

Horizon 2020

Work Programme 2018 - 2020 (2020)

Consolidated Draft

04.12.2018

13. Europe in a changing world – Inclusive, innovative and reflective societies

DISCLAIMER

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material. the drafts have been validated by the relevant UAF, and by the Directorate's legal correspondent, and that unit J1 has been consulted in advance on any legal issues and Dir. C for international cooperation

Table of contents

Introduction.....	5
Call MIGRATION.....	7
MIGRATION–04-2020: Inclusive and innovative practices for the integration of post 2015 migrants in local communities.....	7
MIGRATION–05–2018-2020: Mapping and overcoming integration challenges for migrant children.....	8
MIGRATION-06-2020: Innovative practices for the integration of newly arrived migrants into societies.....	11
MIGRATION-09-2020: Narratives on migration and its impact: Past and present.....	12
Conditions for the Call – MIGRATION.....	13
Call SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS OF THE FOURTH INDUSTRIAL REVOLUTION.....	15
DT-TRANSFORMATIONS–02–2018-2019-2020: Transformative impact of disruptive technologies in public services.....	15
TRANSFORMATIONS–04–2019-2020: Innovative approaches to urban and regional development through cultural tourism.....	17
TRANSFORMATIONS–10–2020: Evolving European media landscapes and Europeanisation.....	19
DT-TRANSFORMATIONS–12–2018-2020: Curation of digital assets and advanced digitisation.....	20
TRANSFORMATIONS-15-2020: Understanding processes, change and consequence on innovation (ERA-net COFUND).....	22
TRANSFRMATIONS-18-2020: Technological transformations, skills and globalisation - future challenges for shared prosperity.....	23
TRANSFORMATIONS-19-2020: Culture beyond borders-Facilitating innovation and research cooperation between European Museums and heritage sites.....	25
DT-TRANSFORMATIONS-20-2020: European Competence Centre for the preservation and conservation of monuments and sites.....	26

DT-TRANSFORMATIONS-21-2020: Mentoring scheme for schools: mainstreaming innovation by spreading the advanced ICT-based teaching practices to a wide circle of schools.....	28
TRANSFORMATIONS-22-2020: Enhancing access and uptake of education to reverse inequalities.....	29
Conditions for the Call-SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION.....	31
Call GOVERNANCE FOR THE FUTURE.....	34
DT-GOVERNANCE-05-2018-2019-2020: New forms of delivering public goods and inclusive public services.....	35
GOVERNANCE-07-2020: The Common Foreign and Security Policy and the expanding scope of the EU's external engagement.....	36
GOVERNANCE-09-2020: Addressing radicalisation through social inclusion.....	37
DT-GOVERNANCE-12-2019-2020: Pilot on using the European cloud infrastructure for public administrations.....	38
GOVERNANCE-20-2020: International dimension of Open Innovation.....	39
GOVERNANCE-21-2020: Developing deliberative and participatory democracies through experimentation.....	41
DT-GOVERNANCE-22-2020: Citizen-centric public services in local and regional administrations.....	43
Conditions for the Call - GOVERNANCE FOR THE FUTURE.....	44
OTHER ACTIONS.....	46
I - Support to R&I policy reform and evidence based policy making.....	46
1. Horizon 2020 Policy Support Facility.....	46
2. Implementation and analysis of the joint Commission-OECD international survey on STI policies.....	46
3. Industrial Research and Innovation Monitoring and Analysis.....	47
4. Support to R&I performance and policy analysis.....	48

II - Support to Open Science and to EU policy in the field of research and innovation.....	49
5. Support to Open Science, Open Access and Open Data.....	49
6. Support to Open Science, Open Access and Open Data.....	49
7. Support to EU policy in the field of research and innovation.....	49
8. Support for the future orientations of EU research and innovation policy.....	50
III - Innovation prizes, innovation policy, and support to the European Innovation Council and to international cooperation in research and innovation.....	51
9. The European Capital of Innovation Award (iCapital).....	51
10. Centres/Networks of European research and innovation: follow-up of the NearUS action.....	52
11. Centres/Networks of European research and innovation: follow-up of the ERICENA action.....	53
12. Centres/Networks of European research and innovation: follow-up of the CEBRABIC action.....	54
IV - Horizontal actions.....	55
13. Service Facility in support of the strategic development of international cooperation.....	55
14. e-Government related studies, conferences and other events.....	55
15. External Expertise.....	56
16. COST.....	56
Budget.....	59.

Introduction

The specific objective of the Societal Challenge 'Europe in a changing world – Inclusive, innovative and reflective societies' (SC6) is to foster a greater understanding of Europe, provide solutions, and support inclusive, innovative and reflective European societies in a context of unprecedented transformations and growing global interdependencies.

Pressure from increased migration flows, socio-economic and cultural transformations from new forms of human-technology interaction which will stem from the fourth industrial revolution, and new developments in European, national and global governance have the potential to significantly impact Europe's future at many levels. At the same time, and linked to these developments, the citizens' trust in many public institutions and their capacities to address effectively these challenges is weakening, while their concerns are increasing. In light of these challenges, the scientific and innovation priorities of Societal Challenge 6 (SC6) under work programme 2018-2020 are focused around three major themes: migration, socio-economic and cultural transformations resulting from the fourth industrial revolution, and governance for the future. This will address the concerns of European citizens, provide objective scientific assessments of these phenomena, while formulating policy options and applicable solutions.

In line with the Horizon 2020 (H2020) Specific Programme, the three research and innovation priorities for 2018-2020 in this work programme part, complement as needed the activities undertaken in work programmes 2014-2015 and 2016-2017 of SC6. These work programmes focused on overcoming the economic crisis and mitigating its effects (Call EURO), reducing inequalities and promoting social fairness (Call REV-INEQUAL) and integrating the young generation in a more innovative, inclusive and sustainable Europe (Call YOUNG). They also addressed new forms of innovation and untapped sources of growth (Calls INSO and CO-CREATION) and Europe's cultural heritage and identities (Calls REFLECTIVE and CULT-COOP). The strengthening of EU's capacities for developing and improving its external action and international cooperation were also covered (Calls INT and ENG-GLOBALLY).

The three research and innovation priorities for 2018-2020 also take into consideration the lessons learned from the interim Evaluation of H2020¹. To accommodate evolving priorities, the work programme was flexibly designed to respond to pressing societal challenges and needs and to generate cross-cutting social impact. This is well illustrated firstly in Call Migration, where a new research agenda will support the need for global governance systems with a solid research generated evidence base. Secondly, while the first three years of the SC6 work programme emphasised the aftermath of the economic and social crisis, this work programme focuses on the future of work. It emphasises the technological transformations and the knowledge and digital driven economy that will shape human productivity and that will require new learning and training models as well as extensive reorientations of the economic system (collaborative economy, smart specialisation, disruptive innovations, etc.).

¹ https://ec.europa.eu/research/evaluations/index_en.cfm?pg=h2020evaluation

Finally, the current work programme includes topics on radical ideologies and societal polarisation, which take into account changing European and international geopolitical realities. These examples, among others, demonstrate how the lessons learned from the interim evaluation on the requirements of flexibility have been taken into account.

The calls and topics within SC6 are clearly aligned with the Commission's priorities on Migration; Jobs, growth and investment; the Digital Single Market; Justice and fundamental rights based on mutual trust; Making the EU a stronger global actor; and Fostering a Union of democratic change. It focuses on in particular four of the EU2020 targets (Employment, R&D, Education, Fighting poverty and social exclusion) and four of the seven European Flagships (Innovation Union, Youth on the move, An Agenda for New skills and jobs, European Platform Against Poverty). The calls and topics also support the Sustainable Development Goals, as is highlighted throughout the expected impact sections of the topics.

The separate calls on migration, transformations and governance encourage multidisciplinary, cross-national, comparative and participatory approaches. Where necessary, there is strong focus on social and ICT-based innovation as well as on inclusive growth models. International cooperation is also emphasised in topics where the need to address the challenges under scrutiny require looking beyond EU borders and designing comparative research with non-EU institutions. Furthermore, in the overall context of the Horizon 2020 work programme 2018-2020, the SC6 work programme contributes five actions to the Focus Area on the Security Union and eight actions to the Focus Area on Digitisation. These actions are identified by the acronyms SU and DT in topic titles.

Societal Challenge 6 will co-finance with Societal Challenge 2 a topic on Digital solutions and e-tools to modernise the CAP (RUR-14-2018). The full topic text appears in the work programme for Societal Challenge 2.

Societal Challenge 6 will also contribute to the continuation of the Science4Refugees initiative under the Science with and for society (SwafS-06-2018-Science4Refugees).

Call - MIGRATION

H2020-SC6-MIGRATION-2018-2019-2020

The aim of this call is to produce evidence-based recommendations for the global and European governance of migration of third country nationals as well as innovative (including ICT) solutions for the successful integration of migrants into European host societies. The call will contribute to the promotion of sustainable development, demonstrating a strong commitment to supporting the UN's Sustainable Development Goals (SDGs), and contribute to strengthening international cooperation, as well as a better understanding and awareness of the role of international development and regional policies. It will foster improved responses for the international protection of refugees, the management of forced displacement, and the promotion of more fact-based and accurate discourses and adapted strategies for addressing concerns in host communities. The call will also provide evidence based knowledge on the effects of migration on social systems, the access to and impact on labour markets and the cultural integration of third country nationals, in particular in urban settings. Solutions will be developed to enhance access to factual information on migration and the regulation of migration of third country nationals, also by involving migrants and their individual experiences in the shaping of narratives, including the gender dimension, and by promoting international cooperation where relevant.

Proposals are invited against the following topic(s):

MIGRATION-4-2020: Inclusive and innovative practices for the integration of post 2015 migrants in local communities.

Specific challenge: The arrival of migrants contributes to diversifying the demographic, cultural, linguistic, ethnic and religious makeup of already diverse European cities and suburbs and rural communities. The challenge is to provide policy makers at local, national and supra-national level, civil society organizations and other relevant actors with effective, responsive, flexible, context-specific proposals for measures to promote socio-economic integration and inclusion as well as access to rights and services. This includes sustainable and participatory strategies, also with the support of citizens, civil society actors and the private sector.

Scope

a) Innovation action

The further improve the efficient integration of newly arrived migrants into societies requires an understanding of existing practices which support the integration of migrants. Proposals should examine the provisions for migrants' rights and their access to social services in the host countries. Special attention should be paid to past, existing and potential mechanisms to

support the integration of migrants, through participatory practices, social innovation and entrepreneurship, diaspora communities and local civil society initiatives.

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

b) Research and Innovation Action

Proposals should comparatively assess the effectiveness of integration policies and practices in major migrant-receiving spaces, in local communities, ranging from urban spaces to rural areas. This should include migrants' access to rights, social services and facilities (e.g. education including language tuition and health) as well as intercultural interaction and adaptation to increased diversity of the host community. Proposals should also explore social cohesion and fragmentation aspects of migrant integration policies. The urban and rural governance of integration processes should be analyzed and assessed against the backdrop of a broader multi-level governance framework, whereby potential and real tensions between the local and other levels of governments should be explored. Attitudes to migration and integration by both migrants and the host communities should be studied as well as the role of religious communities. The incorporation of historical and comparative insights from migrant integration processes in non-European societies is encouraged, including through co-operation with scholars from Canada, Africa and the Middle- East. Processes of exclusion such as 'othering' and ghettoization, actions and initiatives to redress them, as well as mutual influences between host and migrant communities, should be studied.

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

A strong cooperation between MIGRATION-04-2020 and MIGRATION-06-2020 is required. The results of IA and RIA will communicate with the results of CSA from MIGRATION-06-2020.

Expected impact: Expected impact: Projects will advance the implementation of the EU Urban Agenda and of the UN Sustainable Development Goals dedicated to making cities inclusive, safe, resilient and sustainable. The actions will contribute to improved practices, policies and strategies at local, national and EU level for the integration of migrants in European urban and local settings by providing policy recommendations, best practices and enhancing an exchange of experience on the factors for successful integration and barriers to it. The Innovation Action will develop and test potentially viable approaches through pilots. It will integrate migrants, members of the host communities, public authorities and researchers, from preparing the concept over their implementation to their evaluation. These pilots should be scalable and replicable in different environments with the necessary adaptations. Their

evaluation should provide conclusions and recommendations for policy making at municipal level as well as for the regional, national and European level to create best possible conditions in which municipalities can operate.

