Scoping Paper for

Horizon 2020 work programme 2018-2020

Societal Challenge 6: Europe in a changing world – Inclusive,

innovative and reflective societies

Important Notice: Working Document

This scoping paper will guide the preparation of the work programme itself. It is a working document not formally endorsed by the Commission, and its content does not in any way prejudge the final decision of the Commission on the work programme.

The adoption and the publication of the work programme by the Commission are expected in October 2017. Only the adopted work programme will have legal value.

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Societal Challenge 6: Europe in a changing world – Inclusive,

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1. Context

'There is not enough Europe in this Union; and there is not enough Union in this Union' President Juncker said. Trends in EU societies include deepening globalisation, increasing migration flows, mistrust, cultural diversity and new forms of human-technology interactions, all raising questions on the governance for the future. SC6 aims at engaging research and innovation (R&I) communities to contribute with a solid evidence base, novel approaches and efficient toolboxes in support to building strong bonds and designing effective policies at the societal, economic, political and cultural levels.

The SC6 upcoming priorities are fully linked to the main EU policies dealing with 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. The EU Agenda on Migration, the European Agenda for the collaborative economy, the EU Global Strategy and the Social Package are also particularly relevant for this SC6 work programme. In addition, the three 'Os' (Open Innovation, Open Science and the Open to the World) of Commissioner Moedas apply across all priorities.

This scoping paper largely draws on five sources. First, it takes into account the report of the Expert Advisory Group for SC6. This group (28 representatives of academia, research institutions, public authorities, NGOs, industry and business) met three times and identified three 'big tickets': Migration, Human and social dynamics of the 4th industrial revolution, and Governance for the Future. Second, it builds on stakeholder inputs collected at twenty public events (around 3,000 actors) where the questions of Trust, Migration and Social inclusion were raised[1]. Third, the scoping paper incorporates the policy issues highlighted by Member States and Associated Countries, i.e. Migration; Trust in global and EU governance; Inclusive growth, collaborative economy and social innovation; Cultural (digital) heritage; and Social impact of technology. Fourth, the paper takes stock of foresight studies, policy reviews and analysis of the coverage of the previous work programmes of SC6. This gap analysis showed that more R&I was needed in the field of Migration, mobility and integration; Demographic changes, global population increase and unemployment; Role of the arts and media; and Identities and values. Fifth, the scoping paper takes into account the results of a call for ideas with a thousand responses from entrepreneurs, researchers and others on a potential European Innovation Council (EIC), highlighting for instance the need for more demonstration and social innovation.

This scoping paper therefore presents three main priorities having a clear EU added value:
- **Migration and the refugee crisis**
- **Cultural and technological transformations for human and social progress**
- **Governance for the future**

These priorities take into account five cross-cutting issues: sustainable development, integration of digitisation, international cooperation, gender, and ethics and values.

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[1] EC, Reports of the international conference 'Understanding and Tackling the Migration Challenge – The Role of Research', 4-5/2/2016 and 'Research on Migration – Facing Realities and Maximising opportunities', 2016.

The proposed R&I activities for 2018-20 complement and transcend as needed the previous lines of R&I actions under SC6. The 2014-15 and 2016-17 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).

2. Strategic orientations

Migration and the refugee crisis are key challenges for Europe. This call is focusing on migration of non-EU nationals although research on intra-European mobility may also be included. R&I need to enhance our understanding of contemporary societal dynamics related to migration and contribute to finding concrete and durable solutions. A solid evidence base must combine research on the root causes of migration and potential projections of future migration flows and displacements (cf. historical analysis and scenarios development), propose innovative solutions to improve the labour market and cultural integration of non-EU migrants in the destination countries, particularly in cities, and suggest interventions for influencing the migration-development nexus where international collaboration has an important role to play (cf. routes followed, countries of origin and transit). It should include innovative services making the best use of ICT to third-country communities across Europe and improve integration service (cf. public participatory governance). R&I must address ways to understand the implications and monitor the reality of the 'new geographies' and 'new temporalities' of migrations. Contextualised approaches are required to anticipate and interpret migration flows and to analyse perceptions of migration in media discourse and public reactions. This action will deal with EU citizens' and migrants' perceptions of 'otherness' and with inter-connected cultural, religious and socio-economic influences, divides and interdependencies. Research should also focus on the inter-relations between drivers, e.g. conflicts and geopolitical shocks within and outside the EU (cf. EU neighbourhood), hybrid warfare, poverty and socio-economic impact, climate change and environmental degradation and their implications on the EU. Migration, including the refugee crisis, is being explored for becoming a Focus Area possibly supported by SC2, SC5 and SC7.

