectations do people harbour about it? Current and previous policies aiming at redressing inequalities should be critically assessed in the light of the findings of the research. The research should combine quantitative and qualitative methods.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic is expected to provide comprehensive data and analysis on the extent to which inequalities are regarded as acceptable across a range of dimensions and Member States. Research will lead to the formulation of a theory of justice which provides political guidance to the challenge of reversing inequalities. In particular, research is envisaged to considerably enhance and deepen the knowledge base on the foundations of the concepts of justice and fairness. Research should inform policy makers at various levels on how to implement policies on the basis of a European Theory of Justice and Fairness.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

REV-INEQUAL-2016-3: Intra-EU mobility and its consequences for social and economic systems

Specific challenge: Free movement is not only a fundamental principle of the European single market, but also a fundamental right of European citizens entitling them to move freely and reside anywhere in the EU. With the 2004 and 2007 enlargements and, more recently, with the lifting in 2014 of the last transitional restrictions on free movement of Eastern Europeans to move to the EU-15, the issue of intra-EU mobility, and particularly the mobility of EU citizens, has become heavily politicised. Negative portrayals of internal migrants, whether EU citizens or third country nationals (TCNs), in terms of economic and social costs are prevalent in the media and have also been widely used in national and European electoral campaigns.

Scope: The research to address this challenge should in particular focus on the following key dimensions. Proposals can comprehensively address one dimension or combine them. They may include additional aspects which are relevant to addressing the specific challenge.

1) Social and economic impact of intra-EU mobility

Research should investigate the facts and test the controversies associated with intra-EU mobility, i.e. of all EU citizens who are currently residing in another Member State than the Member State of citizenship as well as mobile third country nationals (TCNs), and their family members. It should map the paths of their geographical mobility and devise a set of innovative comparative cross-country indicators of mobility. Research also needs to address the economic, social and cultural factors that influence patterns and routes of mobility of EU citizens and TCNs (current and emerging push and pull factors, location-specific utility).

In terms of geographical distribution, the overwhelming majority of mobile EU citizens and mobile TCNs resides in the EU-15 countries. Research should investigate the scale and impact of this group on the social and economic systems of these receiving countries. Special consideration should be given to collecting data on employment and welfare benefits. Such data could include, but should not be restricted to, the type of jobs taken on by mobile EU citizens and TCNs, whether they substitute or complement local labour, the effect on local wages and tax collection, and the use of social benefits. This data should then be interpreted against claims of 'threat to local employment' or 'welfare tourism'.

Research may also consider the socio-economic impact on (predominantly) sending Eastern European countries. Issues to be considered include remittances, loss of human capital, impact of migration on family life (separations, impact on children and the elderly) and local communities, gender, demographic trends, impact on the tax base and labour market. Research could compare migration flows and impacts following the so-called Eastern enlargement round with migration effects after previous accession rounds. Research could also consider whether and to what extent intra-EU mobility relates to inequalities, in particular whether and to what extent it helps to reverse or exasperates existing inequalities and/or generates new ones.

2) Perceptions on and politicisation of intra-EU mobility and representation in the media

Research should survey and examine discourses and perceptions on intra-EU mobility. The role of the media, including social media, of political parties and other groups in opinion formation must be

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analysed. A representative range of Member States ought to be studied comparatively. Research could also compare, and if opportune contrast, these discourses with those following previous accession rounds and assess the connections with the development of xenophobia in Europe. It should also consider whether and to what extent discourses distinguish between intra-EU mobility and migration into the EU. Awareness and knowledge of the factual realities of migration, including and in particular with regard to the actual costs on the welfare systems, should be tested, and if necessary contrasted with claims commonly made. Research should analyse the underlying processes and dynamics of the politicisation of intra-EU mobility. Crucially, research may analyse whether and how this politicisation relates to increasing inequalities in Europe.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research will considerably enhance the knowledge base on the socio-economic impact of intra-EU mobility in general and on national welfare systems in particular. Projects will inform on the necessity of any additional regulation on intra-EU mobility. Research should make recommendations on how sending countries can harness the talents and resources of their citizens abroad. Research will make recommendations with regard to effective tools and methods to correct public perceptions on the issue to the extent that they are distorted. Projects addressing both dimensions of the topic are expected to compare, and if necessary contrast, the empirical dimension with the political rhetoric and public perceptions, sorting myths from the realities.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

REV-INEQUAL-2016-4: Fighting inequalities through policies against tax fraud and tax evasion

Specific challenge: Tax fraud and tax evasion represent a complex challenge for European countries. The scale of the lost revenue is staggering, up to €1 trillion Euro per annum in the EU according to current estimates. Unpaid taxes do not only limit the capacity of Member States to invest in and implement much-needed social and economic policies and services. Tax fraud and tax evasion also constitute a direct impediment to equal treatment and in fact exacerbate inequalities as they lead to additional and potentially excessive fiscal burdens on those who fulfil their tax obligations. This lost revenue could stimulate economic growth, prevent cuts in public services and mitigate fiscal and social inequalities. Moreover, the fact that well-off or well-connected people benefit from privileged tax treatment decreases the trust that citizens have in the fairness of policies and democratic institutions. The specific challenge is to identify and analyse deficiencies in tax enforcement across Member States and to obtain a clearer picture on perpetrators' attitudes.

Scope: The research to address this challenge should in particular focus on the following key dimensions. Proposals can comprehensively address one dimension or combine them. They may include additional aspects which are relevant to addressing the specific challenge.

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1) The state dimension: the role of governments and tax enforcement regimes

Research should identify deficiencies at governmental level and in tax collection and enforcement regimes. A good range of Member States' legal regimes and tax collecting practices should be comparatively surveyed, their strengths and shortcomings analysed and evaluated. Due regard must be had to all forms of corruption in this regard. The research should provide a comparative cross-analysis of tax fraud and tax evasion prevalence in European countries. It should also identify deficiencies in tax enforcement and tax administration practices, technical setup and legal frameworks at national, regional, local and, where available, at European or global level. Based on these insights, it should compare the impact of strategies to enhance tax compliance such as adjusting tax rates, altering the level of punishment provided by law or putting in place amnesty programmes and better information exchange between countries. Since undeclared work and underreporting account on average for 18.5% of the economic activity in Europe, particular attention should be paid to the issue of the shadow economy.

2) The perpetrators' side: practices, motivations and attitudes across Europe

Research should inventory practices, mechanisms and strategies and attitudes of perpetrators comparatively. It should investigate the economic, social, behavioural, ideological, historical and cultural drivers behind fraudulent tax practices. Variation in terms of location, income brackets, sector of activity and any other relevant variables should be explored. In addition, research should analyse fiscal non-compliance through the lens of ethics, morality and social justice. This research requires, if and where possible, a temporal dimension, assessing whether and to what extent practices and especially attitudes have been changing in particular in recent years in the wake of the financial crisis. Research should also assess whether and to what extent the prevalence of tax fraud, optimisation, evasion and avoidance might be socially and/or culturally or gender embedded. Regard should be had to amnesty programmes where applicable and their impact should be assessed. Special attention should be paid not only to tax fraud and evasion, but also to tax avoidance of individuals and corporations in top income brackets. These groups have access to more sophisticated means of non-compliance or 'bending the rules' such as storing money in tax havens, moving to a different tax jurisdiction or using shell companies to hide profit. In turn, combating tax evasion in these cases will require investigating and developing sophisticated methods of data sharing and administrative collaboration at trans-national level. The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research will significantly enhance the knowledge base of various tax collection and enforcement systems among Member States in general and identify their deficiencies in a comparative way. It will make recommendations which help redress and reverse tax fraud, optimisations, evasions and avoidance. Furthermore, research will considerably improve understanding of practices, motivations and attitudes of perpetrators, both individual and corporate. Recommendations will be made on how tax compliance can be improved, and how it could to a greater extent be portrayed and seen as a virtue. Research is expected to propose readily applicable instruments and strategies to reduce tax fraud, tax optimisation and tax evasion and to incentivise tax compliance. The quantitative and qualitative data collected will contribute to increasing the

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efficiency of tax administrations in European countries by enabling them to better target their compliance and inspection efforts on the individual and company level as well as in sectors of economy with a higher probability of non-compliance. Research should also set out best practices for enhancing cooperation, trust and confidence between tax administrations and taxpayers.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

REV-INEQUAL-2016-5: Inequalities in the EU and their consequences for democracy, social cohesion and inclusion

Specific challenge: While a core value of all democratic countries in the EU is equality, inequalities have increased in recent decades, and democracies seem powerless to stop the trend, and may sometimes even seem to encourage such inequalities. There is however considerable controversy on whether and how rising inequalities impact upon democracy and social and political inclusion. Inequalities are not only economic and social phenomena, but they also empower and constrain individuals and groups political capacities and therefore provide indicators as to how we live together as a community and organise politically. Faced with the growing feeling among citizens that the political institutions in European democracies have become less powerful and allow for inequalities to grow instead of reducing them, it is important to enquire to what extent the increase in social and economic inequalities affects the cohesion of society, the future of our democratic systems and the European project as a whole. It is often claimed and/or assumed that a flourishing middle-class constitutes the back-bone of European democracy and that its demise at the centre leads to the rise of more polarised, and possibly populist, politics which threatens to undermine the stable and predictable democratic state which emerged gradually after WWII and became characteristic and indeed an essential prerequisite of European Integration. Given that high concentrations of wealth and income among a small proportion of society impacts negatively on social cohesion, the EU and its Member States have to reassess and reappraise the democratic effectiveness and functioning of their political systems. The specific challenge is to consider and evaluate the political ramifications of increasing social and economic inequalities and polarisation for democracy in Europe.

Scope: The research to address this challenge should in particular focus on the following key dimensions. Proposals can comprehensively address one dimension or combine them. They may include additional aspects which are relevant - to addressing the specific challenge.

1) The relation between democracy and the middle class

Over the last decade, a polarisation of income by education has been noticed in most EU Member States as well as in North America. Recent research has found that the share of employment in jobs located in the middle of the skills distribution has declined considerably. At the same time, the share of employment at the upper and lower ends of the occupational skills distribution has increased substantially. In the face of this evolution, the so-called 'decline of the middle class' has come to the forefront of the debate. As "middle class" is itself a contested object, research should attempt to define it more precisely on the basis of relevant comparative and historical work. It should also test whether the common assumption that increasing inequalities and a growing polarisation between 'rich' and 'poor' are likely to lead to an erosion of the middle class. It will also critically reappraise the

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claim that a solid and flourishing middle class is a precondition for and guarantor of a thriving democracy. Research should also consider the implications of a declining middle class on levels of trust and cohesion in the EU as well as traditional democratic and political structures more broadly.

2) Increasing inequalities and their impact on classical and non-classical political participation

As analysed by European research projects, the links between income, voter turnout, institutional factors, psychological factors and other forms of democratic participation and citizenship are complex.¹¹ Historically, the rise in inequalities has coincided with a decline in voter turnout in most Western democracies. A potential further evolution is therefore that, as inequalities increase, several segments of the populations in European democracies cease to participate in public life and become depoliticised, indifferent or even hostile to democracy, at least in its current forms. Research should study correlations between increasing inequalities in its various dimensions and electoral participation and consider causalities in both ways. Due regard should be had also to participatory action repertoires beyond participation in elections. Civil society, civic culture and social participation are important in this regard, but research should be open toward genuinely alternative and innovation participation in public discourses too. Research should compare, and if opportune contrast, the impact of heightened inequalities between traditional democratic participation on the one hand and engagement in alternative, including more ad hoc action repertoires on the other. Particular attention should be paid to links between non-institutionalised forms of participation and inequalities with regard to education. Research should combine qualitative and quantitative methods and be able to develop causal explanations rather than mere correlations.