- a) The Innovation Action will develop and experiment with and test potentially viable new approaches through pilots. It will integrate migrants, members of the host communities, public authorities and researchers, from preparing the concept over their implementation to their evaluation. These pilots should be scalable and replicable in different environments with the necessary adaptations. Their evaluation should provide conclusions and recommendations for policy making at municipal level as well as for the regional, national and European level to create best possible conditions in which municipalities can operate.
- b) The Research and Innovation Action should deliver analysis for better understanding the phenomenon. Based on these research findings, projects should identify approaches and practices, which can be applied in both, cities and rural communities as well as those, which would be specific to one or the other. Projects should compare the different practices and experience on their viability, efficiency and transferability. They should deliver policy recommendations. Deliverables should include experience and practices also from non-EU countries, in particular, from Canada, Africa and the Middle- East. Projects should establish a regular exchange with the stakeholders from the different communities and municipalities.

Type of action: Research and Innovation Action and Innovation Action

The conditions related to this topic are provided at the end of this call and in the General Annexes

MIGRATION-05-2018-2020: Mapping and overcoming integration challenges for migrant children

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

Scope:

a) Research and Innovation action (2018):

Proposals should generate quantitative and qualitative data and policy recommendations on the integration in schools of pupils (ISCED 0-3) from existing migration cohorts, children of refugees and asylum seekers, and unaccompanied minors, including those residing in hotspots and reception centres. They should take account of the complexity of pupils' backgrounds,

including of children who are EU long-term residents with migration backgrounds and of newcomers, and should assess issues related to gender, identity, achievement, well-being, home-school links and discrimination among others. Ethnological, cultural, and anthropological perspectives should be included. Social and learning environments should be considered as well as strategies to promote resilience, avoid segregation and to enhance children's skills and well-being. Proposals should take an integrated approach, looking at how access to adequate housing, a decent standard of living, protection from all forms of abuse and exploitation, healthcare and psychosocial support, alternative pedagogical approaches and arts affect successful integration in schools. Proposals should also address (several of) the following issues: the time elapsed between arrival to Europe and access to education; year(s) spent out of education as a child; experiences of detention and deportation; governance and funding; roles and attitudes of families, communities, educational centres, civil society and local services, also from a gender perspective; preparedness of schools and teaching staff; language learning and multilingualism; educational and vocational opportunities for those who arrive past the age of compulsory schooling, as well as the role of extra-curricular activities (including sports and leisure) in promoting integration. Refugee and migrant children's lived experience and 'voice' must be taken into account in line with Article 12 of the UN Convention on the rights of the child. Best practices supporting equal life-chances should be identified with the involvement of stakeholders, maximising the potential of existing experiences⁴, including those developed in cooperation with refugee and migrant scholars and scientists.

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

b) Innovation Action (2020):

Building on existing evidence, including from projects funded under topic Migration-6 2018 where relevant, proposals should implement pilot actions able to experiment formal, informal and non-formal education solutions to address the integration challenges of children (0 to 18 years old - ISCED 0-3) from recent migration cohorts, children of refugees and asylum seekers, and unaccompanied minors, including those residing in camps. The proposals will include actions with local schools and organisations working with children (with or without migration background) and focus not only on formal educational settings but also on informal social and learning environments. Proposals should address at least three of the following issues: governance and funding of education institutions, funding of integration actions targeting children, roles and attitudes of families, communities, civil society and local services, preparedness of schools and teaching staff, practices for language learning and use of native languages alongside the language used at school. Proposals should build upon good practices identified with the involvement of stakeholders such as e.g. practices of mutual cultural participation and exchange.

Proposals should address at least three of the points above, with a set of clearly defined goals. Processing of personal data of migrants must be conducted in accordance with EU data protection legislation and existing regulation such as eIDAS[1]. Proposals should engage all actors and consider the potential for co-creation work with all relevant stakeholders, including migrant families themselves, in the design and delivery of services. In addition, proposals should demonstrate their reusability or scalability and should develop a strong and realistic plan to ensure the long-term sustainability as well as take up of the results by the identified users. They should engage multi-disciplinary and multi-sectoral teams to explore the complexity of this challenge, to identify the necessary changes, and the risks and barriers to their implementation, addressing diversity as appropriate (gender, age, social, cultural, linguistic, religious background). Proposals should combine strong academic knowledge and research-action based support, with stakeholders and practitioners knowledge in the several fields identified above. Children ‘voice’ should be taken into account in line with Article 12 of the UN Convention on the rights of the child.

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

Expected impact: The actions will inform policymakers, families, teachers and other stakeholders on effective practices for integrating migrant children in schools and more broadly in society, and for developing more inclusive schools, able to increase sense of belonging of all children. They will enhance synergies and cooperation amongst these actors for the uptake of innovative practices, for monitoring and data collection and for the definition of research gaps. Proposals should develop and implement actions which can be adapted, rescaled and reproduced in different environments according to the local/regional needs and involve stakeholders from public administrations, civil society, migrants and the host community from a very early stage as appropriate.

Type of Action: Research and Innovation and Innovation Action

The conditions related to this topic are provided at the end of this call and in the General Annexes

MIGRATION-06-2020: Innovative practices for the integration of newly arrived migrants into societies²

Specific challenge: This innovation action will draw on concrete experiences and research in the integration of new migrants in European societies. Lessons from best practices and difficulties will provide policy recommendations on which local, regional, national and

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

governments can draw and share experiences through exchanges with all types of stakeholders. A platform structure that gives European visibility will be developed.

Scope: Proposals should identify, monitor and/or engage EU projects on migration funded under Horizon 2020. The collection of new knowledge and innovative practices should be structured along specific themes, with a focus on improving the good governance of migration, measuring migration governance and delivering innovation in support of improved outcomes for both migrants and the communities in which they live.

The direct involvement of the research community (with particular regard to the research teams of past migration-related Horizon 2020 projects), including through in-depth participatory techniques aimed at extracting policy implications from research findings, is essential.

This should be complemented by strategies for dissemination to relevant stakeholders in view of exploitation of results. An interactive online repository should be set up that can provide for customised searches and reports. It should engage the public to increase awareness of the added-value of European research and innovation activities on migration.

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

A strong cooperation between MIGRATION-04-2020 and MIGRATION-06-2020 is required while the results of CSA will communicate with the results of RIA and IA from MIGRATION-4-2020.

Expected Impact: The actions will establish a solid and readily accessible evidence base in support of migration and integration policies and will contribute to improved practices, policies and strategies at local, national and EU level, including urban and rural spaces. They will advance the implementation of the EU Urban Agenda and of the UN Sustainable Development Goals dedicated to making cities and rural communities inclusive, safe, resilient and sustainable. Furthermore, the actions will contribute to the deployment of migration-related innovation on the market and in society. Finally, they will reduce the R&I division by improving the flow of knowledge in the field between researchers, practitioners and policymakers across Europe.

Type of action: Coordination and Support Action

The conditions related to this topic are provided at the end of this call and in the General Annexes

MIGRATION-09-2020: Narratives on migration and its impact: past and present

Specific challenge: The portrayal of migration and migrants in the media and in political and public discourses has an impact on which policies and responses are considered desirable and

viable. It affects migration dynamics and the social, economic and cultural integration of migrants. The challenge is to enhance awareness of policy-makers, civil society organizations and citizens with regard to those dynamics, and to improve competences to respond adequately to these discourses. Furthermore, it should improve the participation of under-represented voices in the shaping narratives.

Scope: Proposals should address the dynamics and developments of migration narratives at local, national and EU level, as well as in countries of origin and transit. They should examine the general and potential long-term societal impact as well as the ethical implications of narratives and their currents of construction and formation on policy making. Successful projects should study the historical perspectives and changes in attitudes of non-migrant populations towards migrants and vice versa. Research also needs to address innovative ways for migrants to shape their portrayals and narratives. This should include the strong role of ICT and social media and may involve cultural heritage representation e.g. in museums. Proposals could also explore how migration narratives affect migration decisions and behaviours of potential migrants themselves, including their use of social media to facilitate migration. For the study of the impact of media and public narratives on perceptions, opinions, attitudes and behaviours of different categories of people, the use of innovative research methodologies, including experimental ones, is strongly encouraged.

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

Expected impact: The actions will significantly enhance the knowledge base to enable, inform, and potentially steer policy choices in relation to the societal impact of discourses on migration. They should have a direct impact on the conduct of practitioners. They will improve access and dissemination of information on migration, its scale, patterns and its social and economic impact on host societies. They will also strengthen the participatory aspect of generating factual information by actively involving migrants. In addition to scientific deliverables, outputs and impact, they will develop methodologies, best practises, platforms and policy recommendations for the societal impact of this action.

Type of action: Research and Innovation Action

The conditions related to this topic are provided at the end of this call and in the General Annexes

Conditions for the Call - MIGRATION

Opening date(s), deadline(s), and indicative budget:³

³ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

Topics (Type of Action)	Budgets (EUR million)			Deadlines
	2018	2019	2020	
Opening: 07 Nov 2017				
MIGRATION-05-2018-2020 (RIA)	6.00			13 Mar 2018
Opening: 05 Nov 2019				
MIGRATION-04-2020 (RIA/IA)			9.00	12 Mar 2020
MIGRATION-05-2020 (CSA)			2.00	
MIGRATION-06-2018-2020 (IA)			9.00	
MIGRATION-09-2020 (RIA)			9.00	
Overall indicative budget	6.00		29.00	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex H of the work programme.

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme.

The full evaluation procedure is described in the relevant [guide](#) published on the Participant Portal.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts for the 2019 budget are subject to the availability of the appropriations provided for in the draft budget for 2019 after the adoption of the budget 2019 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

Consortium agreement:

All topics of this call	Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.
-------------------------	--

**Call-SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS IN THE
CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION**

H2020-SC6-TRANSFORMATIONS-2018-2019-2020

The aim of the call is to address the challenges linked to the compounded socioeconomic and cultural origins and effects in Europe of the fourth industrial revolution in a context of globalisation and digitisation and to provide alternative policy options. R&I activities will provide new evidence and policy options in order to mitigate or support these transformations with a view to enhancing the diversity of cultures and social bonds, the existing or nascent social and cultural strengths of Europe, as well as reinforcing the social, cultural and economic benefits of the fourth industrial revolution where relevant. They will thus contribute to fostering equitable and sustainable prosperity and culture in the broad sense through objective scientific evaluations, social, cultural and technological innovation, co-creation and bottom-up solutions. The call's activities will also contribute to the objectives and the legacy of the European Year of Cultural Heritage 2018 and to the UN's Sustainable Development Goals (SDGs).

Proposals are invited against the following topic(s):

DT-TRANSFORMATIONS-02-2018-2019-2020: Transformative impact of disruptive technologies in public services

Specific Challenge: The challenge is to assess the potential benefits and risks of using disruptive technologies in public administrations as well as the social impact, including the impact on public servants and the interactions between the government and the citizens, of using them for government processes and governance (e.g. for registers, for archiving, for decision-making processes, etc.). The political, socio-economic, legal and cultural implications of disruptive technologies and their acceptance are important not only for public administrations, but also for citizens.

Scope:

a) Research and Innovation action (2018-2019):

The use of disruptive technologies (such as block-chain, big data analytics, Internet of Things, virtual reality, augmented reality, artificial intelligence, algorithmic techniques, simulations and gamification) in public administrations, public goods, public governance, public engagement, public-private partnerships, public third sector partnerships and policy impact assessment is growing and can be very beneficial. Yet, the real potential impact of such technologies and the ways in which they can disrupt the existing landscape of public services and legal procedures and can replace present solutions and processes are largely unknown. As a result, deploying these disruptive technologies in public administration requires a thorough assessment of their potential impact, benefits and risks for the delivery of public goods. Proposals should pilot the technology and should engage multidisciplinary partners, stakeholders and users to examine how emerging technologies can impact the public sector (including the impact on public servants and the relation between public services and citizens) and explore in a wide-ranging fashion the issues surrounding the use of these technologies in the public sector.