Cultural and technological transformations for human and social progress are largely coming from the so-called 'fourth industrial revolution', globalization and digitization. This call mostly deals with *Values, identity and belonging* and the *Human-technology interface*. Cultural diversity and complexity have increased and accelerated in Europe in recent times. Established, traditional cultural concepts and orientation systems at European and national levels are challenged by demographic and societal changes, evolving ways of acquiring of and interacting with culture and by populist narratives over cultural openness and intercultural dialogue. Culture is one of Europe's greatest strengths. It is a source of identity, it gives the continent a sense of belonging, it anchors our societies into their past and allows them to project themselves into a peaceful and sustainable future as communities working together towards value-based objectives (cf. 2018 as the European Year of Cultural Heritage). Culture also contributes to well-being, social cohesion and inclusion. Being the cement of our society in a globalized world, culture (and creative industries) is also driver of economic growth, job creation and external trade. The technological revolution (cf. Internet of things, robotisation, 3D printing) is blurring the lines between physical and digital spheres with its legal, ethical and socio-economic consequences. It impacts modern living, influences human and social behaviour, re-organises the workplace, has consequences on public services and civic

engagement, and changes the ways in which we produce and consume. R&I should monitor, analyse and forecast this new form of human-technology nexus especially dealing with the complex innovation dynamics – including social and cultural innovation - helping to create prosperous, inclusive, stable and resilient economies and societies. The use of emerging technologies is also transforming the public sector (e.g. its role and functioning) and civic engagement. The combination of new and creative forces would give strength to European soft power and cultural diplomacy.

The governance for the future, the 'de-legitimacy' of traditional institutions, the rise of non-state actors and mistrust in the system' are key issues that will have to be addressed by researchers and decision-makers. The evolving meaning of European values, reflected in EU symbols and traditions, the notions of Europeanness (inside the EU and in the EU vicinity) as well as in how EU citizens interpret, endorse or practise them (or not), needs to be better understood, with special attention paid to the young generation. Conceptualisations of governance, at all level, from local to European governance (including macro-regional within the EU; economic and fiscal governance, cf. Five Presidents' Report, European Semester), of democracy, the rule of law and inclusive participation, of justice and fairness, of EU citizenship and identity as well as respect of fundamental rights are central to the European project. They are however challenged by rising inequalities, polarisation, nationalisms, populisms and extremisms in Europe and across the world. The challenge of globalisation and of the digital era is shared by all actors (public and private sectors, civil society, non-governmental, social economy actors and academia). The pervasive use of digital technologies is also impacting governance. Opening up public organisations through open data and processes increases transparency, accountability and trust and supports new forms of public involvement and collaboration with other actors to create public value. Research on the role of Europe in a multi-level governance environment increasingly involves international cooperation and has to be seen in combination with the Sustainable Development Goals. Research should study political parties (including at EU level), civil society, administrative structures as well as the formation and evolution of elites.

To support the 'Open to the World' policy and the strategic development of international cooperation in R&I, the Commission will need services such as studies, networking and secretarial support. Also, to realise the international dimension of 'Open Innovation', we need to provide further support to European researchers and entrepreneurs to engage globally, building on the European R&I Centres created in third countries in 2016, as well as to promote the uptake of innovation into the economies of both developing and developed countries via new forms of partnering, especially between SMEs.