3) Young people and the future of European democracies

While young people seem to have a fairly substantial interest in politics and political issues, this seems to translate less and less into comparable levels of engagement with formal politics and the political system. This is an alarming sign for the future of European democracies. A more differentiated policy approach is needed, taking into account and responding to social structural inequality affecting young people and diversity. To this end, research should explore new ways of political engagement and interaction, with the aim of countering the depoliticisation of socially excluded young people. On the basis of qualitative and quantitative empirical work on young people and their links to democracy, it should assess how to "reinvent" democracy in Europe and make our political systems evolve. Finally, it should also look at how children in Europe, as future citizens, consider the central values of democracy such as equality and solidarity and how such views can determine their future political participation and level of support to various forms of democracy.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research will increase the knowledge base on the effects of increasing socio-economic inequalities and ensuing polarisation between different parts of the citizenry and European democracy(ies). Research will make recommendations on the future role of a shrinking

¹¹ See, for instance, the projects PIDOP (<http://www.fahs.surrey.ac.uk/pidop/>) and MYPLACE (<http://www.fp7-myplace.eu/>), as well as the policy review "An even closer union among the peoples of Europe? Rising inequalities in the EU and their social, economic and political impacts", European Commission 2015.

middle class for democracy and social cohesion and the ramifications this will have for political engagement. Research will also inform policy makers on how more novel, including ad hoc, participation repertoires may or may not qualify to substitute for more traditional democratic, especially electoral participation. Most importantly, it will provide a critical assessment of current democratic practices in order to build more inclusive and reflective societies and "reinvent" democracies. Research will also inform policy makers of different future scenarios of the development of democracy and political participation in Europe in the light of varying trends in inequalities.

Type of action: Research and Innovation Actions

Budget: EUR 7.5 million

REV-INEQUAL-2016-6: Tackling inequalities at their roots: new policies for fairness in education from early age

Specific challenge: Despite ample analysis and many recommendations, educational inequalities remain pervasive in all European education systems regarding access, treatment and outcomes. European education systems need to cater for considerable diversity and enable all citizens to succeed and develop their full potential, irrespective of their background and according to their specific learning needs. Yet, whole social groups or sub-sets of the population persistently perform less well in education. There are also wide geographic disparities in education, between and within Member States, also regarding early-childhood (pre-primary) education. Finally, many learners with disabilities and/or special educational needs are still placed in segregated institutions or in mainstream settings with inadequate support, frequently leaving school with insufficient learning outcomes. The role of pre-primary and primary education has been recognised as being of fundamental importance in the educational cycle, as they lay the foundations for future educational and professional attainment. However, huge disparities exist within Europe also at this level.

The goal of reducing inequality and discrimination in European education systems is particularly challenging and relevant. However, it is both more efficient and equitable to invest in education very early: correcting failure later on is inefficient in comparison. Early childhood education facilitates later learning, and can produce large socio-economic returns, especially for disadvantaged children. Moreover, innovative practices for increasing the efficiency of education systems could also play an important role for equity.

Scope: The research to address this challenge should in particular focus on the following key dimensions. Proposals can comprehensively address one dimension or combine them. They may include additional aspects which are relevant to addressing the specific challenge.

1) Reducing educational poverty from an early age

How can higher levels of educational outcomes be ensured for the whole population? What policies are needed to reduce educational poverty thanks to bold policies in early-childhood education? The research will focus on early childhood education (pre-primary) and primary education. More specifically, it will assess the successes or failures of educational policies against inequalities in a comparative way and analyse the various institutional, cultural and ideological resistances to changes

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towards equality. It will seek to generate concrete policy guidance for system-wide, integrated and - where necessary - cross-policy strategies for effective intervention at an early age. Particular attention should be devoted to strategies for strengthening inclusive education and providing for the successful inclusion of learners in early childhood education and care. This could include combating social, economic, gender and spatial segregation and discrimination; promoting the success of migrant-background learners; better equipping institutions and educators to deal with diversity and social inequality; providing active and inclusive pedagogies; promoting citizenship and enhancing democratic values; better measuring and monitoring inequalities in education, including at the regional and local level. It will help define the roles of education at an early age as an essential tool against inequalities, taking into account the wider context of schools and education in Europe.

2) The contribution of innovative forms of organisation and management in educational systems to equity and efficiency

Research should investigate how innovative forms of organisation and management in educational systems may contribute to equity and efficiency. The research should address barriers, including cultural ones, to innovation in education systems and propose strategies for overcoming them. It should concentrate on European countries with higher levels of educational poverty and include comparisons with countries outside of Europe when relevant.

The focus should be on outcomes in terms of level of competence of pupils and students, taking into account all relevant dimensions of outcomes and the pupils' background in European educational systems (ISCED 0 to 4). Possible dimensions to be analysed include: governance issues (decentralisation of responsibility for expenditure, decision-making, assessing results, allocating public funding); organisation of the curriculum; degree of autonomy of schools; accountability issues; availability and quality of facilities, including ICT, innovative teaching/learning methods; gender balance and learning environments.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Education is one of the five key objectives targeted by the Europe 2020 strategy for growth essential to combat (social) inequality and social exclusion by equipping the next generation with the skills and qualifications needed to build a socially and economically strong Europe and to provide for social cohesion and democratic values. Further specific research, taking into account the recent economic, demographic and social developments in Europe, will contribute to the identification, transferability and up-take of effective and efficient measures to combat inequalities in education right from the early age, increase educational outcomes, promote social innovation and foster broad cross-policies cooperation among researchers, stakeholders, practitioners and policy-makers. Other policy-relevant outputs of the research could be novel methods to analyse efficiency/effectiveness of spending in education, including new indicators.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

REV-INEQUAL-2016-7: Spatial justice, social cohesion and territorial inequalities

Specific challenge: Location matters. This could hardly be truer than with regard to the place where people live, including neighbourhood, city, region, and country. Where one is born and raised (still) determines to a considerable extent one's opportunities and constrictions and it also impacts on one's personality. Despite technological developments which are making the notion of 'space' somewhat more relative, social mobility is constrained by many spatial and institutional factors, especially for the young and those living in precarious conditions. Yet, from an equality and spatial justice perspective, the place of birth or living should have as little impact as possible on socio-economic chances and public policies should be in place to lessen such inequalities. At a political level, it seems that regional, and sometimes sectarian, movements and parties appear to be gaining ground in Europe, whereas Member States and the European Union are losing political credit. After a long period of catching-up for most of the disadvantaged regions, inequalities among regions within Member States are now growing again. As "hollow" States find it hard to develop appropriate answers to increasing inequalities, citizens are seeking locally and socially innovative solutions within their immediate environment or communities. Territorial patterns are shifting and some cities are taking the lead in global challenges (e.g. with regard to sustainability, transport and climate change).

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Territorial Cohesion, Spatial Justice and Solidarity in Europe

Research should explore links and tensions between territorial cohesion, sustainable development and spatial justice in Europe at times of crisis. In particular research should assess whether and if so how and why territorial cohesion could or should be understood as a prerequisite for achieving sustainable economic growth and maintaining democratic capacities for adaptation and change. Research will survey empirically existing and emerging spatial and territorial inequalities and evaluate them normatively from perspectives of justice and fairness. A representative number of divergent spatial entities in Europe (and beyond, where appropriate) have to be studied. Research should in particular consider and appraise the socio-economic and political consequences of the financial strains for territorial cohesion in times of austerity. Possible conceptual connections between social and economic cohesion and the European Social Model should be reappraised. The distribution, size and availability of public services in the fight against spatial inequalities should be thoroughly assessed. Furthermore, research will take account of justice and fairness inspired conceptions of solidarity in formulating requirements of spatial justice.

2) Regionalism, a question of political and social equality?

Research should explore whether, and under which circumstances, claims to (more, or partial) regional autonomy or decentralisation are - or are not - justifiable on account of economic, political and social justice. In particular, research should explore whether and why a relatively high degree of regional distinctiveness in terms of economic development, social structures and, where appropriate, culture, may require certain degrees of autonomy. Research should consider whether and to what extent the quest for regional autonomy could be seen as an alternative for EU social cohesion policies.

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The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The research will conceptually and empirically contribute to the knowledge base on spatial justice and territorial inequalities. It will also contribute to identifying policies promoting spatial justice and socio-economic well-being at various governance levels concerned (incl. among local organisations and stakeholders). Research will reappraise existing cohesion policies and instruments, as well as the essential role of public services and make recommendations for their continuation under conditions of austerity. Research will also make a contribution to conceptualising the European Social Model. Research will improve the knowledge base on the relation between regional policy and political claims to regional autonomy and decentralisation.

Type of Action: Research and Innovation Actions

Indicative budget: EUR 5 million

REV-INEQUAL-2017-8: Dynamics of inequalities across the life-course

Specific challenge: Existing and rising inequalities pose fundamental challenges to European societies and economies. The sources of inequalities in contemporary societies are complex and highly intertwined. A key concern and indeed challenge is the increasing gulf between rich and poor exacerbated by the financial and economic crises and ensuing high unemployment rates, especially among the young and marginalised groups. The action should address the underlying mechanisms behind existing inequalities in general and the development of inequalities across the life-course in particular. In this context, time is an often neglected key resource. The evolution of disposable time over the life-course can be an important indicator of intergenerational inequalities and raises questions of intergenerational justice and solidarity. A new understanding of the complex dynamics of inequalities across life-courses and between generations as well as their relationships with social cohesion in a contemporary historical perspective is therefore needed. The specific challenge of this call is to address these dynamics comparatively in their social, cultural, economic and political dimensions.

Scope: Activities under this topic should contribute to exploring the underlying dynamics, structures and processes of inequality across life-courses and contribute to better understanding some of the most pressing problems of present-day society related to inequality and social cohesion. They aim to engage, bring together and broaden the research community, and facilitate capacity-building for research into inequalities and life-courses on a comparative, multi-disciplinary and cross-national basis. The participation of disciplines such as sociology, education, law, political science, economics, history, anthropology and psychology is anticipated and encouraged, as is due regard to demography and sustainability.

Building on and taking stock of existing data, research should compare the life-courses of different generations in Europe and set them into relation to disposable time and income. To this end, research should comprehensively examine how Europeans of all ages spend their time, and how this

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use of time has evolved over recent decades. Comparisons should be made between time-use patterns of various generations, gender differences and of rural and urban populations in Europe. Research should also investigate the conditioning factors of disposable time at various stages of the life-course at both the individual and structural level. It should explore how work/life balance patterns evolve over life-courses and how more flexible work patterns could be devised which lead to more equitable and sustainable intergenerational distributions of disposable time. It should thus provide the evidence base for effectively planning time in the working environment, but also insights on how relevant policies, such as employment or education policies, can provide the frameworks in which people feel that they can use their life time in a manner they experience as comfortable and fair. Research could also address issues such as intergenerational justice, for instance regarding the set-up and reforms of pension systems in Europe.