Proposals should also lead to the development of business plans that would ensure the long-term sustainability of the services offered based on the used technology.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

b) Research and Innovation action (2020):

The use of disruptive technologies (such as block-chain, big data analytics, Internet of Things, virtual reality, augmented reality, artificial intelligence, algorithmic techniques, simulations and gamification) in public administrations, public goods, public governance, public engagement, public-private partnerships, public third sector partnerships and policy impact assessment is growing and can be very beneficial. Yet, the real potential impact of such technologies and the ways in which they can disrupt the existing landscape of public services and legal procedures and can replace present solutions and processes are largely unknown.

However, disruptive technologies are associated with several risks, e.g. the risk of excluding a large part of the population due to age and/or gender. As a result, deploying these disruptive technologies in public administration requires a thorough assessment of their potential impact, benefits and risks for the delivery of public goods. Proposals should pilot the technology and should engage multidisciplinary partners including those from social sciences and humanities, stakeholders and users to examine how emerging technologies can impact the public sector (including the impact on public servants and the relation between public services and citizens) and explore in a wide-ranging fashion the issues surrounding the use of these technologies in the public sector (incl. e.g. the impact on capital, labour and knowledge).

Proposals should also lead to the development of implementations and/or business plans that would ensure the long-term sustainability of the services offered based on the used technology.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The action will enable public authorities to develop pathways for the introduction of disruptive technologies while also addressing the societal challenges raised by such technologies. Based on a thorough understanding of users' needs, the action will enhance knowledge on digital democracy; develop new ways of providing public services, of ensuring public governance and of boosting public engagement with the help of disruptive technologies. It will also contribute to developing new practices, to optimising work processes and to integrating evidence-based decision-making processes in public services and in services such as health, education, culture, social welfare and mobility.

Type of Action: Research and Innovation

The conditions related to this topic are provided at the end of this call and in the General Annexes.

TRANSFORMATIONS-04-2019-2020: Innovative approaches to urban and regional development through cultural tourism

Specific Challenge: The various forms of cultural tourism in Europe are important drivers of growth, jobs and economic development of European regions and urban areas. They also contribute, to the understanding of other peoples' identities and values by driving intercultural understanding and social development in Europe through discovering various types of cultural heritage. However, although cultural tourism by its nature invites cross border, regional and local cooperation, its full innovation potential in this respect is not yet fully explored and exploited. The level of development of cultural tourism between certain regions and sites, including those between the neighbouring countries in Europe, is still unbalanced. Deprived remote, peripheral or deindustrialized areas lag behind, whereas high demand areas are over-

exploited in an unsustainable manner. There is also a significant knowledge gap in terms of quantitative and qualitative data on the phenomenon of cultural heritage tourism and on understanding its contribution to cultural Europeanisation and economic and social development in Europe.

Scope:

a) Research and Innovation action (2019):

Proposals should comparatively assess how the presence, development, decline or absence of cultural tourism has affected the development of European regions and urban areas. They should investigate motives for cultural tourism and assess the effectiveness and sustainability of multilevel strategies, policies, trends and practices in attracting, managing and diversifying cultural tourism in Europe in view of identifying best practices that should be communicated to policymakers and practitioners. This should include considerations of specific strategies to promote cultural tourism at a regional, national and European level, including use of structural investment funds where appropriate. Minority cultures and regions as well as urban and rural areas currently less attractive to cultural tourism should receive special attention. Historical perspectives, as well as comparison with lessons learned at international level on the emergence of particular forms of cultural tourism or reasons for cultural tourism in particular areas should also be investigated. Innovative methods and techniques, including statistical tools and indicators, for measuring and assessing various practices and impacts of cultural tourism should be developed and tested. Proposals should also deploy place-based and participatory approaches to investigate the relation between intra-European cultural tourism and Europeanisation, and whether it impacts identities and belonging.

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

b) Innovation action (2020):

Through exploring possibilities of cultural tourism in Europe's natural and cultural sites, including those with an industrial heritage, the proposals should propose innovative strategies and pilot solutions for successful and sustainable cross border, regional and local cooperation in cultural tourism, including those for management, training and services. Various options of the use of the EU Structural Investment Funds should be explored. Minority cultures and regions as well as urban areas currently less attractive to cultural tourism should receive special attention in proposed strategies and pilot activities. Further on, proposals should include place-based and participatory approaches to investigate relations between intra-European cultural tourism and Europeanisation and their impacts on identities and sense of belonging. Strategies for cross border cooperation might look beyond EU Member States and include partnerships between EU and non-EU countries of the Balkans, the Eastern neighbourhood or the Mediterranean. Proposed solutions should be developed and tested in wide and diversified partnerships of stakeholders. These should include, but not being limited

to, entrepreneurs in the tourism industry, SMEs, regional and local governments and municipalities, institutions and organizations representing citizens living in the affected areas. Furthermore, it should cover emerging European networks of heritage sites like the European Heritage Label sites or European cultural routes. Innovative statistical methods, tools and indicators as well as qualitative concepts for measuring and understanding the various impacts of cultural tourism should also be developed and tested.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The action will contribute to improvements in sustainable cultural tourism policies and practices, at various levels, as well as to further progress in growth, jobs, social and economic development of European regions, and in urban and rural areas. It will provide strategic guidance at European level concerning the efficient use of European Structural Investment Funds in this field. It will contribute to the establishment of partnerships between public and private stakeholders, including citizens at large, and will provide strategies and training tools for cooperation in the area of sustainable cultural tourism. Creation of innovative quantitative/statistical as well as qualitative tools and methods will improve available data on and understanding of the impact of cultural tourism on European economic and social development and on cultural Europeanisation.

Type of Action: Research and Innovation action and Innovation Action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

TRANSFORMATIONS-10-2020: Evolving European media landscapes and Europeanisation.

Specific challenge: The traditional and social media landscape is changing rapidly. Digitization, capital concentration, political interference, the transformation of the journalists' perception of their roles and changing media consumption patterns are among the triggers of these changes. The media influence – although at a fiercely-debated rate and manner– individual and public opinion, political choices and even the sense of belonging and identities. There is a clear knowledge gap about the transformation of the European media landscape in its totality and in its national and regional level. The process of political and cultural Europeanization towards a European political and cultural space is also a hotly debated issue. What are the impacts of the deep transformations of the media landscape on the evolution of a European political and cultural space? Do Europeanization and localisation contradict or complement each other? How are the media representations of major European political and cultural issues (e.g. refugees, migration, religions, common history, geopolitical and economic crises, terrorism, sport, elections, etc.) impacted by new production, consumption,

ownership and censorship patterns of media? What is the impact of the changing global and European media landscape on specifically European political and cultural markers, symbols and identity elements and on perceptions and attitudes towards Europe? How does the European media landscape foster or hamper the European project and societal cohesion?

Scope: Research on this topic needs to analyse, by using regional, national and European data sources, the transformations of the European media landscape in its global context in recent years, from the beginning of the 21st century to now. Where relevant, the research may put recent transformations in historical perspectives, including comparisons with other past ‘media revolutions’. Beyond analysing media production, ownership and eventual censorship, the research should look into the patterns of representation, dissemination and consumption or usage at a certain level of disaggregation, in terms of socio-economic categories and European countries and regions. It should study the contradiction or compatibility of an emerging European Media landscape with an increasing localisation of the content of European Media. The research should provide an idea concerning the evolution of the spatial and social, including gendered, distribution of media consumption and use. This action should study the impacts of the deep transformations of the media landscape on the prospects and evolution of a common European political and cultural space as well as on the media representations and narratives of major European political and cultural issues, markers, symbols and identity elements.

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

Expected Impact: Funded projects will fill the knowledge gap, concerning the galloping transformations, of the European media landscape, in its global context. The action will provide diachronic and synchronic analysis of the European media landscape and its interlaced patterns of production, representation, consumption and appropriation patterns and will produce reliable forecast about its evolution. This RIA will go beyond the state of the art in analysing the media representations, narratives and appropriations of major issues that people consider of European relevance and significance and will deliver reliable diagnosis on the prospects and evolution of a common European political and cultural space. It will also improve statistical data and research methods for capturing the evolution of contemporary media in cooperation, when appropriate, with national statistical institutes, relevant international organisations, networks, research infrastructures and Eurostat. It will equip policymakers with effective tools for understanding the impact of the changing media landscape on European politics and on political and cultural Europeanisation.

Type of action: Research and Innovation Actions

The conditions related to this topic are provided at the end of this call and in the General Annexes.

DT-TRANSFORMATIONS-12-2018-2020: Curation of digital assets and advanced digitisation

Specific challenge: In cultural heritage institutions, digital content is growing exponentially, together with the technological performance, and its quantity presents an increasing challenge to its curators. Work in this area should enable heritage institutions to fully use the potential of digital technologies for managing, studying, making accessible, interlinking, disseminating and preserving their collections.

On the other hand, the technological advancement presents opportunities, namely with regard to digitisation. So far, digitisation focused mainly on capturing the visual appearance of individual objects, collections or sites. There is a real need to establish a comprehensive picture of the studied assets, capturing and re-creating not only visual and structural information, but also stories and experiences (stored in language data), together with their cultural and socio-historical context, as well as their evolution over time. In addition, the current approach to digitisation is often localised and static: single experts perform the digitisation and the archiving; the digitised cultural tangible (artefacts, historical sites) and intangible resources (stories, experiences, written memory of the society) are rarely consolidated and interlinked, preventing deeper exploitation of the resources through wider searchability via other domains, networks or languages.

Scope:

a) Innovation Action (2018):

Proposals under this action should address the curation and preservation of digital assets. They should provide new technologies and methods that enable, among others, richer experiences, storytelling and the linking of physically separated objects and sites, and tangible and intangible heritage. It should pay attention to the emergence of more dynamic and personalised digital resources which pose new issues in terms of curation and preservation.

The Commission considers that proposals requesting a contribution from the EU of between EUR 4 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

a) Research and Innovation action (2020):

Departing from the current paradigm of localised and static archiving, the scope is to develop one or more of the following new technologies and methods:

In order to develop the concept of active digital resources, sound and comprehensive documentation management tools are needed that continuously consolidate digital assets. This

will be achieved through capturing over time, results stemming from a variety of digitisation methods connected to active sensor networks or to semantic web technologies. This will allow for analysis and semantic evaluation of digital assets and resources of cultural heritage.

Consolidation takes also into account the relevance of historical resources (e.g. studies on how language transmits our cultural memory of events) and that a resource evolves over time through cultural impact, research and curation (e.g. studies on how culture shaped a specific collection or how historical events shaped spaces). The continuous consolidation should support the collaboration of multiple actors (IT and SSH) providing both sample data and knowledge to the collaborative framework.

Time and space are core aspects of the history of cultural heritage collections. In addition to the audio-visual appearance, digitisation will include the related cultural, historical, social evolution and events. It will need to develop the accessibility of the semantic content of the resources. Through connecting the tangible and intangible, stories will emerge as a means to enhance our understanding of cultural heritage.

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

Expected impact: The proposals should demonstrate how the new technologies, methods and data formats would help to present historic remains (Europe's historical memory) in a comprehensive and attractive way, supporting the promotion of Europe's cultural heritage. Proposals should also show how the preservation and analysis of the tangible and intangible resources of our cultural heritage would enhance our understanding of cultural history. They should also deliver solutions to the problem that language change hampers static ways of retrieving the information from historic data collections. The economic impact for the creative industries and the scientific impact for cultural institutions who own content will include gains from use and re-use of digital assets.

The main area of expected impact will be in the better promotion of Europe's cultural heritage, such as through presenting historic remains (Europe's historical memory) in a comprehensive and attractive way using new technologies, methods and data formats, including solutions to the problem of language when retrieving information from historic data collections. The preservation and analysis of the tangible and intangible resources of our cultural heritage will enhance our understanding of cultural history, and bring economic impact for creative industries and for cultural institutions owning content, such as from the use and re-use of digital assets.

Type of Action: Research and Innovation action and Innovation action

The conditions related to this topic are provide at the end of this call and in the General Annexes

TRANSFORMATIONS-15-2020: Society and innovations: understanding the contexts, processes and consequences.