2.1 Migration and the refugee crisis

Geopolitical projections, root causes and development: Research should identify long-term migration scenarios under social, economic, cultural, demographic, geopolitical and climate change patterns, and include analysis and design of sustainable adaptation strategies and solutions that can increase the resilience of vulnerable populations and ecosystems, including data and studies on trapped population. Research should include analysis of migrants' expectations vis-à-vis transitional justice process, contribution to social and economic reconstruction, and decision to return in their countries of origin. Voluntary or forcible return of migrants, brain drain versus brain circulation and brain gain, irregular migration trajectories as well as trafficking are also important aspects. The types of exploitation, the pressure put on migrants by the sending communities and the particular vulnerability of migrating women and minors have to be better studied. The New Migration Partnership

Framework for reinforced cooperation with third countries highlights the need for the EU to increase its efforts to address the root causes of irregular migration. Taking stock of past experiences, research should enable the EU to move from migration/refugee crisis management to devise evidence-based long-term policy responses to large scale population movements to and in Europe, its neighbourhood and beyond. Collaborations with researchers from third countries will be an integral part of these research initiatives.

Labour market integration, education and skills: The impact of non-EU migration on diverse sectors of society in countries of destination, including the labour market, is an important line of research. This also relates to aspects such as education, languages, skills and the social welfare system. There is a strong need for data on the profile, integration and education as well as labour market and social outcomes of the recent arrivals. More insight and historical perspective is needed into the contribution of migration to tackle the bottleneck of EU ageing population, into the indirect effects of large scale migration on local service provision, on workplace conditions, productivity and innovation, on social protection systems, on trust and social cohesion, on unemployment, and on the professional and educational choices of the migrant and non-immigrant population. The views and attitudes of the citizens of European destination countries towards refugees and migrants as well as the spatial dimension (urban/rural) will also be taken into consideration. More comparative research with a global perspective is required on the capacities of EU countries to attract and employ highly, medium and low skilled migrants as well as on the various qualification recognition practices across EU countries. The relation between migration and demographic changes, between migration and socio-economic changes (cf. economic crisis) both in origin and destination societies, also needs to be assessed as well as the potential of migrants as entrepreneurs.

Cultural integration and local cross-fertilization: With the majority of migrants taking residence in urban settings, migration is transforming European cities, suburbs and rural areas (cf. high-density migrant-inhabited areas). This transformation touches on multiple aspects such as lifestyles, culture and art, identity, religion, cultural memory, diversity, intercultural and multilingual communication, demographic changes, health and education. To ensure that societies are inclusive and reflective in managing cultural and religious differences, better strategies are needed to foster the integration of migrants into local communities, socio-economic and educational systems also with the support of volunteers, civil society and the private sector. Special attention should be paid to past, existing and potential mechanisms to support the integration of children, youth and women, entrepreneurship, social innovation, gender equality, diasporas, the interplay between host communities and newcomers, and the urban/rural dimension. Processes of exclusion, 'othering' and ghettoization should be studied. Requirements for social, cultural and linguistic integration of migrants in EU societies are important subjects to be analysed from a comparative, cross-national, historical, cultural, educational, social and economic perspective. The mutual influence between host and migrant communities (cf. cross-fertilisation) is also important. Research should demonstrate the role of culture for living together and how cultural identity can contribute to the wellbeing and the quality of life of a community, including recovery from conflict. Research shall also address the role of social remittances, diasporas, determinants and impacts of return migration linked to temporary and circular migration schemes.

Asylum and international protection: Research will contribute to a better understanding of the drivers of policy-making and EU cooperation on the Common European Asylum System, agreement on sharing the number of asylum seekers, solidarity mechanisms, and participation in the Schengen Agreement, through economic, social, historical and legal analysis of European asylum systems, including development of rules and actual practices. A central

question is what the appropriate degree of harmonisation, both normative and institutional should be. Drawing lessons from the last few decades, theories of forced displacement should be developed to produce models, indicators and scenario-mapping including the possibilities of governance structure for dealing with international protection in a global context. Attention should also be devoted to researching which structures and financial arrangements would enable the EU to increase, improve and better coordinate its internal refugee reception capacities and thus alleviate the global refugee crisis. In order to get robust, financially viable and innovative solutions in this area, research needs to describe and analyse the obstacles limiting the EU's reception capacities. Research should focus on how to address the challenges arising at the origin and on the refugee transit paths, whether in Europe, in origin or in transit countries (cf. Libya, Western Balkan countries, Lebanon, Jordan, Turkey and Iran) through carefully targeted interventions at each stage. Research should identify best administrative arrangement practices, especially in relation to unaccompanied minors. It should also highlight ways to create positive outcomes for immigrant individuals and groups as well as securing a local benefit of placement.