The proposed ERA-NET Cofund aims at coordinating the research efforts of the participating Member States, Associated States and Regions in the field described and to implement a joint transnational call for proposals with EU co-funding to fund multinational innovative research initiatives in this domain.

The Commission considers that proposals requesting a contribution from the EU of a minimum of EUR 5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Effective trans-national, pan-European research networking and synergies among national/regional and EU research programmes in the area will increase the knowledge base on life-courses and the role of time with regard to inequalities, realities and conceptualisations of life-courses and intergenerational justice. It will lead to sustainable approaches to work/family/recreation balances. Research is expected to draw conclusions and make recommendations on sustainable future interactions between human capital and social capital in order to help reversing inequalities. A survey of approaches to inter-generational justice systems, projections of future scenarios as well as recommendations on the feasibility and extent of European convergence should be provided.

Type of action: ERA-Net Cofund

Budget: EUR 5 million

REV-INEQUAL-2017-9: Social Sciences and Humanities - Responsible Research and Innovation (SSH-RRI) hub for information and communication technologies (ICT)

Specific challenge: As technologies are increasingly embedded in our lives and in society, ICT-related research and innovation needs to ensure that it proactively considers opportunities and challenges as well as the impacts of take-up in a responsible and sustainable manner. Harnessing the expertise in social sciences and humanities (SSH) is needed to ensure the necessary ingredients to ICT-related scientific and technological developments and to contribute to cohesion, fairness, legitimate representation, inclusiveness, privacy and other societal needs and expectations.

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Scope: In order to effectively attempt ensuring responsible ICT research and innovation in a hyper-connected society effective, a hub for SSH-RRI is envisaged. The Hub is designed to bring together the Social Sciences and Humanities (SSH) and Responsible Research and Innovation (RRI) actors and activities in ICT-related projects across H2020 and to link with activities outside H2020. It should integrate in its work the relevant outcomes of previous and existing European coordination efforts.

The purpose of the Hub is to stimulate responsible ICT research and innovation by encouraging the uptake of the SSH expertise and by engaging, coordinating and supporting internally (i.e. within the Horizon 2020 Framework) and linking externally (i.e. with other relevant projects and initiatives both in Europe and in the world, other stakeholders, from citizens, policy makers, researchers, to private corporations). The coordination and support action is expected in a participatory inclusive and collaborative way to create a common understanding and ways to implement what "responsible" means and implies for ICT research and innovation.

In terms of **engagement**, the Hub is expected to ensure active dialogue among all stakeholders, facilitating access to SSH knowledge within the ICT-related H2020 projects and beyond. It will foster participation, experience sharing, networking between different actors, cooperation with existing networks and will extend its reach to other communities, initiatives, projects and stakeholders. Through these dialogues, it helps research initiatives to better meet societal needs and expectations for ICT-related research and innovation.

As regards **coordination** efforts, the Hub will focus on community building, facilitating cross- or even multidisciplinary collaborations between ICT developers, SSH researchers and other stakeholders as well as building partnerships to create synergies within and across projects, topics and organisations, within and beyond Europe. The Hub will, inter alia, support consultation, and help projects constantly feed and refine their products and services in relation to their addressees' needs and expectations. The Hub will also serve as the knowledge integrator and channel of the status of RRI-SSH developments and needs within ICT research and innovation in discussions with European policymakers and in planning of future research agendas.

In terms of its **supporting** function, the Hub will catalyse information sharing by mapping, collating, clarifying and curating information about activities in Europe that are aligned with the strategic RRI and SSH objectives in ICT-H2020. In addition, new relevant developments in the world will be monitored and integrated, as appropriate. It will follow the developments and extract best practices and lessons learnt, in order to provide tools and advice for considering RRI in different areas of ICT research and innovation. It will support the visibility of the relevant activities through sustained communication efforts (e.g. annual conferences, awareness raising, promoting the effort at European level and internationally), to create shared understandings, vocabulary and narratives, and stimulate new initiatives and new thinking in the area.

The Commission will select one proposal only and considers that proposals requesting a contribution from the EU of between EUR 1.5 and 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

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- Improved level and efficacy of the interaction between SSH and ICT disciplines with a view to harnessing ICT-related innovation for reversing inequalities and contributing to responsible innovation processes through SSH expertise;
- Improved take-up of responsible research and innovation approach in ICT-related research and innovation that takes into account human and societal concerns under new technological conditions;
- Sustainable community support to the ongoing and future ICT projects by establishing an efficient and effective collaboration platform between ICT developers, SSH researchers, and a broad stakeholder base (including society, industry, policy makers);
- Increased worldwide visibility and influence of a coordinated European SSH-RRI community with a shared vision for responsible ICT research and innovation;
- The proposals themselves are expected to identify key, measurable success indicators that measure impact in community building and engagement, and uptake of responsible ICT research and innovation approaches within and beyond the consortium.

Type of action: Coordination and Support Actions¹²

Indicative budget: EUR 3 million

REV-INEQUAL-2016-10: Multi-stakeholder platform for enhancing youth digital opportunities

Specific challenge: Today's children and young people lack opportunities to participate actively in policy and decision making, as well as in designing their digital agenda. Children and young people are major users of the internet and online services, it needs to be ensured that they are equipped with the right and trusted environments to take advantage of this as active participants in the digital society. The online environment is rapidly changing and we need to develop the tools to identify and understand the needs of the young generation.

Young people in Europe need not only the space to discuss and to engage with multiple stakeholders and decision makers across borders and boundaries, but also to be given the instruments to actively shape the research agenda as well as to actively participate in research related to their use of digital technologies. Innovative research methods are needed to empower children and young people by giving them an active role in research. Efforts need to be undertaken to give a voice and to empower children and young people who are marginalised or at risk of exclusion. Only an active participation of all citizens, and especially of all young people, in policy making, can create the basis for a well-functioning European society.

Scope: This coordination and support action should aim at the creation of an online platform to engage children and young people, framed by research according to their needs and behaviours. Children themselves will be able to take initiatives on the research topics and methods, while the

¹² This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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researchers will act as facilitators. Children and young people will be given more active and participative roles that allow empowerment.

The platform should bring together stakeholders from research and policy makers, together with children and young people around Europe. Specifically it should:

- Allow for child and youth-directed research, where researchers and policy makers act as facilitators;
- conduct research and develop a knowledge base on the use and interactions with the digital world of children and young people. This will be done in collaboration with interdisciplinary researchers and social scientists;
- discuss within peers but also with decision makers, industry and civil society on their needs and expectations from the digital society;
- co-create with multiple stakeholders research and policy priorities.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements:

- Stimulate children and young people's civic engagement through online participation;
- Allow for innovative research methods on children's and young people's use of internet and digital technologies through their active participation in the research;
- Empower children and young people by allowing them to take an active role in policy making
- Leverage youth participation and dialogue with stakeholders and decision makers;
- Ensure full and safe participation of children and young people in accessing and creating services.

Type of action: Coordination and Support Actions¹³

Budget: EUR 1 million

¹³ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

CALL ENGAGING TOGETHER GLOBALLY

ENG-GLOBALLY-2016/2017

H2020-SC6-ENG-GLOBALLY-2016/2017

ENG-GLOBALLY-2017-1: Situating Europe into the global context: intercultural relations and their effects

Specific challenge: In the early 21st century, Europe is faced with a complex global context characterised by numerous competing understandings of central values and organising principles of society, including the meaning and direction of politics, economics, culture and ultimately human life. This context, and Europe's place in it, needs to be understood and accounted for, also from a historical perspective, if the European Union and its Member States want to continue to constructively take part in global discourses about what constitutes a "good society". This requires a great dose of (self-)reflexivity about Europe's own history and its interactions with third countries, regions, cultures and religions. It also calls for a continued investment in fostering political, economic, social and cultural relations with other actors on all continents, and for ways in which to sustain intercultural exchanges that effectively enhance mutual understanding despite differences.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine two or three of them. The research may also cover other issues relevant for addressing the specific challenge.

1) Intercultural skills in the context of European diplomacy

In an increasingly complex global context, diplomacy as a social practice and profession is undergoing considerable changes. With the proliferation of state, sub-state and non-state actors in global politics, the diplomatic arena is becoming more diverse. As a result, in both bi- and multilateral contexts, it is no longer sufficient for diplomats to be skilled in the art of negotiation, but they also need to possess - alongside specialist knowledge - ever more developed intercultural competences. When it comes to the capacity to function in intercultural contexts, European diplomats are often considered as highly skilled because both Member State diplomats and representatives of EU institutions frequently have to operate in complex multilateral, multicultural and multilingual environments inside the EU. However, European diplomats are also engaged in a wide range of interactions all over the globe, and this increasingly in important, highly challenging cultural and linguistic contexts beyond the "Western sphere".

Research should examine the level of knowledge and intercultural skills prevalent in European diplomacy in the broadest sense of the term, including activities of EU representatives (e.g. from the European External Action Service) and Member State representatives, but also of European civil society actors, business representatives, cultural actors or researchers engaged in forms of (para-)diplomatic activities. Analyses of European diplomacy in and with third countries and regions, sub-state and non-state actors should rely on comparative case studies to identify instances of successful

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and failed intercultural exchanges. The perceptions of third country representatives and other interlocutors from outside Europe of EU diplomatic performance could form part of such analyses. Research should expose under which conditions cultural understanding, or a lack therefore, has contributed positively or negatively to reaching foreign policy objectives in various intercultural challenging contexts. Reasons for a possible lack of intercultural skills should be identified and ideas developed on what it takes to be a culturally aware and skilled diplomatic actor. Suggestions should be made on adequate training and possible collaborations between governmental and non-governmental actors (e.g. researchers) for ensuring context-aware intercultural knowledge and skills for the benefit of European diplomacy. In this context, ideas for exploiting synergies, for instance through area-specific task-sharing and specialization between various European diplomatic actors, should be explored.

2) Reflections of Europe's colonial past in contemporary European societies

Multidisciplinary research associating scholars from the humanities and social sciences should adopt an outside-in perspective on contemporary European societies and trace the manifold non-European, colonial era-related determinants of present-day societal and cultural diversity in Europe. In so doing, it should pay particular attention to the way societal and cultural influences from outside of Europe have historically been framed, contested, transformed, refused or taken up in European societies. It should elucidate how and why some of these influences were able to strongly impact European societies and culture, and why others were less successful. Research under this topic will lead to a sound understanding of the cultural legacies of colonialism within Europe and their implications for policy-making and intercultural dialogue.

3) Global trends of secularisation and religious radicalisation and the role of Europe

Over the centuries the relations between the state and religion were of key importance for the functioning of state and society. Today's world is divided between secular states where government is officially separated from religion, and states where this distinction is blurred, in addition to a few theocratic states. Whereas secular states are spread all over the world, and the religions professed and practiced by their citizens represent the widest possible spectrum of beliefs, the majority of countries which have embraced religion as leading principle are predominantly, although not exclusively, those following Islam and located in the area of North Africa and the Middle East. Taking account of the diversity of forms of secularism and religion, and adopting a historical perspective, this multidisciplinary social sciences and humanities research should investigate and compare various types and experiences of the functioning of secular and religion-based states. Its findings should clarify reasons for, and pathways of, transformation of the role of religion in state governance, and should explain differing perspectives of cultural and political co-existence within the polity. Specific attention should be paid to the analysis of the impact of religious radicalisation on secularisation trends all over the world and its consequences on states' peaceful coexistence. It should particularly focus on what these trends can and do mean for the European Union and its Member States and the state-religion relationship on the European continent.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic is expected to provide in-depth insights into the multiple ties and mutual influences between Europe and its neighbours, former colonies and other countries and regions, especially in the socioeconomic, cultural and religious spheres. It will provide a sound understanding of contemporary European societies, of the multiple sources and expressions of diversity in the EU and of how non-European influences impact on the formation of European identities. Acknowledging the multiple sources of today's European diversity will have strong policy implications, not just for cultural policy, but also for immigration, integration, education and external policies. It will also facilitate Europe's future engagement in effective intercultural dialogues.