Specific Challenge: The times of social, economic, technological and cultural changes we live in generate opportunities as well as new challenges for people, society and culture. Innovations will bring (assumed) benefits and (perceived) threats. They may bring economic progress but also societal anxieties and feelings of insecurity. Technological changes will affect employment and production as well as ethics, trust, legal frameworks, decision-making processes, social protection mechanisms, education and learning. At the same time, society will shape these technological changes. The changes will open discussions on values and identities, principles of democracy, questions of social justice, cohesion and inclusion, knowledge and information and the meaning of work and leisure. There will be changes in the way people communicate with each other (and, increasingly, with machines and robots) and find meaning in their lives. To ensure that future innovations and decision-making are imaginative, culturally and historically informed, ethically grounded and context-specific, a knowledge base on the contexts, processes and consequences of innovations is needed.

Scope: The proposed research will focus on the ethical, legal, social, economic, educational, cultural and historical contexts and consequences (or impacts) of innovations. Inter- and transdisciplinary research will be promoted for example, on the consequences of the digital turn on including cloud computing, democratic values and procedures, political participation, on inequality, societal cohesion, the influence on education and learning, work, employment, entrepreneurship, social protection mechanisms and the Welfare State as well as on identities, legal issues and ethical concerns, cultural practices, the arts, communication media, public discourse, public spaces and security. The overarching goals will be: analyse, explore and consider solutions to challenges facing society from technological disruptors and innovations; understand societies' capacity for integrating innovations and for dealing with change; analyse the ways in which democracy and societies' (sustainable) development can be threatened by innovative (disruptive) technology and the broader process of globalization; set-up policy scenarios, addressed to practitioners and policy-makers, that will explore the optimal use of innovative (disruptive) technology and of the broader process of globalization on behalf of societies and of the Welfare State.

The ERA-NET Co-fund Action and the transnational projects funded under the call for proposals will address innovations and technological change from both humanities and social sciences perspectives and will be a laboratory for inter- and transdisciplinary co-creation. They will create new designs for combining qualitative and quantitative methods and will promote dialogue between researchers, innovation actors, policy-makers and civil society. The call will ensure added-value to other topics of Horizon 2020 Societal Challenge 6.

This ERA-NET Co-fund will pool financial resources from all participating states from the European Union with a geographically balanced representation of Member States. It will implement a joint transnational call for proposals with EU co-funding (resulting in grants to

third parties). Proposals are required to implement other joint activities, including additional joint calls without EU co-funding.

The Commission considers that proposals requesting a contribution from the EU of maximum EUR 10 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The ERA-NET Co-fund Action will combine the analytic and transformative powers of humanities and social sciences in understanding processes of change and consider solutions when societies faces the introduction of disruptive technology and the broader process of globalization. It will contribute to a knowledge base for policymaking and will formulate more enlightened and effective societal policies for the future.

It will align national funding strategies and funding on the topic of innovations and their impacts. Projects funded under this call will help to understand the contexts and deep impacts of innovations, drawing lessons from the past, allowing policy makers and societal actors to enter into public discourse and understand and manage the consequences of the digital transformation. The action will enhance inter- and transdisciplinarity.

Type of Action: ERA-NET Cofund

The conditions related to this topic are provided at the end of this call and in the General Annexes.

TRANSFORMATIONS-18-2020: Technological transformations, skills and globalisation - future challenges for shared prosperity

Specific challenge: The reorganisation of international production, technological transformations and the expansion of trade and globalisation both involving, greater global interdependence have created winners and losers everywhere. European economies are faced with the paradox of the co-existence of skill shortages, high unemployment, asymmetrical labour mobility within Europe, as well as emigration and immigration which do not fully respond to the current and potential future dynamics of labour markets and necessities in terms of skills and competences. Compounded on top of these structural imbalances, European economies and societies are on the cusp of substantial technological transformations, and political concerns in the Western world, and in particular in the European Union, related to future challenges for shared prosperity are growing, in a context of uncertain futures.

A substantial though disparate body of research exists on what the future impacts and challenges of the juxtaposition of technological transformations, the associated labour market dynamics, and of globalisation may be. Academic studies emphasize opportunities for economic growth and productivity gains at a time when job-creating growth can no longer be assumed. Political debates often depict alarmist scenarios that are used to build support for the rejection of globalization as a pathway to economic and social progress. Better projections into the future with greater realism and accuracy are needed to prepare our economies, societies and policies for what is to come and to build up capacities for influencing these changes.

Scope: Proposals should project how the interactions between technological change and globalisation will transform the current international structure of labour markets in existing and emerging sectors and their impact on income distribution. Particular attention should be paid to skill-biased, capital-biased and talent-biased technical change and to possible trajectories for low-skilled work in the European and international context. The analysis should take into account the evolution of the processes through which technological change is integrated in economic, institutional, political and socio-cultural contexts, including the needs and obstacles. The future volume and quality of work should be addressed in relation to skills, education, development, migration and mobility, demographic changes, family and gender equality, and the analysis of economic convergence and divergence within Europe and with the rest of the world. Scenarios on regional integration and relations with the principal neighbouring zones of interest for the European Union, as well as scenarios of competition, cooperation or conflict with emerging countries (for example the BRICS or other relevant G20 countries), can be considered. Both demand and supply side issues, including global value chains and their distributive effects, can be addressed in this topic.

Proposals should produce a comprehensive set of scenarios based on data from national and international agencies, from databases on labour markets, inequalities, globalisation, productivity and growth, and from other relevant sources as needed. The analysis should have a strong focus on disentangling the processes and effects of technological change and of globalisation, in particular for their implications on the development of skills and competences that need to be strengthened in Europe. In addition, proposals should identify priority areas and content for policies that would enable sharing the benefits of technological change and globalisation more equally and widely. For instance, proposals could map pathways for adapting working populations and their flows to trends in the international production and consumption structure. Paradigm changes needed in education, skill and talent development could be anticipated. Due to the specific challenge of this topic, participation of relevant partners from third countries, including both developed and developing countries, is strongly encouraged. A solid dissemination strategy should be foreseen for bringing findings to the attention of policymakers and into the public domain.

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

Expected impact: The action will provide substance for inclusive policy choices and informed public debates, especially on questions of skills, mobility and labour markets, based on national and international data. It will propose policies on the areas discussed above for different levels of national and international governance and the means of achieving multilateral cooperation on these objectives, i.a. by proposing pathways to achieve these goals. It will contribute to the development of solutions to stalemates in areas such as trade policy (post Doha), labour and migration, intra-European mobility (including in a post-Brexit world), international regulatory frameworks or the coordination of sustainable development

policies in industry, agriculture and services after the Paris agreement and in the context of a potential stalemate of the WTO.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes

TRANSFORMATIONS-19-2020: Culture beyond borders – Facilitating innovation and research cooperation between European museums and heritage sites⁴

Specific challenge: Today, when communication, media and culture flows freely beyond borders, there is growing need to connect cultural heritage collections and sites and present Europe's tangible and intangible heritage to citizens and tourists in their wider historical and geographical contexts. Museums and heritage sites are also knowledge centres for heritage conservation, management and cultural tourism. Sustained cooperation between museums and heritage sites would increase European public interest, cultural tourism and the innovation potentials of these institutions for heritage sciences and the cultural and creative sectors thus it would contribute to sociocultural inclusion, economic growth and job creation. However, cooperation between museums and heritage sites is hindered by lack of sustained financing, institutional and legal obstacles, IPR and insurance issues, etc. Stakeholder involvement at European level is necessary for identifying gaps and obstacles but also best practices and fields where research and innovation can develop new solutions for successful cooperation.

Scope: A network will bring together European museums and heritage sites (national museums, regional and local museums, European Heritage Label sites and European cultural routes, among others) with researchers and relevant public authorities for supporting cooperation between European museums and heritage sites. The network will explore ways for innovating in sharing collections, research facilities and specialized knowledge for restoration/conservation, including skills in traditional heritage crafts and technics. Based on a focused, critical mapping of current practice and obstacles, the objective of the network is to develop an understanding of the challenges and opportunities for the enhanced cooperation of European museums and heritage sites. The network should pay particular attention to the sustainability and employment dimensions of further institutional cooperation. The network will map and share European and extra European best practices. It will evaluate bottlenecks and opportunities of enhanced cooperation. It will also identify the specific research, innovation and training needs for policy makers for improving the cooperation of European

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

museums and heritage sites, thus contributing to shape the research and innovation agenda for cultural heritage in Horizon Europe.

The Commission considers that proposals requesting a contribution from the EU in the 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: The coordination and support action will create a representative and geographically balanced European network of European museums, heritage sites, researchers and policy makers. The network will support, as a pilot demonstration activity, the joint organisation of travelling exhibitions and shared digital exhibitions. It will develop and share best practises. It will also support knowledge exchange between museum curators, conservators and management. The CSA will provide an agenda with key research and innovation challenges for European museums and heritage sites for Horizon Europe. The research agenda will cover needs for new technologies, materials, management tools, legal solutions, IPR management, financing instruments and visitors' and community involvement. The network will also identify short, mid- and long-term education and training needs for European museum and heritage professionals.

Type of Action: Coordination and Support action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

DT-TRANSFORMATIONS-20-2020: European Competence Centre for the preservation and conservation of Monuments and Site⁵

Specific Challenge: The increasing occurrence of natural disasters such as floods, earthquakes, fires, and pollution can sometimes cause irreversible damage to cultural heritage sites and historical documents, or destroy entire areas together with the documents and monuments therein. Europe's cultural heritage sites and many more historical documents, monuments and historic buildings across the Member States are in danger. Apart from losing our heritage, the culture and creative sectors, and related industries such as tourism and hospitality rely heavily on the appeal and conservation of cultural heritage sites, documents and monuments. Digital technology can help preserve the knowledge of threatened heritage artefacts, museums, monuments, documents and sites and make them accessible for citizens across Europe and for future generations. In addition, online access to high quality holistically documented digital replicas (including storytelling) of artefacts, sites, documents and

⁵ 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

monuments may increase the appeal and promotion of a place, city or Member State, thus supporting the local tourism and hospitality industries.

Scope: Proposals under this action should set up a "Competence Centre"(CC) aiming at the preservation and conservation of European Cultural Heritage using new state-of-the-art ICT technologies. The CC should map past and ongoing research, collect, analyse and promote best practices from Europe and beyond, and become a major point of European reference for transnational and interdisciplinary networking in the preservation of Cultural Heritage.

The CC should support cultural institutions to benefit from the opportunities brought by new ICT technologies by sharing best practices on technical, legal, and online publishing requirements, etc. as well as increasing cooperation in the sector, with a special attention to 3D technologies and corresponding standards.

The CC should also act as a facilitator for access to finance and mapping possibilities as well as an ambassador for massive digitisation of endangered European Cultural Heritage. The CC should also pave the way for future European research on cultural heritage that would need a holistic research agenda and an inclusive interdisciplinary approach, bringing together multidisciplinary expertise such as historians, archaeologists, architect, civil engineering, chemical engineering, craftsmanship, social and human sciences.

Expected Impact: The CC should increase the quality of preservation initiatives undertaken by Cultural Heritage institutions. It should also demonstrate how it will contribute to an increase in the number of and quality of digitised monuments and documents. This would allow a better use and re-use of new digital assets. The CC should also strengthen the coordination between all players in the Cultural Heritage domain.

The Commission considers that proposals requesting a contribution from the EU of around 3 million would allow this specific challenge to be addressed appropriately. The duration should be around 3 years. The sustainability of this competence centre should be foreseen and set in place during the duration of the project. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Type of Action: Coordination and Support Action

The conditions related to this topic are provide at the end of this call and in the General Annexes

DT-TRANSFORMATIONS-21-2020: Mentoring scheme for schools: mainstreaming innovation by spreading the advanced ICT-based teaching practices to a wide circle of schools⁶

⁶ 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

Specific Challenge: Education, in particular at school level, has to keep the pace with the digital transformation of our society. While some schools have a culture of well-developed ICT strategies and pursue very innovative practices, they often work in isolation and there is a growing digital gap between schools that are advanced and those who are not leveraging the advantages of ICT-based pedagogies. The greatest challenge is to mainstream digital innovation in education on a large scale, reaching the less advanced schools and teachers. To accelerate the digital transformation of schools in Europe, there is a need for sharing, discussing, spreading and adopting innovative practices, supporting a whole-school approach and promoting a model of school mentoring. This requires implanting and fostering a broader culture of innovation and leveraging networks and hubs of innovation to help disseminate and widely diffuse best practice involving ICT. Accelerating digital transformation in education and delivering high-quality digital education to all students requires bridging this gap and accelerating change by diffusing innovative ICT-based educational practices across schools and stimulating bottom-up diffusion of innovation through school-to-school peer-learning.