Management of migration challenge through innovation-enabled solutions: Migration management is the priority of the EU and innovative solutions can support the anticipation of migration flows and the fight against criminal organisations profiting from people movements. Social innovation and digital solutions can facilitate immigrants' participation in decision-making processes and promote public participatory governance. This may include multi-language civic education, distance learning and educational solutions in precarious conditions. ICT-enabled public sector innovation, the re-use of open services including eID, behavioural approaches and design thinking can foster the creation of specific services, delivering easy to use, life-event based, personalised and even automated services. The role of innovation in public participatory governance, as deployed by the public sector itself or by other actors (e.g. civil society, social movements) can support the integration of migrants by facilitating interaction amongst themselves, with public authorities and among service providers in digital ecosystems and networks. Better knowledge on housing location and social capital at local level can also contribute to a successful integration of refugees.

Narratives on migration in the media and in the public discourse: Recent migration phenomena and their portrayal in media, political and public discourses have had an enormous impact on which policy responses to managing migration and the refugee crisis are considered reasonable and viable. The dynamics of pro and anti-migration opinions should be studied to understand the factors influencing how immigration and integration issues are framed in political debate, at EU and national level (cf. scaremongering, instrumentalisation of cultural stereotypes), and how migration is represented by media, in social networks and in public opinion drawing lessons from the past. Exploring differences between historical experiences, cultural, religious and political heritage of EU and EU's broader neighbourhood is particularly important. Historical research helps contextualise the current crisis by highlighting continuity and differences with previous waves of migration, many of which include intra-EU flows and movements. A socio-cultural analysis of the evolution of the framing, representations of and narratives on migration in the various EU societies is also required. This includes why and how cultural influences from outside (and sometimes within) Europe have historically been framed, transformed, rejected or taken up by European societies. Attitudes and changes in attitudes of non-migrant population towards migrants and vice-versa should also be studied. Public access to accurate and factual information should ensure that the discourse surrounding migration is based on facts. Research should also test innovative solutions for ensuring that the public is well informed about the real benefits and challenges of migration.

2.2. Cultural and technological transformations for human and social progress

The societal value of culture: There is a tension on the value of culture, on the relations between culture and economics, and on the different trade-offs. In the aftermath of the financial crisis, culture plays an increasingly important role in terms of economic impact, i.e. value added job creation, business innovation and international trade, but also in terms of societal value. More research is needed on innovative ways to invigorate the production and dissemination of culture for both economic value and societal benefits. Research shall investigate the ways in which national and European policies can enhance their engagement with culture as central to social life itself, as a framework for the production of meaning, social cohesion and participatory engagement in the public sphere. New approaches to the societal value of culture - including creative arts, performing and visual arts - shall investigate how culture operates as a source of cultural identity, bonding and strengthening of communities. Research shall elucidate the role of cultural participation as possible source of wellbeing in mental and physical health as well as offering intrinsic values to audiences. Research is needed to explore how to embed culture within the efforts for reconnecting citizens with the European project as well as how to promote culture globally, i.e. in the area of the EU foreign relations and policy. Innovative ways to use culture as a source of growth and jobs should also be explored.