Type of action: Research and Innovation Actions

Budget: EUR 7.5 million

ENG-GLOBALLY-2017-2: The Asia-Pacific as a strategic region for Europe

Specific challenge: The Asia-Pacific is a large and diverse region, encompassing industrialised countries, emerging economies and developing countries. Perhaps due to this diversity, and save a few specific cases, the European Union has lacked a strategic approach towards the region, despite strong economic interests and heightened security concerns in the area. Several EU Member States have adopted an active bilateral approach towards key partners, but the European Union has mostly failed to speak with one voice in relevant fora. Nowadays the multiple and complex challenges shared by the two regions, ranging from climate change and sustainable development to conventional and non-conventional security challenges, are opening up new opportunities for the EU to become more involved in the region beyond economic cooperation. In order to re-think its role and strategy for the Asia-Pacific, and to fully tap the potential for action at European level, the European Union needs to be supported by sound research showing the concrete implications of further engaging with and in the region in a number of sectorial and geographic areas.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine two or three of them. The research may also cover other issues relevant for addressing the specific challenge.

1) Regional integration in South-East Asia and its consequences for Europe

South-East Asia has seen, since 1967, the most ambitious project of regional integration outside of Europe, pursued through the Association of Southeast Asian Nations (ASEAN). It has followed a different integration path to Europe, based on dialogue and non-interference rather than convergence and law. The region has an immense social, cultural and economic potential, but it still faces the challenge of developing a regional identity with both an internal dimension (how to nourish a sense of belonging) and an external dimension (how to engage with foreign powers, such as China, the United States, Japan and the EU). The process of nation-building in the ten ASEAN countries is incomplete (and nascent in a region's non-ASEAN country like Timor-Leste). It is also confronted with widespread poverty, disruptive migration flows, inter-ethnic conflicts and even territorial disputes. For the EU to engage effectively in South-East Asia and manage the variety of countries and cultures present in the region, it is necessary to understand what 'region' means to the peoples of these

countries within and beyond the ASEAN context. Research is thus necessary on the mobility of people, knowledge, ideologies, cultures, goods and capital within the region and their influence on the emergence of a South-East Asian identity which would help the EU and its Member States to forge coherent, adapted and culturally relevant foreign policies with all countries in the region.

2) Cultural and socio-economic aspects of urban issues in China

In China and elsewhere, the management of an exceptionally rapid urban growth poses considerable challenges to policy-makers and city planners. In such a delicate context, physical city planning cannot be considered in isolation from governance aspects, related for instance to land use and resources for city financing but also to the human and cultural dimensions of cities. Urban infrastructures and public services also call for a balanced and integrated planning so as to minimise or avoid the negative socio-economic, human and environmental impacts on city-dwellers. Cities are also viewed as engines of growth and innovation, often attracting large shares of R&D investments and an innovative service sector. Many aspects of city planning and development, such as infrastructures, regulatory regimes, taxation, health, education and culture, have a bearing on the framework conditions within which innovation occurs and can be shaped to boost cities' performances. Joint European-Chinese research taking into consideration these essential elements of city development could contribute to an improved reciprocal knowledge on urbanisation processes between the EU and China. Through the joint format, research will benefit from access to data and expertise from both EU and China, with a view to proposing new models of sustainable urban development adapted to local socio-economic, cultural and political specificities.

3) Governance in and of the Pacific as a challenge for Europe

One of the major strategic challenges in the Asia-Pacific region relates to the governance of the Pacific itself. The Pacific Islands region represents a unique diversity of nations, state formations and regional and intergovernmental mechanisms, which is experiencing major challenges regarding the protection of its exceptional natural environment, threatened in particular by climate change. The small islands developing states (SIDS) of the Pacific therefore have a central role in the contestation over, competition for, and conservation of some of the world's key resources, far surpassing their modest size in terms of land mass and population. As the second largest donor of development assistance to the region, the EU's interests and activities in the Pacific are highly significant and hold important potential for the future. However, the region's new geopolitical currency is a willingness to seriously engage with emerging definitions of an equal, two-way partnership relation in Pacific terms that expands beyond the monetary dimension of cooperation. The EU is thus at a cross-road in its engagement with the Pacific. Research should examine the emerging governance structures in the region and their effectiveness, paying close attention to issues such as trade and transport, fisheries management, climate change, biodiversity, social inclusion, democracy and blue/green growth. It should comparatively analyse the role and impact of external actors in the region, prominently focussing on the European Union and its Member States. Building on existing research, lessons should be drawn from the Pacific experience for devising new approaches, as well as on how Europe can effectively respond to the strategic challenge posed by the Pacific.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic is expected to provide a comprehensive overview of the strategic challenges that Europe faces in the various zones of the Asia-Pacific region, and on a range of relevant subjects. Based on this, it will inform different foreign policy actors, processes and initiatives at EU and Member State-level either with a sectorial or geographic focus, especially by providing essential insights on the legal, cultural and socio-economic aspects surrounding their implementation.

Type of action: Research and Innovation Actions

Budget: EUR 7.5 million

ENG-GLOBALLY-2017-3: The strategic potential of EU external trade policy

Specific challenge: In its "Strategic Agenda for the Union in Times of Change" for the period 2014 to 2019, the European Council identified the need to "maximize the EU's clout" in global affairs, notably by "ensuring consistency between Member States' and EU foreign policy goals and by improving coordination and coherence between the main fields of EU external action, such as trade (...) development and economic policies".¹⁴ One area which definitely promises maximised EU clout in global affairs is trade. Given the European Union's significant weight as the world's largest trading block, its external trade policies can be a major source of a reinforced European role as a global actor if they are strategically deployed and contribute to a broader, coherent foreign policy approach. EU trade policies have however been fraught with contradictions: the EU's trade liberalisation agenda has been superposed by what many of its interlocutors regard as protectionist reflexes, and despite the use of conditionality in trade agreements to interlink trade with broader foreign policy objectives (e.g. promotion of human rights), the Union has been reproached to regularly let its economic interests prevail. What is more, EU and Member States' external trade policies have regularly not been in sync. To reap the strategic potential of EU external trade policy, its current functioning, as well as its intended and unintended consequences need to be fully understood, and forward-looking perspectives have to be developed on how to make it more effective.

Scope: Research under this topic should take stock of the European Union's and its Member States' bilateral and multilateral trade strategies and policies, comparing various regional and country-specific trade policy approaches and assessing the coherence and consistency of their objectives, strategies and instruments. Bilateral trade relations with key economic players such as the United States and China, but also developing countries from various continents should form part of such comparisons, alongside the Union's multilateral engagement in relevant international institutions, such as the World Trade Organization and its related negotiation processes and the G-20 summit as a major global economic forum. This analysis should in particular comprise detailed scrutiny of the coherence and consistency between the EU's trade policies and those of its Member States.

The results of these stock-taking should lay the foundation for an investigation of the coherence and consistency of trade policies with other EU external policies such as economic, developmental, environmental, social and labour (e.g. international labour standards, cooperation on decent work) and human rights policies. Research should ultimately evaluate whether and how EU external trade policies can and do serve wider foreign policy objectives, identify the institutional, organisational and

¹⁴ European Council (2014): Conclusions. Brussels. 26-27 June 2014.

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behavioural drivers of and obstacles to a coherent and effective strategic use of EU trade policy, and formulate propositions on how to combine trade and other external policies into a comprehensive European foreign policy. A comparative perspective, contrasting the EU's approach with the strategic use of trade policy by other major global players, could be envisaged.

The Commission considers that proposals requesting an EU contribution of between EUR 2 and 2.5 million would allow this specific topic to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic will lead to a set of novel insights into the evolving EU and Member States' bi- and multilateral trade strategies and their inter-linkages with other external policies, their coherence and effectiveness. Placing trade at its centre, it will revisit and innovate the debate on coherence and consistency in EU foreign policy so as to provide an understanding of whether and how trade can be utilized strategically in the context of broader EU foreign policy agendas and in support of its foreign and economic policy objectives. Based on these policy-relevant insights, it will formulate recommendations on the institutional, organisational and behavioural adaptations needed to reinforce the EU's clout in global affairs via enhanced coherence of its foreign policy.

Type of action: Research and Innovation Actions

Budget: EUR 2.5 million

ENG-GLOBALLY-2017-4: Shifting global geopolitics and Europe's preparedness for managing risks and fostering peace

Specific challenge: Europe's strategic and geopolitical environment is evolving rapidly, and in a manner that increasingly raises concerns. In recent years, violent conflicts have agitated the planet, many of them located in Europe's immediate neighbouring regions. These developments take place at a time when global geopolitics is undergoing long-term transformations challenging the traditional predominance of the West, while policies of economic austerity oblige EU Member States to manage scarce resources more effectively. These trends seriously challenge the Union's capacity for guaranteeing its citizens' security - one of its principal *raison d'être* - while also jeopardizing its aspiration of promoting European values and interests abroad. To evaluate and promote its preparedness for playing its role as an effective security provider, and for managing risks and fostering peace beyond its borders, the implications of recent global developments need to be understood and assessed against the EU's own capacities and willingness to make synergetic use of those.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Recent global geopolitical developments and their implications for Europe

Research under this dimension should adopt a comprehensive understanding of security and, based on this, identify and investigate long-standing and novel - global and regional - external risks facing

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the EU and its Member States. Crises in its neighbourhood, such as the rise of radical Islamic groups exemplified by the expansion of the "Islamic State" in Syria and Iraq, but also conflicts and risks in other regions of the world such as in South Asia (e.g. Afghanistan) and Sub-Saharan Africa (e.g. Mali) should be examined. Research should identify the most pressing risks and unravel the causes, expressions and security-relevant consequences of such instable contexts. It should examine possible inter-linkages between various geographically limited conflict situations as well as their embeddedness into overarching global geopolitical developments. This necessitates a sound understanding of the political, socioeconomic and cultural contexts in which patterns of insecurity emerge, also from a historical perspective. An inventory of contemporary risks should form the basis for identifying their implications for Europe and its security needs. Research should examine how potential threats are perceived, and if and how they can, do and should become part of a novel security agenda in Europe. It should investigate how the EU and its Member States can act to better anticipate, prevent and respond to the identified risks and develop scenarios on possible EU activities, evoking policy mixes combining diplomatic and economic with civilian and, if needed, military means.