Scope: the action will build, coordinate and seek to expand an inclusive pan-European network of schools where schools (school leaders and teachers) interested in pedagogical uses of ICT can build their know-how by learning from their more advanced peers through demonstrations of best pedagogically sound practice. The action will in particular focus on mainstreaming the innovation process, which leads to positive results, using a policy-connected approach by involving policy-makers at regional and national level. The action will also include bottom-up, regional grassroots actions that support the situated take up of ICT and ICT-based practices between schools with various levels of technological proficiency, particularly within countries where mainstreaming of innovative use of ICT in schools is still at a relatively low level and paying attention to contexts where such patterns of cooperation are not yet prevalent. The action will particularly: 1) collect and document evidence of cases where whole-school peer-learning methodologies have been successfully used in the Member States with a view to further scaling-up, and also compare them with less successful cases 2) build on and involve the existing networks, ‘multiplier’ structures and regional hubs to mainstream change; 3) set up collaboration between more advanced and less advanced schools and support the exchange or practice with instructional design, paying attention to their specific educational contexts; 4) leverage an EU-level awareness-raising platform or infrastructure to promote the idea and models of mentoring scheme; actions may propose using existing platforms to save resources for other activities 5) explore which incentives and rewards for advanced schools make it attractive for them to participate as mentors in school clusters to mainstream their innovative practices 6) will support the development of whole-school approaches to ICT deployment and the mainstreaming of innovative practice involving ICT in schools across Europe 7) provide a strategy and a plan how to achieve greatest impact possibly by involving institutional actors such as Ministries of Education and disseminate the model of mentoring among schools. Letters showing Ministries of Member States interest to actively participate in the action would be an advantage.

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. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected impact: The proposals should provide meaningful and ambitious indicators on how the whole requested range of impacts will be measured, including the number of countries and schools to be reached.

A significant number of schools connected and supported by the network to exchange best practices and develop a whole-school approach involving all levels of school governance to implementing ICT;

A significant number of policy-makers better informed about the mechanisms needed to scale up ‘islands’ of innovation and provided with actionable guidance and recommendations on how to develop, nurture and successfully implement a sustainable culture of innovation across European schools;

Strengthened capacity at regional and national levels across Member States to mainstream innovation in education and to further transfer the processes of mainstreaming innovation;

Type of action: Support and Coordination Action

The conditions related to this topic are provide at the end of this call and in the General Annexes

TRANSFORMATIONS-22-2020: Enhancing access and uptake of education to reverse inequalities

Specific Challenge: Inequalities have been rising for decades to increasing social and economic detriment despite high levels of social investment. Growing inequality is a threat to economic growth, democracy and equal opportunities for future generations. Social disadvantages and precariousness are to a large extent inherited whereby low educational attainment of both parents and children play a key role. There is ample evidence that children from less privileged social backgrounds trail behind in access and uptake of education. Often disadvantages such as low-skilled parents, mono-parental families, limited access to social services (e.g. health and housing), and cultural resources, and being from a migration background, cumulate. The challenge is to reverse this trend and to enhance upward social mobility by significantly improving access and uptake of education in Europe, in line with the European Pillar of Social Rights.

Scope:

a) Research and Innovation Action:

The research will focus on access and uptake of education from early childhood to adult education in an integrated, cross-sectoral and multidisciplinary way. Education should be understood comprehensively, including formal and informal education publicly or privately provided. Any means of knowledge, skills and competences acquisition should be considered. The research should take into account the increasing diversity in Europe and complex interplay of the socio-economic status of parents, geographical location, ethnicity, religion, language, traditions, cultural values, gender, disabilities, special educational needs, as well as differences between urban rural environments. The diversity requires moving from standardisation to customisation and cross-sectoral policies as well as the involvement of multiple stakeholders. Research will refine and develop necessary quantitative and qualitative data, learn lessons from existing policies to combat inequalities across a number of policy fields, and propose new or differentiated policies where needed. Proposals should build on the evidence of the successful contexts in which practices are demonstrating to be effective, considering the diversity of structures and agents influencing the access and uptake of education.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 3.5 million for part a) and 3 million for part b) 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 Action⁷:

The Coordination and Support Action will run in parallel to the research and innovation actions and interact with them to enhance synergies and cooperation between them and amongst the relevant stakeholders (including policy makers at all levels in the relevant policy fields,) and decisively promote the policy uptake of the research to overcome inequalities. It will generate networks for research and policy development and promote and monitor concrete policy guidance for system-wide, integrated and - where necessary – cross-policy strategies for effective intervention.

The Commission considers that proposals requesting a contribution from the EU in the order of EUR 3.5 million for part a) and 3 million for part b) would allow this specific challenge to be addressed appropriately. This does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: a) The action will support the advancement and uptake of effective and efficient practices in order to reverse inequalities, increase access to quality education for disadvantaged groups, improve uptake of education in key competences (reading, maths, sciences), reduce the impact of social disadvantage and thereby increase social upward

⁷ 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.

mobility in Europe. It will produce research results on access and uptake of education and formulate policy recommendations in a cross-sectoral approach and by involving multiple stakeholders. It will deliver best practises and new methodologies (where appropriate), which can be used by other projects and stakeholders. The action will support the breaking of policies and intervention silos toward more cooperation amongst stakeholders.

b) The Coordination and Support Action will draw policy lessons from previous topics in this field, bring together through networks and conferences different stakeholders and coordinate their efforts to draw policy recommendations and impact lessons that can be implemented. The network structure should enable the sustainability over time of the policy process.

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

The conditions related to this topic are provided at the end of this call and in the General Annexes

Conditions for the Call - SOCIOECONOMIC AND CULTURAL TRANSFORMATIONS IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION

Opening date(s), deadline(s), indicative budget(s):⁸

Topics (Type of Action)	Budgets (EUR million)			Deadlines
	2018	2019	2020	
Opening: 07 Nov 2017				

⁸ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The deadline(s) in 2020 are indicative and subject to separate financing decisions for 2020.

The budget amounts for the 2019 budget are subject to the availability of the appropriations provided for in the draft budget for 2019 after the adoption of the budget 2019 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

The budget amounts for the 2020 budget are indicative and will be subject to separate financing decisions to cover the amounts to be allocated for 2020.

DT-TRANSFORMATIONS-02-2018-2019-2020 (RIA)	9.00			13 Mar 2018
DT-TRANSFORMATIONS-12-2018-2020 (IA)	10.00			
Opening: 06 Nov 2018				
DT-TRANSFORMATIONS-02-2018-2019-2020 (RIA)		7.00		14 Mar 2019
TRANSFORMATIONS-4-2019-2020 (RIA)		9.00		
Opening: 05 Nov 2019				
DT-TRANSFORMATIONS-02-2018-2019-2020 (RIA)			12.00	12 Mar 2020
DT-TRANSFORMATIONS-12-2018-2020 (RIA)			13.50	
DT-TRANSFORMATIONS-20-2020 (CSA)			3.00	
DT-TRANSFORMATIONS-21-2020 (CSA)			1.00	
TRANSFORMATIONS-4-2019-2020 (IA)			8.00	
TRANSFORMATIONS-10-2020 (RIA)			9.00	
TRANSFORMATIONS-15-2020(JOINT ERANET)			10.00	
TRANSFORMATIONS-18-2020 (RIA)			9.00	
TRANSFORMATIONS-19-2020 (CSA)			6.00	
TRANSFORMATIONS-22-2020 (CSA/RIA)			10.00	
Overall indicative budget	19.00	16.00	81.50	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and

- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex H of the work programme.

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme.

The full evaluation procedure is described in the relevant [guide](#) published on the Participant Portal.

Consortium agreement:

All topics of this call	Members of consortium are required to conclude a consortium agreement, in principle prior to the signature of the grant agreement.
-------------------------	--

Call - GOVERNANCE FOR THE FUTURE

H2020-SC6-GOVERNANCE-2018-2019-2020

The aim of the call is to enhance the evidence base and provide sound policy and technological options in order to develop adapted governance structures at various relevant levels. The call addresses the very foundations of governance and democracy by supporting the collection of new evidence and the development of policy options in key constitutional and institutional areas such as social rights in Europe, trust, citizenship, differentiation in the EU, open innovation, security and defence policy, digital democracy and also the delivery of public goods and the governance of the digital single market and of the European cloud infrastructure for public administration. Populism, polarisation and radicalisation are addressed from the angle of inclusive and reflective societies. International cooperation is also required in topics on global governance and violent extremism in the broader MENA region and the Balkans.

The aim of this call is to enable development (based on a solid evidence base providing sound policy and technological options) of adapted governance structures at various levels and in key constitutional and institutional areas, such as: social rights in Europe; trust; citizenship; differentiation in the EU; open innovation; security and defence policy; digital democracy and also the delivery of public goods and the governance of the digital single market; and of the European cloud infrastructure for public administration. Populism, polarisation and radicalisation are addressed from the angle of inclusive and reflective societies. International cooperation is also required in topics on global governance and violent extremism in the broader MENA region and the Balkans.

Proposals are invited against the following topic(s):

DT-GOVERNANCE-05-2018-2019-2020: "New forms of delivering public goods and inclusive public services

Specific Challenge: Governance is being transformed by new approaches to delivering public services, which allow for the involvement of citizens and various other actors. The challenge is to critically assess and support as needed this transformation based on an open collaboration and innovation platform supported by ICT ('government as a platform') and on an open environment and ecosystem with clear frameworks and guidelines for modular services quality ('government as a service') in accordance with the EU eGovernment Action Plan 2016-2020⁹ and the European Interoperability Framework Implementation Strategy¹⁰.

⁹ EUeGovernmentActionPlan2016-2020Acceleratingthedigitaltransformationofgovernment.pdf

¹⁰ [European Interoperability Framework – Implementation Strategy \(COM/2017/134\)](#)

In particular, to deliver better public services, public administrations need to regroup resources together under common infrastructures at the European level that serve the needs of various actors and enable the participation of all relevant communities including elderly people and migrants. Mobile apps providing access to public services are likely to become the norm to facilitate the interaction and engagement of citizens with public administrations. In addition, to ensure a cost efficient provision of inclusive digital services, there is a pressing need to identify gaps in accessibility solutions, to identify related good and bad practices, and to promote training, awareness raising and capacity building.

Scope: In a context of open government and digital democracy, the role of the government is changing due to its use of ICT and to the increasing pervasiveness of ICT across all parts of society. In addition to being a manager of societal assets, government is becoming a provider of tools, opportunities, guidance and incentives for co-creation as well as a guarantor of public value over the longer term.

a) Coordination and Support Action (2018) ¹¹

For a cost efficient provision of inclusive digital services, the proposed action will:

1. Identify gaps in the current accessibility solutions and establish related best practices,
2. Promote training, awareness raising, and capacity building.

The Commission considers that proposals requesting a contribution from the EU of between EUR 1 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

b) Research and Innovation action (2019-2020)

Proposals should analyse, develop and demonstrate the potential for sharing common services with different actors (public, private, and third sectors) to achieve efficiency and effectiveness in these collaborations, in particular leveraging mobile communications and Apps. The proposals should also evaluate the role and responsibility of the public authorities and of the other actors delivering public goods and services in the new governance model and the related partnerships, including in terms of ensuring secure mobile single sign-on for cross border access and use of services. Evidence of the benefits of the full implementation of the once-only and digital-by-default principles and user centricity and the transformative impact of new technologies should also be taken into account.

Proposals should also lead to the development of implementation and/or business plans that would ensure the long-term sustainability of the new governance model. They should engage multi-disciplinary and multi-sectoral teams to explore the complexity of this challenge and to

¹¹ 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.

identify the necessary changes as well as the legal, cultural and managerial risks and barriers to its implementation.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: Solutions for opening up and connecting public administration data and services will have a measurable impact for both businesses and citizens, leading to efficiency gains. The actions will provide for all the elements required to facilitate the migration of public administrations towards forward-looking models, in particular mobile ones, for the co-delivery of public services.