Symbols and cultural heritage: Analysis is needed on how cultural and historical symbols (cf. 'European Cultural Commons') are understood, acknowledged, interpreted and appropriated by EU citizens and residents. The media as well as formal, semi-formal and informal education impact lifestyles and the nature of cultural expressions. The interpretation and spread of cultural symbols as well as their role in identity construction need to be studied. New affordable and efficient digital services must be made available in order to deepen the understanding of cultural expressions, to support the innovative approaches that will generate new knowledge, to create added value for society from cultural heritage (CH) and to respond to the need to communicate European culture in a multi-cultural society. Such services will facilitate the analysis and interpretation of cultural resources, including digital ones, improve the accessibility of reference collections and support the integration of CH information from different locations. They will connect people to heritage, foster exchanges and cooperation among cultural institutions, academia, individuals and communities from different sectors (e.g. tourism, gastronomy) stimulating their creativity by developing and improving methods for active innovation. These concepts could be supported by the curation of digital assets and enhanced access to CH, collaborative approaches to CH for social cohesion, advanced digitisation, 'from digital to real'. In particular, issues related to the conservation, restoration and transmission of CH in an environment characterized by increased digitization, would be studied, analysed and prospected. Copyright of digital cultural contents, their public distribution and portability are crucial aspects of an EU-wide Digital Single Market.

Identities, radical ideologies, belonging and social inclusion: Recent ideology-based movements in present a stark and serious challenge to the Europe's stability, security, social cohesion and democracy. They are prone to generate urban risks and crime. Research is needed in terms of ideological content (e.g. political, religious) and on how it is communicated as well as on the impact it has on identity, personal belonging and social inclusion. The physical and online contexts where young and disenfranchised people searching for an identity are exposed to violent ideologies deserve special scrutiny as well as the role of religion. Video-sharing platforms have a role to play regarding prohibition of hate speech and protection of minors against harmful content. Research should explore beliefs and

narratives that may shape perceptions, increase polarisation of society, and underpin and perpetuate radical ideologies[2]. Counter-narratives to radical ideologies should be proposed. Potential uses of big data to address this issue should also be considered. Social inclusion, marginalization and criminality, in particular in the context of cities, should be addressed. More empirical and interdisciplinary research, both on Europe and in other countries (cf. EU broader neighbourhood and Balkans), is needed to understand the historical, geopolitical, social, religious, psychological, demographic, gender and cultural dimensions of social polarisation and violent extremism that erode social cohesion.

Creativity, creative industries and cultural diversity: The development of social media, cultural and creative industries such as arts, publishing, design, media, libraries, traditions and folklore, craft and architecture are at the heart of a vibrant economy and may serve the purpose of revitalising the EU regions (cf. 'creative clusters'). Research should investigate how cultures are shared among different populations, why some groups are more culturally active than others, and how cultural knowledge circulates across social groups and territories. These issues deeply affect our democratic societies (cf. populist movements that use identity and values as exclusionary definitions). Education and culture are major public policies for social, cultural and political cohesion while cultural diversity has a strategic importance for creativity and innovation. Research should propose innovative ways for education, cultural policies and institutions to foster social cohesion and inclusion. Research should also improve cultural statistics in order to gain more fact-based insight on how cultural values are constructed and upheld in the age of social media, internet and television and to assess how factors such as urbanization, spatial and social segregation, gender and the increase of social diversity in European societies influence cultural values.

Productivity, growth, jobs and European social welfare: Technological evolutions have a significant impact on productivity and on the welfare state. They transform the ways in which we produce and consume while also generating productivity gains and the subsequent need for high skills. Several emerging technologies (e.g. blockchain, semantic web) are likely to have significant impacts on the way governments will be organised, operated and perceived. The processes of social learning, imitation and diffusion (in different contexts and regions) should be better understood and creative spaces should be developed to shape the innovative capacities of societies. Technological evolutions also raise regulatory challenges (e.g. safety/liability issues in relation to the Internet of Things). The availability of open and big data, in particular facilitated by high-performance computing capabilities can support policy making, implementation and enforcement through analytical tools. R&I actions should address the use of big data and questions of individual rights and privacy. The possible consequences of emerging technologies need to be examined, from a socio-economic, cultural and cognitive prism (e.g. psychological consequences of the changing relationship between humans and technologies) as well as from a new path of growth and employment such as freelancing and self-employment. While opening a range of new opportunities, these evolutions also carry the danger of increasing inequalities and of job polarisation. Empowerment of women in the workplace, new forms of training and public administration structures, youth employment and lifelong learning are key issues in the labour market for the future. To ensure the functioning of the social market economy, research should propose adaptation in taxation systems, social investments, education and social protection as well as fair and sustainable ways of distributing resources in a digitized world. The role of civil

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[2] As argued in the European Commission policy review 'Addressing Terrorism: European Research in social sciences and the humanities in support to policies for inclusion and security', 2016.

society and of public-private partnerships in creating more inclusive labour markets should also be studied.