2) Europe's preparedness for managing risks and fostering peace in a crisis-ridden context

Research under this dimension should comprehensively examine the European Union's and its Member States' willingness, capacities, instruments and channels for anticipating and responding to a large array of external threats. It should contrast the EU's legal basis for external security policies, including risk analysis and management, conflict prevention and resolution, post-conflict management and peace-building, to the actual practice, both prior to and after the onset of the economic and financial crises. Analyses should draw on comparative case studies from the EU's handling of various conflicts and crises across the globe. Research should develop criteria for effective security cooperation in the EU, distinguishing between objectives and instruments, and identify the political, socio-economic and cultural conditions that enable or hinder the emergence of such cooperation. Based on this evidence, research should highlight necessary developments towards effective EU security policies, especially in the framework of its Common Foreign and Security Policy (CSFP). It should also provide insights on whether and how the EU can work synergistically together with individual third countries or international institutions like NATO.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic will lead to an up-to-date appraisal of global and regional risks and, as such, of Europe's evolving security agenda in the light of recent geopolitical developments affecting its neighbouring regions and the entire globe. It will generate critical and forward-looking evidence of Europe's preparedness for effectively facing these threats, guaranteeing its citizens' security while managing risks and fostering peace abroad. Based on this evidence, it will provide recommendations on how to improve the EU's effectiveness as a domestic and global security provider.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

ENG-GLOBALLY-2017-5: The European Union and the global challenge of migration

Specific challenge: Migration is a central and common phenomenon in human history. Recent estimates put at 72 million the international migrant population in Europe¹⁵ and it is expected that this number will increase in the future, due to economic and demographic factors, political unrest, conflicts and climate change. One aspect that has become increasingly clear in recent years is that, if the EU wants to successfully manage immigration flows at home, it needs to strengthen its cooperation with third countries of origin and transit of migrants, by fully addressing the root causes of migration and exploiting the potential of migration as a development enabler. In this vein, the European Council conclusions of June 2014 stress that migration policies need to become a stronger integral part of the Union's external and development policies through intensifying cooperation with third countries, while also calling for improving the link between the EU's internal and external policies. In recent years, important steps have been taken in this direction, but it is essential that the EU continues to engage in a broad debate on the links between its migration policies and other policies with an external dimensions including, but not limited to, its foreign and development policies.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) An integrated approach to migration and development

Building on existing studies, research should further elucidate the complex interrelation between demographic trends, socio-economic development and good governance on the one hand, and migration flows on the other, both in third countries of origin and transit of migrants. To complement macro-studies and investigate drivers at the micro- and meso-levels of analysis, comparative case study research of countries and regions most relevant for migration flows to Europe should be envisaged, taking into account local knowledge of the studied countries and regions. Consortia are encouraged to target geographic areas of current and future strategic relevance for the EU, including those most likely to generate irregular flows. Researchers should be careful to capture the two-way relation between migration determinants and the impact of migration on the broader socio-economic infrastructure and processes of transformation in the sending countries. Given its increasing relevance, climate change and its effects, as well as other or environment-related reasons for migration, could also feature in the analysis of drivers of migration.

2) EU policy coherence and migration

Research should focus on the interplay between the Global Approach on Migration and Mobility (GAMM) and the deployment of EU foreign policy tools and processes and other European policies with an external dimension, in particular the European development and neighbourhood policies. The analysis will encompass the implementation of these policies in selected geographic areas of interest for the EU and the combined effects that such policies have on countries of origin and transit of migrants. Pre-departure policies, programmes and related activities could be the object of specific attention, along with other tools promoting mobility in a legal and secure environment. Finally, the

¹⁵ United Nations, Department of Economic and Social Affairs, Population Division (2013a). Trends in International Migrant Stock: The 2013 Revision - Migrants by Age and Sex (United Nations database, POP/DB/MIG/Stock/Rev.2013/Age).

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consistency of the overall EU approach to third-country cooperation on migration will be assessed, including aspects of inter- and intra-institutional coordination, along with areas where further synergies are needed to create greater leverage effects between different policies. In selected cases, consortia should look at the role of bilateral migration policies conducted by Member States vis-à-vis third countries and their complementarity with EU level actions.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The results of research under this topic, with its focus on sending and transit countries, will allow for a better understanding of the root causes of migration, their interplay with other determinants and the impact of migration on development processes. Research will give EU and national policy-makers stronger conceptual tools to better interpret the role of the EU and its Member States as global actors in the field of migration. Research under this topic is also expected to bring about greater policy coherence and effectiveness in the field of migration management and relations with third countries.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

ENG-GLOBALLY-2016-6: Reappraising the European Union's neighbourhood policies

Specific challenge: The European Union's neighbouring regions are, in various ways and for a number of reasons, in turmoil. To the East, the Eastern partnership has been called into question ever since the 2013 Vilnius summit, especially by the long-standing crisis in Ukraine. In the South-East, the EU's relationship with Turkey has increasingly come under strain, while at Turkey's border the conflict in Syria and the ravage of the Islamic State have created high degrees of instability. In the Western Balkans, the accession processes of several candidate countries remain challenging. Finally, the East and South Mediterranean region has been the theatre of profound and intricate transformations ever since the "Arab revolutions" of 2010/11.

Against this backdrop, it is fair to observe that the EU's aspiration of creating a "ring of friends" around its borders based on the shared values of democracy, the rule of law and the respect of human rights, remains unfulfilled. More than ten years after its inception, the European Neighbourhood Policy (ENP)¹⁶, but also other EU strategies (including enlargement-related ones) targeted at its neighbouring countries and regions, need to be re-assessed. This assessment process requires in-depth knowledge about the political, socio-economic and cultural conditions of the different countries located around the EU. It also demands in-depth scrutiny of the Union's past approaches and policies in order to identify best practices and the conditions under which they can be successfully deployed, while also thinking in terms of innovative alternatives.

¹⁶ The European Neighbourhood Policy covers Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, the Republic of Moldova, Morocco, Palestine (this designation does not entail any recognition of Palestine as a state and is without prejudice to positions on the recognition of Palestine as a state), Syria, Tunisia and Ukraine.

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Scope: This coordination and support action should provide a stock-taking and critical review of research on the European Union's neighbouring regions as well as on its neighbourhood-related strategies and policies. It should synthesize knowledge regarding each of the neighbouring countries and regions, taking full account of the diversities of the studied entities, and compare transformation experiences both from an EU and a third country perspective, across time. In so doing, it should draw on and synthesize insights of neighbourhood-related FP7¹⁷ and H2020¹⁸ projects such as those focused on the Caucasus, the Eastern Partnership, Turkey and its neighbourhood, the Balkans, and the Southern and Eastern Mediterranean. It should also consider relevant results of international cooperation projects involving neighbourhood countries.¹⁹ Additional research insights, taking into account the role of other state (e.g. US, Russia) and non-state actors in the various neighbouring regions, should be considered. Supplementary research should be envisaged in order to cover a wider set of policy areas that play a role in the relations between the EU and its neighbours, including socioeconomic and environmental, but also research and innovation policies. The coordination and support action should liaise between projects and disseminate project findings to relevant stakeholders, including policy-makers and civil society organizations in Europe and third countries. It should draw lessons for EU policy-making that combine general observations about the Union's neighbourhood strategies and policies with regional and country-specific scenarios. The differences between the studied regions and their historical ties with Europe and the EU Member States should be duly accounted for. The coordination and support action should ultimately formulate recommendations for an innovative and effective set of EU formal and informal strategies vis-à-vis its neighbours.

Any consortium submitting a proposal to this call should ensure a balanced representation of partners from countries neighbouring the European Union.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: This coordination and support action will result in a consolidated corpus of knowledge on the EU's neighbouring countries and regions, their socioeconomic, political, and cultural situations. It will put together an inventory of EU strategies and policies vis-à-vis various countries in these regions and provide an assessment of these activities against criteria that it will develop. Based on these policy-relevant insights, the coordination and support action will feed into future EU strategies vis-à-vis its neighbours with an eye to reinforcing stability and promoting democracy and prosperity in its near abroad. It will ensure a wide dissemination of these results to the relevant stakeholders.

Type of action: Coordination and Support Actions²⁰

Budget: EUR 1.5 million

¹⁷ See, for instance, FP7 projects CASCADE (<http://www.cascade-caucasus.eu/>) and ISSICEU (<http://www.issiceu.eu/>) on the Caucasus and ARAB-TRANS (www.arabtrans.eu/), SAHWA (www.sahwa.eu/), POWER2YOUTH (www.power2youth.eu/) on the Mediterranean.

¹⁸ See the call "Europe as a Global Actor" under the Societal Challenge 6 Work Programme 2016/2017.

¹⁹ See "Research and Innovation in support of the European Neighbourhood Policy" (http://ec.europa.eu/research/iscp/pdf/publications/neighbourhood_policy.pdf).

²⁰ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

ENG-GLOBALLY-2017-7: The European Union and Central Asia

Specific challenge: In spite of its undisputable importance as a region located at a strategic crossroad to the Far East, as a rich reservoir of natural resources and as an area of traditional trade relations with Europe, Central Asia has been rather neglected by the major global players in the post-Soviet era. Only in more recent years, the political and economic developments in the five countries of the region - Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan - have received more attention. Challenges related to weak governments, abuse of power and corruption, divided societies, border disputes and ethnic tensions have led to increasing political and religious militancy and the creation of extremist groups which potentially represent non-negligible suppliers of forces to the radical political and religious movements in the neighbouring countries. Today's relevance of Central Asia in general and to the trade, security and development strategies of the European Union and other world powers in particular is, however, not reflected in the level of attention which the region is given from a scientific, social sciences and humanities point of view. Not only are Central Asian Studies less of a priority for European research centres, but European researchers in this field are also not sufficiently coordinated and their work is not adequately linked to policymaking.

Scope: Taking into account the need for a more intensive and properly coordinated research in the field of Central Asian Studies and the need for closer links to EU policy making, a network of European researchers will be created which, in cooperation with researchers from Central Asian countries, will:

- through mapping the current state of affairs in the field of Central Asian Studies in Europe and European Studies in Central Asia, recommend relevant new forms and priorities for future EU scientific cooperation with the region;
- through mapping the current state of political, economic, trade, cultural and any other relations between the EU and its Member States with Central Asian countries, and analysing results of the existing measures and tools supporting them, recommend future priorities for European policy making. These recommendations should be prepared in close cooperation with any other relevant European and Central Asian stakeholders (e.g. local, regional and state authorities, not-for-profit sectors, representatives of businesses, etc.);
- prepare an awareness-raising dissemination and communication strategy for the promotion of Central Asia and its role for Europe, which could be used by a variety of stakeholders (e.g. education, media, EU public sphere in general).

Any consortium submitting a proposal to this call should ensure a balanced representation of partners from countries in Central Asia.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The coordination and support measures of this action will contribute to improving the ties of the EU with the region and countries of Central Asia in all socio-economic, political, security as well as cultural and scientific areas. Its findings will primarily be focused on the

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formulation of short- and long-term priorities for EU policies towards the region, as well as on proposing methods for their achievement. They will be further used for education and media purposes and thus contribute to raising awareness among EU citizens of today's reality of the countries of Central Asia and of their importance for Europe. By creating a network of European researchers in the field of Central Asian Studies and by proposing new forms of cooperation with counterparts in Central Asia, the action will reinforce mutual research ties between the EU and Central Asian countries and establish a robust basis for their sustained collaboration.