The actions will provide evidence of how the open government approach may reinforce trust in public institutions, which is strongly associated with citizens' satisfaction from full deployment of inclusive digital government. The actions will also contribute to establishing a culture of co-creation and co-delivery, transparency, accountability and trustworthiness as well as of continuous consultation promoting overall digital accessibility.

In addition, to support the implementation of the Web Accessibility Directive, enhanced cooperation on digital accessibility between various stakeholders will result in scalable and more affordable accessibility solutions. Overall, the actions will contribute to the widespread recognition of the need for and benefits of an inclusive Digital Single Market.

Type of Action: Coordination and support action, Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

GOVERNANCE-07-2020: The Common Foreign and Security Policy and the expanding scope of the EU's external engagement

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

Scope: Proposals should ascertain what governance structures are needed for ensuring an effective EU foreign and security policy as well as a coherent and sustainable external action. They should develop assessment criteria for effective defence, security and intelligence cooperation in the EU, distinguishing between objectives and instruments. Results should take

account of the previous calls 'Europe as a Global Actor' (Work Programme 2014/15) and 'Engaging together globally' (Work Programme 2016/17). Proposals should engage with the growing diversification of international relations, e.g. the E3/EU on Iran and regional integration strategies with neighbourhood regions. Research should analyse perceptions and the political acceptability of an enhanced EU common defence policy among Member States and citizens. Crucially, projects must thoroughly investigate the burgeoning peripheral and sectoral diplomacies in traditionally internal policy areas and assess how these could be brought within the joint-up frame of a coherent EU external action.

The Commission considers that proposals requesting a contribution from the EU in the 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: Actions will inform policymakers on the governance structures needed to ensure joint-up and sustainable EU diplomatic action and international cooperation. They will contribute to the advancement of the Common Security and Defence Policy and to increased coherence between the EU foreign policy and Member States' foreign policies.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes

GOVERNANCE-09-2020: Addressing radicalization through social inclusion

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

Scope: Based on empirical and multidisciplinary approaches, proposals should assess the multiple drivers and manifestations of radical ideologies prone to incite or lead to violence, both religious and political, as well as the physical and online contexts for their propagation. Complementary knowledge on non-radicalising identity, belonging, disengagement and detachment should also be formulated in order to provide a holistic framework for assessing and proposing preventive measures in terms of social policies and interventions. A focus should be on the psychological and social mechanisms of alienation and (de-)radicalisation of youth in urban and peri-urban contexts. Research must engage with the relevance of big data and also consider fendered perspectives where relevant. Proposals should rely on extensive fieldwork and construct a solid empirical base. They should also proactively target the needs of policymakers and practitioners.

The Commission considers that proposals requesting a contribution from the EU in the 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: Actions will provide a holistic evidence base to support situation analysis. They will increase the capacity to quickly identify and reach at-risk groups and thereby contribute to better targeted and more effective policies and interventions. Actions will identify best practises, develop new methodologies where appropriate and provide evidence based policy recommendations in close collaboration with civil society and policy makers. The involvement of practitioners will facilitate policy take-up as well as implementation of proposed solutions. Communication actions will increase awareness and resilience in at-risk demographics.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes
The conditions related to this topic are provided at the end of this call and in the General Annexes.

DT-GOVERNANCE-12-2019-2020: Pilot on using the European cloud infrastructure for public administrations

Specific Challenge: . Data analytics and the use of cloud infrastructure to gain access to shared data can help improve policy making at all levels, national but also local such as citizens and businesses. Moreover, engaging citizens and local actors in the generation of data or in the analysis of 'big data' and its ethical issues can assist local governance.

Scope: The availability of open and big data, in particular as facilitated by high-performance computing (HPC) capabilities offered by the European Cloud Initiative¹², would provide an infrastructure with data and analytical power for the public administration. Proposals should develop new ways, methods, ethical, and legal aspects of using the cloud infrastructure by public administrations for policy modelling, policymaking and policy implementation. They should also create reusable models that allow for a better, more accurate and more efficient development and management of policies related to health, emergency responses, weather warning etc.

Proposals should demonstrate the interoperability¹³, reusability or scalability of the models and analytical tools.

¹² As described in the Commission Communication on the European Cloud Initiative - Building a competitive data and knowledge economy in Europe [COM(2016) 178 final]: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0178&from=EN>

¹³ As indicated in the Commission Communication on the [European Interoperability Framework – Implementation Strategy](#) [COM(2017) 134 final]: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0134&from=EN>

They should also develop a solid and realistic business plan to ensure the long-term sustainability and take-up of the results and consider legal, ethical and security aspects. They should consider the different legal aspects of the models and analytical tools depending on what kind of data they contain/are based on. They should also consider how communities can be effectively involved in co-creation of data management and analysis. In addition, they should involve multi-disciplinary and multi-sectoral teams to explore the complexity of this challenge, including the problems raised by big data uses and consideration of precautionary approaches to address such problems.

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Expected Impact: The action will create analytical tools that enable public administrations to reuse common infrastructures and data sets for the development of better-targeted and more effective evidence-based policies. It will engage citizens and businesses in the co-creation of the tools, thereby enhancing trust and boosting the perceived legitimacy of authorities.

Type of Action: Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

GOVERNANCE-20-2020: Centres/Networks of European research and innovation¹⁴

Specific Challenge: To extend the network of (currently three) centres in the world's most dynamic and innovative countries and regions that connect and support European researchers and entrepreneurs globally, in order to establish their presence in third countries and strengthen the position of Europe as a science, technology and innovation leader.

This call topic builds on the results of the 2016 Call topic ENG-GLOBALLY-09-2016, focusing specifically on innovation.

Scope: To establish new centres, or networks of centres, in close cooperation with local technology and innovation structures located in international partner countries and regions. These centres/networks will engage in activities with a focus on (focus depends on the country/region addressed):

- Providing services (incubator co-working space, advice and support) directly to European innovators (start-ups, SMEs) that want to soft-land in the partner country and/or to engage in co-creation with local innovators;
- Building/linking to an eco-system of stakeholders including early adopters, potential customers, partners etc. in the country;

¹⁴ This activity 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.

- Supporting the transfer and internationalisation of demonstrated technologies and know-how, both to and from the country/region;
- Launching local market development programmes to deploy European technology;
- Offering mentorship, training and promoting staff exchange to increase capacities of innovators;
- Leveraging private and public investors' resources to sustain the activities of the centre(s).

Proposed work will seek to establish the centres/networks in cooperation with local actors based on a sound business plan that is expected to include clear commitment from multiple funding sources, such as corporates, investors, or local governments making available soft-landing spaces. The business plan and the intended governance (including type of legal entity to be established) shall be presented as part of the proposal. The involvement of European and local incubators or accelerators must be described.

Each proposal shall target one country or region that is an emerging or developing technology or innovation partner; proposals addressing India and all or part of Africa are strongly encouraged without excluding other countries with similar characteristics.

For India, the centre(s) should target mature start-ups and SMEs from both Europe and India and promote matchmaking for adaptation of European technologies and innovative solutions to the Indian context.

For Africa the centre(s) with the network of incubators and accelerators should target at least five sub-Saharan African countries, build on existing local incubators and accelerators, and focus on technology transfer/adaptation (from Europe to Africa or vice-versa), staff exchanges and training.

Consortia shall include business development as well as technology expertise in the target country or region and ensure adequate involvement of European stakeholders from existing structures in the addressed countries/regions. Proposals should build on previous work of bilateral and regional international cooperation projects where appropriate.

A maximum of three proposals will be supported including one for India and one for Africa. The Commission considers that proposals requesting an EU contribution of around EUR 2-3 million for a duration of 3-4 years would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Expected Impact:

- Reinforced cooperation between European innovators 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 innovation environment of the partner country/region;

- 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 action.

Eligibility and admissibility conditions: Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

The conditions related to this topic are provided at the end of this call and in the General Annexes.

GOVERNANCE-21-2020: Developing deliberative and participatory democracies through experimentation

Specific challenge: Liberal democracies have come under pressure in recent times. Political distrust, polarizing discourses, and populist narratives that reject the idea of an open society manifest themselves in Europe and beyond, with very strong support. Developments in party systems, lower electoral participation and trends in public opinion seem to point to increasing levels of distrust towards the political institutions of representative democracy and a burgeoning crisis of legitimacy.

At the same time, in the last two decades deliberative and participative democracy has become increasingly prominent as a response to the challenges besetting liberal representative democracies. Premised on notions of direct democracy, active citizenship and decisions reached through rational argumentation, these new practices of democracy have in theory the potential to revive democratic legitimacy and help close the gap between citizens and political elites. The challenge therefore is to examine whether and how deliberative and participatory approaches – theoretically and practically – can fulfil this promise in the present context, and reach out to include those alienated from the political process.

Scope: Research should elucidate the complex links between political discourses and identities (including populist standpoints), dialogue guided by reasoned argumentation and the potential for achieving consensus on policy choices. Projects should also consider issues pertaining to effective participation in deliberative and participatory processes (especially as regards vulnerable groups and the politically less active) and as to how effectively these are translated by governments and institutions into concrete action. Research should equally examine how deliberative and participatory processes relate to polarisation and how (or if) it can assist in reaching mutual understanding among different categories of citizens. Lastly, attention should be paid to how deliberative and participatory democracy can best complement representative institutions. Issues of coordination, complementarity, scaling up (of such practices) but also opening up more traditional representative institutions should be examined.

The impacts of technology need to be further illuminated. Re-evaluating and re-assessing the contribution of digital technology in implementing deliberative, participatory (and by

extension direct) democracy is needed. Projects should offer exhaustive assessments of experiments and innovations in deliberative and participatory processes highlighting success and failure factors. The role of the internet should equally be examined (also in connection to social media) in light of recent trends, which have cast doubt on its capacity to act as a platform of rational communication between equal participants.

In the EU context, the notion of the public sphere, as a key deliberative element, should be reconsidered both conceptually and empirically in view of the economic, social and political crises and developments of recent years. This includes a reappraisal of the question whether there is, could, or should be a European public sphere, which could enrich the democratic quality and the liberal character of the EU.

Research should examine how concept of deliberative and participatory democracy could be used and adapted to facilitate such a process and whether and how it is compatible with polarization tendencies, which have been prevalent in recent years. It needs to be investigated how societies can be made not more only more inclusive but also more reflective, and how critical capacity and attitudes can be developed which revive deliberative democratic discourses. In this context, the contribution of the education system needs to be worked out. Connections should be made with questions of (European) identity, whereby the focus should not lie on an essentialist conception of identity, but reflexive identity, which signifies a critical and transformative self-understanding. Research should investigate how to create arenas or spaces open to citizens which are conducive to collective decisions made through public deliberation.

A set of innovation actions could concretely look at experimental and participative approaches to civic and social life, and suggest pathways for strengthening democracies at all levels, in terms of concrete actions, pilot projects and experimentation. They could build on previous results of international, European and other projects in these areas. In a context where citizen involvement and citizen participation in research and innovation is strongly stressed for Horizon Europe, this proposal could help to lay the groundwork.

The Commission considers that proposals requesting a contribution from the EU in the 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: This action will move to another level our understanding of deliberative and participatory democratic processes and identify ways of how they can be improved in practice. Research should make proposals on how to create arenas or spaces open to citizens which are conducive to collective decisions made through public deliberation. Proposals should outline methods and policies by which democratic practices can be strengthened in order to rebuild trust in political, economic and social institutions.

Type of action: Research and Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

DT-GOVERNANCE-22-2020¹⁵: Citizen-centric public services in local and regional administrations

Specific Challenge

With the adoption of the Tallinn Declaration, the ministers in charge of policy and coordination of digital public services in the countries of the EU and EFTA, recognise the needs and expectations of the citizens and businesses as they interact with public administrations and commit that the design and delivery of their services will be guided by the principles of user-centricity¹⁶.

The digital transformation of the public administration is a collective endeavour and will be implemented at national, regional and local levels.

Scope

For user-centric digital public services, the proposed action will:

1. support the implementation of the 'User-centricity principles for design and delivery of digital public services' laid down in the Tallinn Declaration and to put citizens truly at the heart of governments' digital transformation at cities and regions level;
2. encourage and recognise cities and regions that are taking policies steps to become more user-centric;
3. promote through a community building approach capacity building, best practices and experience exchange, solutions reuse, training, awareness raising;
4. ensure that the mechanism for recognising user-centric cities and regions and the community will become self-sustainable beyond the H2020 funding.