Innovative cities, social innovation and the collaborative economy: Cities are home to innovation culture and at the heart of EU policies, as clearly marked by the 'Urban Agenda' and the Pact of Amsterdam. The EU is increasingly acknowledging the cities' role in driving new forms of innovation, including social innovation, and is supporting cities' examples and policy models based on co-creation across all stages from ideas to implementing passing by planning, piloting and developing. The European Capital of Innovation award supports cities' capacity to attract talent, skills and businesses by enhancing citizens' engagement. The challenge for the future is to explore effective ways to streamline urban-related activities and maximise their impact, while enhancing a bottom-up approach and inclusive innovation. New solutions are needed for the 'collaborative economy' and its organisation dealing with new business models (in both the profit and non-profit sectors), services, access vs. ownership, crowd-funding and crowdsourcing, including the more intense use of arts, design, culture and tourism. These solutions should ensure citizen participation, employment opportunities and wider societal dividends. The untapped potential of big data to improve policy-making is a clear example. A more effective use of data would enable cities to improve the real-time monitoring of their territories, thus driving better performance and making better policy, funding choices and sustainable and inclusive cities. Similarly, supporting innovative public procurement for cities would stimulate fit-for-purpose solutions tackling societal challenges as well as contribute to achieving the Sustainable Development Goals.

Bottom up, participatory and open innovation: The EU approach to economic development and growth lays considerable stress on the open and inclusive aspect of development, be it related to consumers, small and/or social entrepreneurs and creative firms/start-ups and scale ups, or civil society organisations and citizens at large, thus effectively allowing all stakeholders to play an active, participatory and productive role in the new economy, common good and welfare. This is a question of legitimacy and political acceptability, of the desire to integrate and tap into a wide variety of existing talents in society that would otherwise not be mobilised. This process carries with it a wide variety of bottom up notions of innovation, such as social innovation, frugal innovation, open innovation, public sector innovation and open science, social economy and social entrepreneurship. Simultaneously, the protection of intellectual property rights must ensure sufficient incentives for inventors and innovators to carry through their innovative activities. To ensure an optimal level of cultural and digital literacy, it is important to avoid large differences between regions or groups in society. This requires also methods to improve innovation in communication and exchange. Evidence-based research on the impact of participatory approaches in cultural heritage policies and governance may provide valuable examples of innovations. The linkage between resilience and social innovation should also be considered.

2.3 Governance for the future

Trust, justice and fairness: Trust and the trustworthiness of governance have been challenged in the wake of recent debates on migration, radicalisation, austerity, corruption and geopolitical stances. The crises have augmented the need for reappraising and adjusting our conceptualisation of justice and fairness and the way they are linked to the legitimacy of institutions. Research is needed to examine how these notions depend on deep-rooted assumptions as well as on the symbolic and normative elements that underlie our identity as (European) citizens. Concrete proposals should be made on how the EU can address more effectively priorities that are aligned with the main concerns of citizens with a view to

enhancing active, engaged and critical resilient citizenship. A focus should be on the rule of law and fundamental rights including gender based violence. Research should explore how much differentiation and flexibility European integration can bear and specify the non-negotiable constitutional core, including values, identities and cultural signifiers. Different trust relations ought to be analysed *inter alia* with a view on how these affect policy formulation and implementation. This should include comparative research on global legal systems and on decision-making frameworks.