Type of action: Coordination and Support Actions²¹

Budget: EUR 1.5 million

ENG-GLOBALLY-2016-8: Centres/Networks of European research and innovation

Specific challenge: The challenge is to strengthen the position of Europe as a global actor by reinforcing the presence of European research and innovation actors in selected international partner countries and regions. The aim is to develop structures that will provide services to European research and innovation actors to facilitate and support partnering, access and promotion in international partner countries and regions.

Scope: Proposals shall strive to establish new centres, or networks of centres, building as much as possible on existing European science, technology and innovation structures located in international partner countries and regions. These centres/networks will engage in activities such as:

- Promotion, awareness raising and training activities, e.g. on European science, technology and innovation strengths and actors, on cooperation opportunities, on the international dimension of Horizon 2020, on opportunities offered by national programmes etc.;
- Events and meetings, e.g. partnering events, networking, best practice exchange, knowledge transfer, visits etc.;
- Studies, analysis and monitoring work, e.g. on local innovation and market framework conditions etc.;
- Advice and support to European academic as well as industrial/private sector actors on how to develop successful research and innovation cooperation with the international partner country/region etc., and advocacy towards international partner countries/regions in favour of open and responsible research and innovation.

Proposed work shall seek to establish the centres/networks and ensure their initial operational phase. Establishment shall take place in accordance with a business model that shall aim to finance, in the medium term (at the latest at the end of the grant), part of the activities of the centre/network through service contracts with private and public clients.

Proposals shall target the following international partner countries and regions: [Brazil], [China], [sub-Saharan Africa], [Southern Neighbourhood].

A maximum of one proposal will be supported per targeted international partner country and region. The Commission considers that proposals requesting an EU contribution of between EUR 2 and 3 million for a duration of 2-3 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

²¹ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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Expected impact statements:

- Reinforced cooperation between European research and innovation organisations and researchers and those of the Union's international partners;
- Higher visibility and prestige for European research and innovation and its actors in international partner countries/regions;
- Stronger presence of European organisations in the science and innovation environment of the partner country/region;
- Improvements in the framework conditions for international cooperation in research and innovation;
- Enhanced impact of results from research and innovation projects, including those under Horizon 2020, through increased access to excellence and to markets across the world.

Type of action: Coordination and Support Actions

Budget: EUR 10 million

ENG-GLOBALLY-2016-9: EU-China innovation platform on sustainable urbanisation

Specific challenge: The importance of innovation in sustainable urbanisation has been recognised by the EU and China in their Joint Declaration on the EU-China Partnership on Urbanisation signed in 2012, as well as in the conclusions of the EU-China Innovation Cooperation Dialogue of 2013. The challenge is to bring together a wide-ranging partnership of stakeholders in Europe and China to create an innovation platform for developing and piloting innovative solutions in sustainable urbanisation that rely on advanced knowledge and technologies.

Scope:

Proposals shall

- Establish a platform bringing together industry, academia and other stakeholders in EU and China in sectors important for sustainable urbanisation. The platform should develop joint strategies, be the 'nursery' of joint projects and a broker of science-industry partnerships between Europe and China. It should mobilise key urbanisation related initiatives such as the European Innovation Partnership on Smart Cities and Communities and the Joint Programming Initiative on Urban Europe;
- Develop, through the platform, a joint EU-China strategic research and innovation agenda on sustainable urbanisation, in consultation with relevant stakeholders (public authorities, industry, academia etc.). The agenda should contain collaborative research projects and large scale demonstration projects, including joint activities that may be financed partly through coordinated EU-China Calls for proposals. It should allow for seamless integration with initiatives financed by EU Member States and Associated Countries, regional governments in China, or by industry. Framework conditions for cooperative innovation should be addressed as necessary;
- Promote, through the platform, linkages between sustainable urbanisation demonstration projects in European and Chinese cities, including by running a competition that will lead to the selection of a small number of demonstration sites in China and in Europe, including also suggesting the network infrastructures (energy, transport, ICT, water etc.) that would need to be put in place in these sites and possible financing means, as well as designing demonstration projects with conditions that encourage co-investment by Chinese and EU partners in intelligent solutions for sustainable urbanisation, building as much as possible on existing initiatives.

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As such, the platform is expected to contribute to creating the conditions for large scale science-industry cooperation on sustainable urbanisation that can address the challenges China and Europe face in this area.

A maximum of one proposal will be supported. The Commission considers that a proposal requesting an EU contribution of EUR 1.5 million for a duration of 3 years would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Due to the specific challenge of this topic, in addition to the minimum number of participants as set out in the Rules of Participation, proposals shall include at least one participant from China. [Under this topic, legal entities established in China are eligible for funding from the Union.]

Expected impact statements:

- Increased stakeholder awareness, exchanges and synergies between Chinese and European industrial, academic and public players engaged in research and innovation on sustainable urbanisation;
- Improved complementarity between different sustainable urbanisation funding programmes supported by the EU, the EU Member States and China;
- Better match between the supply of innovative technological solutions and the needs of city planners and managers in charge of organising services linked to sustainable urbanisation;
- Increased capacity of industrial actors to develop and provide more effective solutions for the needs of sustainable urbanisation, and of city planners and managers to make informed choices on innovative technologies.

Type of action: Coordination and Support Actions

Budget: EUR 1.5 million

CALL UNDERSTANDING EUROPE PROMOTING THE EUROPEAN PUBLIC AND CULTURAL SPACE

CULT-COOP-2016/2017

CULT-COOP-2017-1: Contesting sovereignty and legitimacy in Europe

Specific challenge: Discourses on the legitimacy of the EU, and especially its democratic deficit, have been a perennial issue for many years but have become significantly more urgent and pressing in times of crisis and austerity. At both ends of the political spectrum, claims about the illegitimacy of current EU governance have found broader resonance, expressed both in public manifestations of discontent combined with claims for alternative forms of legitimacy and in electoral successes of radical right and radical left parties across Europe. In this context, questions of justice, fairness and European solidarity have equally been raised. The concept of justice is inherently connected with the rule of law and entails a right to justification. Fundamental rights are also key in this regard. The European Stability Mechanism and the Fiscal Compact have been regarded by some as emblematic challenges not only to the rule of law but also to democratic governance. What is more, especially in the light of some recent election results in EU Member States, it seems as if not only the legitimacy of certain policies and institutions have been questioned, but also fundamental issues concerning the locus and exercise of popular sovereignty have been placed on the agenda. The specific challenge is to take the cues from such developments and ensuing contestations over sovereignty and legitimacy in order to reappraise discourses about democratic legitimacy on the one hand, and the rule of law and justice as increasingly thorny issues for the European public space on the other.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Democratic government and representative democracy

In light of the increasing number and growing popularity of alternative discourses about EU legitimacy and the locus of sovereignty, research should re-examine common democratic deficit arguments, in particular in relation to a possible decline of democratic control and participation in Europe. This requires inter alia a comparative investigation of the sovereign and democratic powers of Member State parliaments and governments, not least in the light of a possible de-legalisation of the (Economic and) Monetary Union. Research should assess the constitutional significance of recent electoral challenges in particular to economic and monetary governance outside the EU Treaties. In this regard it is of specific importance to clarify questions related to sovereignty and the ultimate source of authority in contemporary EU governance: who does, can and should possess this authority and how is it legitimately exercised at EU level. Research will also assess comparatively new patterns concerning the usage, transformations and popular understandings of various arguments about European legitimacy and sovereignty in public political discourse and in civil society and the conditions under which they do or not resonate among European citizens. Research should also revisit the inter-institutional relations in the EU with specific attention to the position of the European Parliament. In particular research must normatively assess the constitutional implications of the European Stability Mechanism and the Fiscal Compact for Parliament on the one hand, and the

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assertion of the Parliament to install the winning party's candidate as Commission President after the 2014 European Parliament elections on the other.

2) Legitimacy through the rule of law, delivery of justice and fundamental rights

Research should reappraise the significance of the rule of law and discourses on justice with regard to the legitimacy of the EU in times of crisis. Of particular importance in this regard is the jurisprudence of both the European Court of Justice and Member States' courts in upholding the rule of law. Research should ascertain whether and to what extent legal discourses of justification contribute to the legitimacy of the EU. The increased importance of the Charter of Fundamental Rights in the wake of the Lisbon Treaty and the nomination of a First Vice President of the Commission with responsibility for Fundamental Rights ought to be considered. The role of mutual recognition, also in relation to the recognition and judgements of other Member States, needs to be explored in this regard. The evolution as well as the strengths and weaknesses of judicial cooperation among Member States should also be examined, whereby it should be considered whether existing institutions such as Eurojust need to be strengthened, and if so how, and/or whether new tools such as the European Public Prosecutor's Office ought to be instituted. Research should critically assess whether and how there is any risk of undermining the rule of law and/or of justificatory discourses by recent and contemporary fiscal governance.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research will inspire and inform future debates on the locus and exercise of sovereignty at EU level and the democratic credentials and deficits of the EU in particular with regard to the new fiscal governance instruments outside the Treaties. Research is also envisaged to feed into future debates on the constitutional arrangements of the EU taking due account electoral developments which appear to pose challenges to those arrangements. Research will deepen the understanding of the significance of the rule of law in general and justification discourses in particular, both at national and supranational level and inform whether and how they can contribute to fostering legitimacy of the EU.

Type of action: Research and Innovation Action

Budget: EUR 5 million

CULT-COOP-2017-2: Improving mutual understanding among Europeans by working through troubled pasts

Specific challenge: The European integration project was conceived as an antidote to a troubled past, especially during the first half of the 20th century. In fact, its very *raison d'être* was to overcome this burdensome heritage and to avoid once and for all future wars and authoritarian regimes. This was true not only in relation to and in the aftermath of WWII and the Holocaust, but also with regard to the Southern and Eastern enlargement rounds, which were inter alia motivated by embracing European countries that had left behind the yoke of - authoritarian and/or totalitarianism - right wing and communist regimes respectively.

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In times of crisis, this original *telos* of European integration is often lost from sight, even though it seems particularly opportune to bring it back into focus when reconsidering the fundamentals of integration in order to overcome the crisis. Historical discourses can contribute to cultural dialogue, mutual understanding and enhanced inter-comprehension between European states, nations, communities, migrant or minority groups and individuals. However, they might also be used to deepen perceived divisions and legitimate radicalisation or exclusion. Commemorating the past as well as preserving and cultivating the memory of troubled pasts are important in this regard. A critical engagement with negative heritage may also facilitate the construction of more value-oriented identities. More knowledge is needed on whether and how such discourses occur in various European countries. The specific challenge is to explore how uncomfortable histories are reflected and reappraised especially with a view to enhancing mutual understanding among Europeans.