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

Expected Impact

The objectives of the action are to show the social and human dimension of digitalisation, in particular that all citizens can be better served by their public administrations while moving into the digital age, and to strengthen European citizens' sense of belonging to the European Union.

¹⁵ 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.

¹⁶ See Annex to the [Tallinn Declaration](#).

By developing a framework that will determine the conditions by which cities and regions will be recognised in their commitment to become more user centric the belief is that across Europe public administrations will be inspired to accelerate their journey to design and deliver more user-centric digital public services for the benefit of their citizens and businesses.

The action should emphasise the movement of local and regional administrations towards citizen centric, secure, high quality and burden free public services and towards more inclusive and participative decision and policy-making. At the same time cities and regions will gain visibility and benefit from being part of the community through exchange of best practices, solutions and know how among all cities and regions experiencing the same journey.

Type of Action: Coordination and Support action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

Conditions for the Call - GOVERNANCE FOR THE FUTURE

Opening date(s), deadline(s), and indicative budget:

Topics (Type of Action)	Budgets (EUR million)			Deadlines
	2018	2019	2020	
Opening: 7 Nov 2017				
DT-GOVERNANCE-05-2018-2019-2020 (RIA)	1.50			13 Mar 2018
Opening: 6 Nov 2018				
DT-GOVERNANCE-05-2018-2019-2020 (RIA)		8.00		14 Mar 2019
DT-GOVERNANCE-12-2019-2020 (IA)		8.00		
Opening: 05 Nov 2019				
DT-GOVERNANCE-05-2018-2019-2020 (RIA)			20.00	12 Mar 2020
DT-GOVERNANCE-12-2019-2020 (IA)			10.00	

DT-GOVERNANCE-22-2020 (CSA)			1.50	
GOVERNANCE-07-2020 (RIA)			9.00	
GOVERNANCE-09-2020 (RIA)			9.00	
GOVERNANCE-20-2020			7.00	
GOVERNANCE-21-2020 (RIA/IA)			9.00	
Overall indicative budget	1.50	16.00	65.50	

Indicative timetable for evaluation and grant agreement signature:

For single stage procedure:

- Information on the outcome of the evaluation: Maximum 5 months from the final date for submission; and
- Indicative date for the signing of grant agreements: Maximum 8 months from the final date for submission.

Eligibility and admissibility conditions: The conditions are described in General Annexes B and C of the work programme.

Evaluation criteria, scoring and threshold: The criteria, scoring and threshold are described in General Annex H of the work programme.

Evaluation Procedure: The procedure for setting a priority order for proposals with the same score is given in General Annex H of the work programme.

The full evaluation procedure is described in the relevant [guide](#) published on the Participant Porta

Other actions¹⁷

All activities in this section aim directly at supporting the development and implementation of evidence base for R&I policies or supporting various groups of stakeholders and are therefore excluded from the delegation to the Research Executive Agency and will be implemented by the Commission services (except for Other Action - External Expertise that is only partially delegated to REA)

I - Support to R&I policy reform and evidence based policy making

1. Horizon 2020 Policy Support Facility

Implementation of the Horizon 2020 Policy Support Facility Demand for PSF services ramped up rapidly since its launch in 2015 with 14 activities scheduled for 2017 and others still in the pipeline. An overview of past and ongoing activities can be found at <https://rio.jrc.ec.europa.eu/en/policy-support-facility>.

This provision serves to implement the PSF framework contract (current and future) by providing support to the following services: peer reviews of national R&I systems; specific support activities and mutual learning exercises; and communication and dissemination activities.

Type of Action: Public Procurement - Use of an existing Framework Contract - Number of specific contracts to be concluded will depend on the demand for PSF services by the Member States and Associated Countries, which is expressed as response to a yearly expression of interest addressed to the ERAC Committee.

Indicative timetable: Specific contracts to be concluded for 2020

Indicative budget: EUR 1.60 million from the 2020 budget

2. Implementation and analysis of the joint Commission-OECD international survey on STI policies¹⁸

As a major step towards reducing the burden for Member States and Associated Countries to report on evolutions in their Science, Technology and Innovation (STI) policies, the

¹⁷ The budget amounts for the 2018 budget are subject to the availability of the appropriations provided for in the draft budget for 2018 after the adoption of the budget 2018 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

The budget amounts for the 2019 and 2020 budget are indicative and will be subject to separate financing decisions to cover the amounts to be allocated for 2019 and for 2020.

¹⁸ This grant will be awarded without call for proposals in line with Article 190(1)(e) of the Rules of applications of Regulation (EU, Euratom) 966/2012, Regulation No 1268/2012 and Article 11(2) of the Rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)", Regulation (EU) No 1290/2013"

Commission and the OECD launched in 2015, for the first time, a joint international survey on STI policies. This survey is conducted every two years and underpins the OECD's biannual STI Outlook report. Its results are fed into the Commission's European Semester analysis and other reporting products. The survey is also a major element of the Council conclusions on 'Streamlining the R&I monitoring and reporting landscape' which were adopted under the Maltese Presidency and called on the Commission to maximise the use of the joint survey for monitoring and reporting purposes.

Through a grant provided from the work programme 2016-2017, substantial progress has been made towards making the survey and analysis process fully digital, interactive and more user-friendly. This provision will support further roll-out of the joint survey, further development of the infrastructure underpinning the survey and its analysis capabilities, and in-depth analysis of the information gathered through the survey.

The standard evaluation criteria, thresholds, weighting for award criteria and the maximum rate of co-financing for this type of action are provided in parts D and H of the General Annexes.

Legal entities:

The Organisation for Economic Co-operation and Development (OECD), 2, rue André Pascal, 75775 Paris, France

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

Indicative timetable: First quarter 2020

Indicative budget: EUR 0.70 million from the 2020 budget (one grant)

3. Industrial Research and Innovation Monitoring and Analysis¹⁹

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

Legal entities:

Joint Research Centre (JRC), Rue du Champ de Mars/Marsveldstraat 21, 1050 Brussels, Belgium.

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

¹⁹ This grant will be awarded without call for proposals in line with Article 190(1)(e) of the Rules of applications of Regulation (EU, Euratom) 966/2012, Regulation No 1268/2012 and Article 11(2) of the Rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)", Regulation (EU) No 1290/2013"

Indicative timetable: First quarter 2020

Indicative budget: EUR 2.65 million from the 2020 budget

4. Support to R&I performance and policy analysis

Expert support will be used to analyse and evaluate R&I performance, policies and programmes, both at national and EU level, and their impact.

This will include an expert group²⁰ to evaluate the appropriateness and effectiveness of the Policy Support Facility. The aim of this evaluation is to assess, on the basis of the PSF activities carried out in 2015-2017, whether the PSF has been successful in terms of raising the interest of the Member States and Associated Countries, providing a high quality set of services and provoking policy change in the Member States and Associated Countries.

In addition, individual experts will be used to support ongoing work on improving the quality and timeliness of R&I performance analysis, including through the use of novel data collection and analysis methodologies. Experts will also contribute to the scientific and economic analysis supporting the 2020 and 2022 editions of the Science, Research and Innovation Performance of the EU Report²¹, as well as to its overall quality assurance. This report, which is published every two years, provides an indicator-driven analysis of the state of science, research and innovation in the EU and how it links to productivity and economic growth, while at the same time investigating the drivers underpinning this performance.

The activities carried out by the individual experts and the expert group will be essential to the development and monitoring of the Union policy on Research, technological development and demonstration. The specialist skills required and the demanding nature of the work necessitate highly qualified experts, which will be selected on the basis of objective criteria following a call for applications published in accordance with Article 10 of Decision C(2016)3301. Therefore, a special allowance of EUR 450/day for each full working day spent assisting the Commission will be paid to the experts appointed in their personal capacity who act independently and in the public interest in terms of Article 21 of Decision C(2016)3301. This amount is considered to be proportionate to the specific tasks to be assigned to the experts, including the number of meetings to be attended and possible preparatory work.

Type of Action: Expert Contracts

Indicative timetable: Third quarter 2020

Indicative budget EUR 0.10 million from the 2020 budget

²⁰ Commission Decision C(2016) 3301 establishing horizontal rules on the creation and operation of Commission Expert Groups

²¹ See for the 2016 edition: <https://bookshop.europa.eu/en/science-research-and-innovation-performance-of-the-eupbKI0415512>

II-Support to Open Science and to EU policy in the field of research and Innovation

5. Support to Open Science, Open Access and Open Data (PP)

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

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

This would take the form of (a) public procurement to address up to six specific policy issues under the scope described above, as well as (b) low value contracts.

Type of Action: Public Procurement - (a) using a framework contract – up to 6 specific contracts, and (b) up to 10 low value contracts

Indicative timetable: 1 Q, 3 Q of 2020

Indicative budget: EUR 0.56 million from the 2020 budget

6. Support to Open Science, Open Access and Open Data (Experts)

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

A special allowance of EUR 450/day for each full working day spent assisting the Commission will be paid to the individual experts appointed in their personal capacity who act independently and in the public interest.

Type of Action: Expert Contracts

Indicative timetable: 2020

Indicative budget: EUR 0.14 million from the 2020 budget

7. Support to EU policy in the field of research and innovation

Within the broad policy scope defined by the Commission's priorities (Open Science, Open

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

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

Type of Action: Public Procurement - (a) using a framework contract – up to 6 specific contracts, and (b) up to 20 low value contracts

Indicative timetable: 2020

Indicative budget: EUR 0.45 million from the 2020 budget

8. Support for the future orientations of EU research and innovation policy

This line of activity aims to develop the future orientations of EU research and innovation (R&I) policy, in particular under the next EU R&I Framework Programme.

Future orientations of EU R&I policy will be supported through horizon scanning, strategic intelligence, sense-making, and scenario building bringing together and building upon existing forward looking activities in the EU with regard to R&I priority setting.

Further analyses of foresight knowledge and anticipatory intelligence will be carried out to support the implementation of the future EU R&I Framework Programme. For this purpose, relevant future orientations for EU R&I policy and funding will be developed and options, boundary conditions and pathways for the implementation of this vision will be provided.

In areas where there is a lack of existing data and knowledge, specific studies will include data collection, literature scanning and analysis.

Type of Action: Public Procurement - using a Framework Contract

Indicative timetable: 2020: 1 specific contract in Q2; 2 specific contracts in Q3; 1 specific contract in Q4

Indicative budget: EUR 0.40 million from the 2020 budget

III-Innovation prizes, innovation policy, and support to the European Innovation Council and to international cooperation in research and innovation

9. The European Capital of Innovation Award (iCapital)

With their capacity to connect people, places, public and private actors, cities can substantially enhance innovation in Europe and improve the quality of citizens' lives. New approaches to undertake and deploy innovative practices are gaining support, marking the shift from traditional top-down schemes to stronger bottom-up practices, where citizens are increasingly co-shaping public policies in an open, transparent way.

Scope:

The traditional city innovation ecosystem is opening up to new models of innovation engaging citizens. An increasing number of cities are acting as test-beds for innovation and run citizens-driven initiatives to find solutions for their relevant societal challenges.

The public domain is particularly challenged with finding effective ways to ensure the mainstreaming of these practices into the ordinary urban development process. Successful practices are particularly crucial to enhance the city's capacity to attract new resources, funds and talents, and become role models for other cities.

Essential award criteria: For 2020, six prizes will be awarded after closure of the yearly contest, to the contestants who in the opinion of the jury best address the following cumulative criteria:

1. Experimenting – innovative concepts, processes, tools, and governance models proving the city's commitment to act as a test-bed for innovative practices, and ensuring the mainstreaming of these practices into the ordinary urban development process.
2. Engaging – increasing opportunities for a broader range of citizens and ensuring a seamless uptake of their ideas.
3. Expanding – outlining the city's potential to attract new talent, resources, funding, investments, and to become a role model for other cities.
4. Empowering – concrete and measurable added value directly connected to the implementation of innovative practices.