Scope: Research should comparatively explore evidence and narratives of critical reflection and engagement with troubled pasts across Europe. Research will identify major gaps or divergences in historical discourses and representations which might make it difficult to understand and overcome past conflicts or troubled historical legacies. The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Formal education, curricula and teaching practice

Research will survey and compare school curricula in a good range of relevant states with a view to identifying patterns and trends in presenting and interpreting difficult periods of history in a European perspective. It will also analyse whether, and at which stages of formal education, how, and with which intensity, openness and criticism troubled and uncomfortable historical heritage resulting from inter alia wars, conflicts, oppressions, genocides and dictatorships are covered in the curriculum. The comparative approach could contribute to exploring differences between historical imageries of neighbouring countries, state majorities and minorities or communities considered as autochthonic or immigrant. Research will not focus solely on history teaching, as historical interpretations might be conveyed by many other disciplines from geography (e.g. implanting symbolic historical geographies) to sciences through arts and especially literature. Research should pay particular attention to primary and secondary education, because of their overwhelming importance in transmitting historical interpretations, bearing in mind that vulnerable or disadvantaged groups may be less represented in higher levels of formal education. Apart from the curriculum, research should also assess the actual practice of teaching such topics, and determine whether there is any discrepancy between the curriculum and its implementation with regard to covering troubled heritage. Crucially, research should develop criteria and indicators to measure how discursive, reflective and critical the teaching is and assess the teaching practices according to these criteria. Furthermore, it should be explored how these educational efforts, to the extent they exist, influence and impact upon national self-understanding and identity as well on perceptions of European integration.

2) Civil society, informal education and political discourses

Research under this strand should investigate how troubled periods of history are related to informal forms of education. Of particular importance is to survey and investigate comparatively how

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discourses in civil society and the media, including social media, are informed by such legacies, and how in turn civil society and the media conduct such discourses. Research needs to unearth how national narratives are influenced by difficult pasts and how civil society, politics and the media constructed discourses, and which factors informed both the construction and the evolution of such narratives. Interconnections between and disparities of national and European historical narratives and symbolical geographies equally ought to be studied. Of particular interest are discourses in the profession of historians in the post-war/post-authoritarian period and how they might have evolved over time. Also artistic appropriations of memory in relation to troubled pasts and their receptions by the media and wider public should be explored. In addition to this, research should investigate whether and how such discourses and narratives have impacted upon Member States governments' and citizens' attitudes to European integration and EU membership, both before and after accession to the EU.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Projects will deepen the knowledge base on the significance of memory, interpretations and teaching (or silencing) periods of troubled pasts for the construction of historical narratives in contemporary Europe, notably through education. Research output will inspire and inform initiatives and innovative educational material on how to critically and constructively reflect and act upon troubled historical heritage and facilitate the development of more nuanced and reflective approaches to interwoven local, regional, national and European histories. This will help European policy makers and citizens to re-connect if and where necessary with the *raison d'être* of European integration.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

CULT-COOP-2017-3: Cultural literacy of young generations in Europe

Specific challenge: Cultural diversity is one of Europe's most valuable assets, but existing cultural incomprehension pose tremendous challenges to the societal wealth of Europe. European educational and cultural systems need to cater for diversity and enable all citizens to build the skills and competences needed for effective inter-cultural dialogue and mutual understanding. The challenge is about how to create or transfer values and attitudes for accepting, coping and valorising cultural diversity, and improve conditions to cultivate multi-layered identities - for both individuals and groups.

Scope: The research to address this challenge should in particular focus on the following key dimensions. It is expected to either comprehensively address one of these dimensions or to combine them. The research may also cover other issues relevant for addressing the specific challenge.

1) Promoting cultural literacy through formal education

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Research under this topic should perform a comparative analysis of cultural literacy of young Europeans of diverse origins as well as their "inter-cultural" competencies. It should address the role of formal education regarding skills and competences needed for effective inter-cultural dialogue and mutual understanding as well as for becoming informed and responsible users and producers of the European cultural heritage and culture. It should elaborate on the concept of an emerging "European culture" for the young generations as a possible common set of cultural and conceptual models shared amongst people in European societies, based not only on an elitist concept of culture but encompassing every-day cultural, religious and societal life. It should identify knowledge and skills gaps and the most appropriate tools and practices to address these gaps. In so doing, it should pay particular attention to early childhood (pre-primary) and primary education, due to their importance in building solid bases, overcome inequalities as well as reaching vulnerable populations, which may be less represented in higher levels of formal education.

2) The role of non-formal and informal education in the development of cultural literacy

Based on a comparative analysis of cultural literacy of young Europeans of diverse origins as well as of their "inter-cultural" competencies, research should investigate the role and impact of informal education by the family, communities of origin or peer-groups on the development of cultural literacy. The role of the Internet and social media in the development of cultural knowledge and skills should equally be investigated, as many ideas related to issues of cultural diversity, popular culture, ethnic groups, minorities, discrimination and segregation are conveyed by such media. Research should identify best practices and make suggestions on how informal forms of education can contribute to enhancing the level of cultural literacy among the young.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Research under this topic will contribute to better understanding and enhancing cultural literacy for the young generations, which will lead to greater appreciation of diversity. It will moreover contribute to reinforcing demand for sustainable and creative uses of European cultural heritage. The research will involve policy-makers, stakeholders and educational practitioners for the development and uptake of teaching material and tools both for formal and informal education. This will also include testing innovative practices for enhancing cultural and inter-cultural competencies in their real-life context.

Type of action: Research and Innovation Actions

Budget: EUR 5 million

CULT-COOP-2017-4: Contemporary histories of the representations of Europe in literature and the arts

Specific challenge: Culture is the most cherished and valued shared European asset of EU citizens according to surveys. Europe has been associated with and represented by iconic artistic and literary works since Antiquity. From the ancient Greek myth of Europa to Tolstoy's depiction of Napoleonic Europe in "War and Peace" and to Beethoven's 9th Symphony passing by medieval sacred arts or

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iconic European films, the list of artistic and literary expressions that represent Europe for many Europeans or non-Europeans is open-ended. Even without an official consensus about a repertory of these artistic and literary representations of Europe, they form the backbone of - an arguably predominantly elitist - European cultural identity and cultural heritage for many Europeans and for visitors coming to Europe for admiring its unique cultural heritage. However, the creation of cultural heritage is a never ending process. Today's culture is tomorrow's cultural heritage in the making. In this perspective, the specific challenge of the topic is to critically investigate - with the help of humanities - the evolving representations of Europe in contemporary artistic expressions in the light of changing societal contexts.

Scope: Research under this topic will examine various contemporary arts and/or literature to identify and assess their representations of Europe, European identity and Europeanisation. A comparative approach and a wide European geographic coverage will enable the research to apply an unprecedented European perspective. Research should clearly distinguish between positive and negative depictions of Europe and the European Union, and investigate the reasons for such representations. The research methodologies of different humanities and social sciences could be combined into adequate multidisciplinary approaches. The definition and selection of the artistic and literary manifestations representing - in one way or another and aimed at different target groups - Europe should consider and cover artistic and literary works from various European regions, including post-2004 EU Member States, and potentially from neighbouring countries. Research should consider implications for perspectives on European culture and cultural heritage and the possibilities to channel research results into formal and informal education in Europe through innovative learning material adapted to contemporary media and art consumption patterns. The early involvement of networks of cultural and/or education institutions should contribute to efficient uptake of research results.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The research conducted under this topic will result in better knowledge of cultural Europeanization in the making and in new, innovative tools and material for formal and informal education. The results and their dissemination will contribute to the renewal of a non-elitist cultural narrative of Europe that speaks to Europeans of different languages, cultures, religions and origins beyond national borders. It will contribute to enhanced cultural inter-comprehension among Europeans, especially young Europeans, of different origins. The innovative teaching materials among the research outputs and dissemination means will be adapted to contemporary art and literature consumption patterns in Europe.

Type of action: Research and Innovation Actions

Budget: EUR 2.5 million

CULT-COOP-2017-5: Religious diversity in Europe - past, present and future

Specific challenge: Religious beliefs and affiliation to religious groups and communities were historically the cornerstones of the functioning of societal relations in Europe. Acknowledging the

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rich tradition of the co-existence of diverse religions in Europe, the Charter of Fundamental Rights of the European Union enshrines the right to freedom of thought, conscience and religion. Despite this strong commitment to the freedom of religion in Europe, religious intolerance exists in many European societies, and has been exacerbated by the abuse of religion as a cover for political goals by extremists claiming religious affiliation or as an excuse for the expression of European citizens' unease or intolerance towards immigrants and minority groups. It is therefore indispensable to comprehend the roots of radicalisation and religious intolerance in Europe and to identify the political, social and economic tools for overcoming them and ensuring that the democratic European values of peaceful co-existence, including that with and within all religious communities existing in today's modern Europe, is preserved. Contextualising religious co-existence from a historical perspective can contribute to the promotion of a European public and cultural space and to enhancing mutual understanding.

Scope: From the broadest possible European historical and geographical perspective the proposed comparative and multidisciplinary research will examine various types and elements, as well as societal and political systems supporting, or discouraging, the co-existence of diverse religious beliefs and religious communities in Europe. It should deepen knowledge about the relations, cooperation, tensions within and among the diverse religious communities historically existing in Europe. It should compare such examples at different - local, regional, national as well as multi-national and multi-religious levels. This research will further survey the position and role of religiosity and religious communities in today's European society as well as the role and value of religiosity for today's, especially young, Europeans. It should also broaden the European comparative perspective of the historical roots and experiences of religious tolerance and intolerance by taking into account and mainstreaming the historical experiences of those countries and territories that joined the EU after the fall of the Iron Curtain, as well as the perception of religious beliefs and values of immigrants from the third countries.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The research will deepen knowledge on the diverse patterns of contacts between religions and religious communities in Europe throughout history. By providing a historical and comparative perspective its results will enable European citizens to better grasp conditions needed for religious coexistence in Europe. For this reason, the results of the research will be prepared in order to be used, in the short run, in the broadest possible educational, political and societal sense. Its outcomes should be translated into innovative dissemination tools in order to be used for education purposes of any type (e.g. formal, informal) and discipline (history, political science, civic education). The conclusions should inform policy recommendations targeted at policy makers of different levels in preparing future strategies of cooperation with religious communities as well as in coping with anti-religious animosity. Research will also contribute to informing the broadest range of media as an indispensable tool for the dissemination of the research results among the general public.

Type of action: Research and Innovation Actions

Budget: EUR 2.5 million

CULT-COOP-2017-6: Social innovation in culture

Specific challenge: Recent conclusions of the Council of the European Union recognised cultural heritage as a "resource for a sustainable Europe" and highlighted that "participatory governance of cultural heritage offers opportunities to foster democratic participation, sustainability and social cohesion and to face the social, political and demographic challenges" in Europe.²² The European Commission has also highlighted that the contribution of cultural heritage to economic growth and social cohesion is undervalued in spite of growing scientific evidence, and called for an integrated approach to cultural heritage for Europe.²³ It set the objective of continuing to develop more participative interpretation and governance models that are better suited to the contemporary European context, through greater involvement of the private sector and civil society. Europe's dense network of cultural institutions needs to adapt to changing societal, demographic and economic circumstances. It is thus of paramount importance for urban and rural development, tourism, education, creative industries, and cultural heritage professionals to understand how to integrate European tangible and intangible cultural heritage into sustainable economic, environmental and community development, hence the crucial role of social innovation. This will also help to promote innovative ways in which to manage increasing flows of EU and non-EU tourists, which are currently largely limited to a number of urban destinations only ("theme park Europe").

Scope:

a) Research and Innovation Actions

Research under this topic will critically assess the current state of cultural institutions and investigate new ways to develop the role of European culture ministries, cultural institutions and their networks as cultural service providers and hubs of social innovation. It should take into account recent international, European and national research results and best practices. It should have wide European geographic coverage and stakeholder involvement from cultural institutions that enables innovative research, case studies, pilot actions and smooth uptake of research results. The research should investigate innovative ways in which cultural institutions can engage with younger and more mature audiences, with minority, migrant or socially disadvantaged groups. It should look into the challenges faced by cultural institutions with regard to the necessity to balance needs for managing material collections and opening culture and cultural heritage to new audiences through meaningful digital collections. Research should also investigate the issue of how to combine traditional cultural services with innovative new cultural or social services like adult or lifelong learning, carrier support, access to and assistance to digital services and e-administrations, etc. The role and potential of enhanced European and international cooperation and networking of culture ministries and cultural institutions (from traveling artefacts and exhibits to joint curatorial work and other types of sharing resources, expertise and best practices) should also be addressed. The proposed research will draw on comparative perspectives.

²² Council of the EU (2014): Conclusions on cultural heritage as a strategic resource for a sustainable Europe and on participatory governance of cultural heritage. May and November 2014.

²³ COM(2014) 477 final.

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The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

b) Coordination and Support Action

A social platform will bring together relevant heritage stakeholder representatives from research communities, from heritage practitioners from public or private cultural institutions (heritage sites, libraries, archives, museums, and other public or private collections), as well as from heritage policy-makers at European, national, regional or local levels. A wide range of views and of stakeholder participation is encouraged. For improving the excellence of European heritage management and related policy making the platform should also harness the potential of networking among the growing number of European cultural heritage and cultural studies departments at higher education and research institutions.

Based on a focussed, critical mapping of existing research, the objective of the social platform is to develop an understanding of the challenges and opportunities for research and innovation in the preservation and participatory management of cultural heritage. The future European research agenda in the field should pay particular attention to the sustainability and employment dimensions of new approaches to cultural heritage, taking into account the issues of data collection and measurement. The platform will map and share European and extra-European best practices, identify emerging new European heritage communities, evaluate bottlenecks and opportunities in the financial and legal environment and create new European networks around the participative preservation and management of cultural heritage.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 1.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The actions will form the basis for new institutional strategies to reach out to new audiences and communities and to combine culture and cultural heritage demonstration and preservation with innovative ways of cultural transmission and creative re-use. The findings will help culture ministries and cultural institutions to reinvent and modernise their policies and their roles as centres of culture, cultural heritage, information, learning and gathering. Results will give guidance to cultural institutions and policy makers on how to promote European culture and further democratise access to it in a way that enables mutual and intercultural understanding for all. In addition to new academic results, the activities will also provide analytical tools or toolkits, description of best practices and policy recommendations that can facilitate the direct uptake of research and other insights by stakeholders. The platform will also support the European Commission in the definition of an innovative and focused research agenda with regard to participatory cultural heritage preservation and management highlighting fundamental research issues, knowledge gaps and key policy-relevant questions.

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

Budget: RIA: EUR 2.5 million; **CSA:** EUR 1.5 million

CULT-COOP-2017-7: Promoting the cultural heritage of European coastal and maritime regions

Specific challenge: European coastal and maritime regions have - over several millennia - developed a rich, multi-layered and varied cultural heritage. At the crossroads of different types of contacts of European peoples with each other and with other regions of the world (from commerce to conquest, from cultural exchange to mass tourism) they represent an extremely rich tangible heritage (coastal towns and villages, harbours, dams, lighthouses, arsenals, buildings of the fishing and marine industry, boat builders, etc.). As a result of a combination of natural landscapes and human ingeniousness, specific coastal cultural landscapes emerged on the shores of Europe. This tangible heritage is intimately embedded into the multiple layers of intangible heritage, from myths to daily practices, traditions and crafts of local cultures of communities of sailors, fishermen, boat builders, merchants, etc. Today, coastal cultural landscapes are very much exposed to environmental challenges such as climate change (rising sea levels), other forms of pollution, the fundamental transformation of the European fishing industry due to over-exploitation of fish stocks and erratic policies of sea or shore conservation at national level. Against this backdrop, research should provide local communities and local, national and European policy-makers with a coherent framework for risk assessment and sustainable management of European coastal cultural heritage in a way that involves local stakeholders.

Scope: The research will aim at providing a comprehensive framework for the risk assessment and preservation of European coastal and maritime cultural landscapes. It should be geographically balanced and cover different types of European coastal and maritime cultural landscapes taking into account various historical backgrounds and the current state of these regions, as they range from the most popular destinations of mass tourism to the most peripheral regions of Europe. The research - multidisciplinary to the extent required by its inherent and explicit research approach - might combine approaches and methodologies of cultural heritage preservation, social sciences and humanities and environmental sciences. It will cover both tangible and related intangible cultural heritage in order to provide a full picture of the societal importance of the cultural heritage of the landscapes under investigation. The research should involve and further develop networks of scholars, local stakeholders and policy makers. It will contribute to European efforts to promote evidence-based research on the impact of participatory approaches in cultural heritage policies and governance, as suggested by the Council of the European Union's conclusions on participatory governance of cultural heritage (2014/C 463/01).

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 2.5 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: As a result of its reasonably multidisciplinary approach and mapping efforts, the research will significantly deepen knowledge on the cultural heritage of European coastal and maritime regions. It will lay the basis of a comprehensive framework for risk assessment and sustainable preservation of European coastal and maritime cultural landscapes taking into account cultural, environmental and broader societal aspects. The research will provide policy advice and create networks, concepts and tools on how to maintain and preserve this rich and diverse element

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of the European cultural heritage based on stakeholder involvement and participatory governance. Case studies and tailor-made pilot projects of the research will permit to put in practice the proposed new tools, concepts and methodologies. Special attention will be given to the preservation of both tangible and related intangible cultural heritage like traditional skills and know-how. The research will also explore the possibilities of new, sustainable, cultural heritage-related career opportunities in the studied regions.

Type of action: Research and Innovation Actions

Budget: EUR 2.5 million

CULT-COOP-2016-8: Virtual Museums and Social Platform on European digital heritage, memory, identity and cultural interaction

Specific Challenge: ICT changes the way cultural digital resources are created, disseminated, preserved and (re)used. It empowers different types of users to engage with cultural digital resources, for example through web discovery interfaces representing a wealth of information from collections (archives, scientific collection, museums etc.) enabling their re-use and re-purposing according to users' needs and inputs. The Virtual Museum (VM) is not a real museum transposed to the web, nor an archive or a database of virtual digital assets but a provider of information on top of being an exhibition room. A virtual museum is technologically demanding especially in terms of virtual and augmented reality and storytelling authoring tools which must covers various types of digital creations including virtual reality and 3D experiences, located online, in museums or on heritage sites. The challenge will be to give further emphasis on improving access, establishing meaningful narratives for collections and displays and story-led interpretation by the development of VM.

The emergence of new social paradigms in the area of European Heritage induce the creation of specific social platforms that will favorise an active participation of a large number of stakeholders aiming at a better understanding of the European cultural heritage. Moreover it should facilitate and support a better understanding of the past to better build our future. The challenge is to support the multidisciplinary awareness needed for providing a comprehensive framework for the accessibility, preservation and participatory management of cultural resources, based on a holistic, social understanding of European culture and cultural heritage. This challenge will contribute to the debate over these issues and opportunities by facilitating an open dialogue on how technological changes and scientific progress impact and accelerate developments, including social change, determine policy changes, and support new investments, involving diverse actors with different stakes and agendas.

Scope:

a) Research and Innovation Actions

The real potentiality of a virtual museum is helping, guiding users and visitors who do not already know a topic, communicating with them. The visual narrative is the best means to effectively

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communicate about objects in a museum to the ordinary visitor. Therefore, actions will focus on the development of highly innovative technologies and tools to significantly improve the quality of images, the display and interactivity of 3D objects. Besides, actions should research and create new ways of personalised storytelling and adaptive guidance, bridging the physical and the digital world. The technology resulting from the research should be validated in real life environments. During test and validation phases, due attention has to be paid to scalability, portability and interoperability of the technologies proposed. Furthermore, social media tools should be integrated into the VM platform in order to facilitate exchange of information among users.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

b) Coordination and Support Action

The scope of this action is to develop and maintain a sustainable platform engaging a large number of key actors, stakeholders and communities of practices on how to improve the collaboration and comprehension among the entire community, in order to build up a common roadmap for future activities. The platform should engage - and be open to all - practitioners and stakeholders wishing to contribute to decision making processes, agree on objectives and priorities, share experiences, policies and practices. Partnership and collaboration between public and private stakeholders should be encouraged. The platform will concretise its action through the organisation of workshops, conferences or any other awareness-raising actions.

The Commission considers that proposals requesting a contribution of EUR 1 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: Virtual Museums and Social Platform are accessible for everyone, breaking the restrictions of geography and time. VM & SP will help to increase European citizens' curiosity for art and their understanding of cultural heritage. Researchers and scholars will also benefit greatly from the new possibilities to access and study European Culture. Finally, synergies between virtual and traditional museums and cultural institutions will support the economic growth of the sector.

Type of action: Research and Innovation Actions and Coordination and Support Actions²⁴

Indicative Budget: RIA: EUR 10 million; CSA: EUR 1 million

CULT-COOP-2017-9: European heritage, memory, identity and cultural interaction

Specific challenge: Collections in archives, museums, and at cultural heritage sites contain a wealth of digital texts, images, audio-visual content and 3D representations of objects or scenes which are largely inaccessible to both computers and humans. Humans can easily extract meaning from

²⁴ This activity is directly aimed at supporting the development and implementation of evidence base for R&I policies and supporting various groups of stakeholders. It is excluded from the delegation to Research Executive Agency and will be implemented by the Commission services.

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individual digital artefacts but are quickly overwhelmed by the sheer number of items. New technologies can be a valuable instrument to process large amounts of data in order to identify new correlations and interpretations and extract new meaning from our cultural and intellectual heritage. To close, or at least narrow, the "semantic gap" would present a major step forward in digital humanities and other sciences related to European heritage, memory, identity and cultural interaction. In addition, the increase and growing complexity of digital cultural material raises new challenges as regards its preservation over time, an essential condition for re-use and study.

Scope: In order to better understand and inform the present by richer interpretations of the past, actions should create affordable and efficient digital access, analysis and preservation services for cultural resources. This should be achieved by tackling issues such as automatic contextualisation and identification of content and by developing analytical tools, including methods for automatically finding content which is semantically similar to a given item, or content which is related to a given high-level concept. Actions should also develop innovative tools and methods to extract meaning from digital artefacts (including video recordings, audio recordings, digital images, text, and 3D representations of objects or scenes) to allow the study and preservation of European heritage, memory and cultural interaction and better inform how European identity can be traced, constructed or debated. Work will be performed in close collaboration with Humanities and Social Sciences researchers.

The Commission considers that proposals requesting a contribution from the EU of between EUR 2 and 3 million would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected impact statements: The actions under this topic will provide the digital humanities and other sciences related to European heritage, memory, identity and cultural interaction with new ways of searching European digital content which used to be inaccessible, buried among huge amounts of data and not sufficiently tagged with adequate metadata. Overall, they will improve the understanding of the richness of European cultural heritage and create added value for the society by providing humanities researchers, journalists, policy makers and the interested public with new ways of finding answers to their questions about European cultural heritage and history.

Type of action: Innovation Actions

Budget: EUR 9 million

CULT-COOP-2016/2017-10: SME instrument (to be defined)

Type of action: SME instrument

Budget: EUR 8.2 million in 2016 and EUR 1million in 2017