One city will be selected for 2020 as the overall yearly winner: this city will be awarded the title of European Capital of Innovation for that year and will receive EUR 1.000.000. Moreover, based on the above cumulative award criteria, five cities will be selected as runners-up in the yearly competition, receiving EUR 100.000 each.

Eligibility criteria:

1. The candidate cities must be established in an EU Member State or in Associated Country and have a population above 100,000 inhabitants²².

²² For the purpose of this competition a 'city' is an urban area over 100,000 inhabitants understood as an

2. Winners of former European Capital of Innovation contests are not eligible. This does not apply to runners-up.

Expected results: A European prize to the most innovative city ecosystem. The award will raise the profile of the city teams that have developed and implemented innovative policies; enhance citizens' role in finding local solutions and participating in the decision-making process; facilitate the city attractiveness towards investors, industry, top class talents and entrepreneurial individuals; help the city open up connections with others and cooperate with them, thus inspiring and helping identify best practices to be replicated across Europe.

Indicative timetable of contest(s):

Stages: *Date and time or indicative period*

Opening of the contest: *first quarter 2020*

Deadline for submission of application: *mid-2020*

Award of the prize: *last quarter of 2020*

Type of Action: *Recognition prize*

Indicative timetable: *2020*

Indicative budget: *EUR 1.50 million from the 2020 budget (€1 million will be awarded to the winner and € 100.000 to each of the 5 runners-up)*

10. Centres/Networks of European research and innovation: follow-up of the NearUS action²³

The objective is to capitalise on the work of the NearUS action and ensure the operations of the ENRICH (European Network of Research and Innovation Centres and Hubs) centre in the US beyond its initial operational phase. The Commission considers that a duration of 3-4 years for the next phase would be appropriate.

The proposal should show how the activities put forward for the next phase will deliver innovation-related services leading to focused tangible support and benefits to a well-defined client base of European researchers and innovators not yet established in the US, and how the financing of the activities to be covered by this contract will fit with private financing raised by services to individual clients. It should also present a sound business plan showing how the activities of the centre will be rolled-out and financed through service contracts with private

administrative unit governed by a city council or another form of democratically elected body, according to the latest Eurostat figures (for countries not covered by Eurostat, the European Commission may perform specific checks when assessing the eligibility criteria)

²³ This grant will be awarded without call for proposals in line with Article 190(1)(e) of the Rules of applications of Regulation (EU, Euratom) 966/2012, Regulation No 1268/2012 and Article 11(2) of the Rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)", Regulation (EU) No 1290/2013".

and public clients, moving from a partly to a fully self-sustainable centre in the mid-term (at the end of this contract).

The standard evaluation criteria, thresholds, weighting for award criteria and the maximum rate of co-financing for this type of action are provided in parts D and H of the General Annexes. The legal entities listed below are the coordinator and participants of the NearUS action. Entities opting not to be a beneficiary are nevertheless invited and encouraged to participate in the activities of the action, and costs for such participation may be included in the estimated budget and be eligible for funding. Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Legal entities:

DEUTSCHES ZENTRUM FUER LUFT- UND RAUMFAHRT EV, LINDER HOEHE, 51147 KOELN, GERMANY; ... [all NearUS beneficiaries to be inserted here] ...

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

Indicative timetable: 3Q of 2020

Indicative budget: EUR 1.00 million

11. Centres/Networks of European research and innovation: follow-up of the ERICENA action²³

The objective is to capitalise on the work of the ERICENA action and ensure the operations of the ENRICH (European Network of Research and Innovation Centres and Hubs) centre in China beyond its initial operational phase. The Commission considers that a duration of 3-4 years for the next phase would be appropriate.

The proposal should show how the activities put forward for the next phase will deliver innovation-related services leading to focused tangible support and benefits to a well-defined client base of European researchers and innovators not yet established in China, and how the financing of the activities to be covered by this contract will fit with private financing raised by services to individual clients. It should also present a sound business plan showing how the activities of the centre will be rolled-out and financed through service contracts with private and public clients, moving from a partly to a fully self-sustainable centre in the mid-term (at the end of this contract).

The standard evaluation criteria, thresholds, weighting for award criteria and the maximum rate of co-financing for this type of action are provided in parts D and H of the General Annexes. The legal entities listed below are the coordinator and participants of the ERICENA action. Entities opting not to be a beneficiary are nevertheless invited and encouraged to participate in the activities of the action, and costs for such participation may be included in the estimated budget and be eligible for funding. Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Legal entities:

SOCIEDADE PORTUGUESA DE INOVACAO - CONSULTADORIA EMPRESARIAL E FOMENTO DA INOVACAO S.A., AV MARECHAL GOMES DA COSTA 1376 PORTO

CONCELHO FOZ DO DOURO, 4150 356 PORTO, PORTUGAL; ... [all ERICENA beneficiaries to be inserted here] ...

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

Indicative timetable: 4Q of 2020

Indicative budget: EUR 1.00 million

12. Centres/Networks of European research and innovation: follow-up of the CEBRABIC action²³

The objective is to capitalise on the work of the CEBRABIC action and extend the operations of the ENRICH (European Network of Research and Innovation Centres and Hubs) centre in Brazil to include also other countries in the region. The proposal should target at least five Latin American and Caribbean (LAC) countries in the initial phase, with a view to expanding the coverage in the medium-term. The Commission considers that a duration of 3-4 years for the next phase would be appropriate.

The proposal should show how the activities put forward for the next phase will deliver innovation-related services leading to focused tangible support and benefits to a well-defined client base of European researchers and innovators not yet established in the LAC country, and how the financing of the activities to be covered by this contract will fit with private financing raised by services to individual clients. It should also present a sound business plan showing how the activities of the centre will be rolled-out and financed through service contracts with private and public clients, moving from a partly to a fully self-sustainable centre in the mid-term (at the end of this contract).

The standard evaluation criteria, thresholds, weighting for award criteria and the maximum rate of co-financing for this type of action are provided in parts D and H of the General Annexes. The legal entities listed below are the coordinator and participants of the CEBRABIC action. Entities opting not to be a beneficiary are nevertheless invited and encouraged to participate in the activities of the action, and costs for such participation may be included in the estimated budget and be eligible for funding. Under this topic, legal entities established in the target country/region are eligible for funding from the Union.

Legal entities:

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V., HANSASTRASSE 27C, 80686 MUNCHEN, GERMANY; ... [all CEBRABIC beneficiaries to be inserted here] ...

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

Indicative timetable: 4Q of 2020

Indicative budget: EUR 1.00 million

IV - Horizontal actions

13. Service Facility in support of the strategic development of international cooperation in research and innovation

Continuation of the existing Service Facility with the objective to provide services that support the policy development, priority setting, follow-up and implementation of the strategy for international cooperation in research and innovation. Services will include awareness raising and training activities, support to National Contact Points and other multipliers, organization of meetings and events, operation of secretariats, and analysis and monitoring activities.

Type of Action: Public Procurement - Use of an existing framework contract – specific contracts (on average, 6-8 specific contracts of EUR 0.3-1 million each, based on the current use of the framework contract and expectations of continued significant gains in cost efficiency due to increased focus and concentration of services in a single facility)

Indicative timetable: 2020 (each quarter, on average, 1-2 specific contracts of 0.3-1 million each)

Indicative budget: EUR 4.00 million from the 2020 budget

14. e-Government related studies, conferences and other events

a) New Framework Contract for Benchmarking online public services and monitoring e-government policies

A Framework Contract (2014-2018, EUR 2.6 million) was launched in 2014 to support Benchmarking activities of online public services. This framework contract expired in the 2nd quarter 2018 and a new framework contract will be launched in the 1st quarter 2020. It will cover the period 2020-2024.

Type of action: Public procurement – New Framework Contract

Indicative timetable: 1st quarter 2020

Indicative global budget: EUR 4.6 million

b) Studies, conferences and other events

In addition to calls for proposals, other actions are also expected to be undertaken on specific activities that the European Commission, Directorate General for Communications Networks, Content & Technology (DG CONNECT) will support. These include:

- Studies including socio-economic and impact analysis studies, policy support activities, benchmarking activities as well as studies to support the monitoring, evaluation and strategy definition for e-Government, new form of delivering public goods and the transformative impact of disruptive technologies in public services;

- The organisation of events related to e-Government, e-governance, new form of delivering public goods and the transformative impact of disruptive technologies in provisioning public services;

- Publications and support to other events (e.g. information, communication, dissemination etc.), either through the use of Framework Contracts, or the launch of new calls for tenders.

Details will be provided in the texts of the relevant calls for tender.

Type of Action: Public Procurement - 4 specific contracts using a framework contract - 3 direct service contracts

Indicative timetable: For 2020: 2 specific contracts – EUR 500.000 in Q3 and EUR 400.000 in Q4; 1 direct service contract – EUR 100.000 in Q3.

Indicative budget: EUR 1.00 million from the 2020 budget

15. External Expertise

This action will support the use of appointed independent experts for the monitoring of actions (grant agreement, grant decision, procurement, and financial instruments).

Type of Action: Expert Contracts

Indicative timetable: 2020

Indicative budget: EUR 0.95 million from the 2020 budget

16. COST

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

Type of Action: Specific Grant Agreement

Indicative timetable: 2020

Indicative budget: EUR 20.64 million from the 2020 budget

SME instrument & Fast-Track-to-Innovation

The respective calls for the EIC-SME instrument call (H2020-EIC-SMEInst-2018-2020) and EIC-Fast-Track-to-Innovation (H2020-EIC-FTI-2018-2020) are found under the Horizon 2020 Work Programme Part – *Towards the next EU Framework Programme for Research and Innovation: European Innovation Council (EIC) Pilot* (part 17 of this work programme).

Budget²⁶

	Budget line(s)	2018 Budget (EUR million)	2019 Budget (EUR million)	2020 Budget (EUR million)
Calls				
H2020-SC6-MIGRATION-2018-2019-2020		36.00	35.00	29.00
	<i>from</i> 08.020306	12.00	8.00	29.00
	<i>from</i> 09.040302	24.00	27.00	0.00
H2020-SC6-TRANSFORMATIONS-2018-2019-2020		48.50	65.00	81.50
	<i>from</i> 08.020306	19.00	20.50	52.00
	<i>from</i> 09.040302	29.50	44.50	29.50
H2020-SC6-GOVERNANCE-2018-2019-2020		40.50	58.25	65.50
	<i>from</i> 08.020306	1.50	16.00	37.00
	<i>from</i> 09.040302	39.00	42.25	31.50
Contribution from this part to call H2020-RUR-2018-2020 under Part 9 of the work programme		5.00		
	<i>from</i> 09.040302	5.00		
Contribution from this part to call H2020-SwafS-2018-2020 under Part 16 of the work		1.00		
	<i>from</i> 08.020306	1.00		

²⁶ The budget figures given in this table are rounded to two decimal places.

The budget amounts for the 2018 budget are subject to the availability of the appropriations provided for in the draft budget for 2018 after the adoption of the budget 2018 by the budgetary authority or, if the budget is not adopted, as provided for in the system of provisional twelfths.

The budget amounts for the 2019 and 2020 budget are indicative and will be subject to separate financing decisions to cover the amounts to be allocated for 2019 and for 2020.

programme				
Other actions				
Prize		1.50	3.50	4.50
	<i>from 08.020306</i>	<i>1.50</i>	<i>3.50</i>	<i>4.50</i>
Expert Contracts		1.65	1.59	1.19
	<i>from 08.020306</i>	<i>1.29</i>	<i>1.24</i>	<i>...</i>
	<i>from 09.040302</i>	<i>0.35</i>	<i>0.35</i>	<i>...</i>
Public Procurement		8.77	11.21	8.01
	<i>from 08.020306</i>	<i>7.57</i>	<i>10.11</i>	<i>...</i>
	<i>from 09.040302</i>	<i>1.20</i>	<i>1.10</i>	<i>...</i>
Grant to identified beneficiary		4.93	1.20	3.35
	<i>from 08.020306</i>	<i>4.93</i>	<i>1.20</i>	<i>3.35</i>
Specific Grant Agreement		20.64	20.64	20.64
	<i>from 08.020306</i>	<i>18.00</i>	<i>18.00</i>	<i>18.00</i>
	<i>from 09.040302</i>	<i>2.64</i>	<i>2.64</i>	<i>2.64</i>
Estimated total budget SC6		162,48	196,39	213.69