Future democracy, governance and institutions: Suitable democratic and open governance structures in Europe are needed to deliver swiftly policy responses to meet both the values of the citizens and acknowledging the role of political and financial institutions and a digitalised public sector. These governance structures will need to be more receptive to and accommodating of the diverse needs, aspirations and expectations of actors such as NGOs, civil society and young people. The 'net generation' people are already enabled by digital technology in their private and working life and are starting to demand that their relations with the public sector should take place on the same basis. Minority groups and others without the same computer literacy should be encouraged to make their voices heard in a social and political context, and governance arrangements should reflect this to stimulate a broad public engagement. This is important in the wake of the crises and in the context of new elite formation, role of business and how to influence public authorities. The significance of the rise of populist parties and movements needs to be studied especially regarding its consequences for the European project. Another question is how democratic governance can better cope with long-term challenges, also in a global perspective. Forward-looking options for EU contribution and support to the global governance architecture including its role in international organisations (e.g. UN, NATO, WTO) and for achieving the Sustainable Development Goals should be examined.

The social dimension of the Euro and the EU citizenship: The prime objective of the European Monetary Union (EMU) is to create conditions for stronger growth, for more and better jobs and for higher living standards. At the same time, increased economic, financial and banking coordination and risk-sharing among Member States is aimed at making the EU and the Eurozone more resilient towards socio-economic shocks and imbalances. Research is needed on ways to strengthen the social dimension of the currency union which could help reduce the risk of asymmetric shocks, lead to an upward convergence in social and employment outcomes and, by extension, strengthen the political legitimacy of the Euro and EU citizenship. Innovative solutions are needed for boosting citizens' resilience and for promoting economic and political literacy. Common benchmarks and standards in fiscal policy, unemployment insurance benefits and social protection would support mobility, strengthen human capital formation and tackle socio-economic disparities and inequalities that sap the foundations of inclusive growth. These policies need to be devised through participatory democratic procedures so that they are widely accepted by citizens. Research is needed to analyse the mechanisms and policy initiatives that, combined with robust and up-to-date socioeconomic data, would deliver on these objectives and assist in contextualising appropriate responses.

Conflicts, global justice and stability: Whilst there are currently 40 active armed conflicts in the world claiming 170.000 lives every year, the EU can look back to 70 years of lasting peace. This testifies to the success of the raison d'être of European integration. At the same time, the EU strives to be open to the world, which renders perceptions on its role as a key global actor, both inside and outside of Europe, pivotal for developing new approaches to conflict resolution, prevention and mediation, especially in the EU neighbourhood. Activities

supporting interactions between the EU and countries which have undergone transformations (e.g. Iran, Syria, Northern Africa) are needed to set the basis for a better mutual understanding and future cooperation. These perspectives require consideration of the EU's external relations in its widest scope, e.g. through potential new competencies in the Treaties or policy-specific clauses enabling the EU to engage in external actions. Thus, whilst the Common Foreign and Security Policy (CFSP) including the Common Security and Defence Policy (CSDP), enlargement and trade remain central to the EU's external actions, policies such as research, culture, justice and home affairs, environment, energy and economic affairs, have also been developing external actions. All these domains have a role to play in conflict prevention, global justice and stability. The EU's Global Strategy underscores that these domains need to be accommodated in a joint-up external action. Research is needed to help understand and inform which governance structures are best suited to facilitate this joining up of a holistic EU diplomacy, including science and cultural diplomacy, which is both open to the world and firm in the pursuit of its values and interests.

Open, globally networked and more inclusive science system: Open Science describes the on-going transitions in the way research is performed, researchers collaborate, knowledge is shared and science is organised. It is enabled by digital technologies. The key drivers are the exponential growth of data, the globalisation and enlargement of the scientific community including new actors beyond academics (e.g. industry, citizens) and the need to address global societal challenges. Open Science should lead to more transparency, inclusiveness and globally networked collaboration. Key questions on the governance of science at the global level are how to incentivise open, globally networked research and researchers to share knowledge and data at an early stage of the research process. This knowledge should be shared beyond disciplines, international borders and the research system itself. A competitive labour market for researchers is also a key requirement in strengthening of Europe's R&I capacities. However, the European labour market is fragmented and researchers still face many obstacles in moving between different countries and changing jobs. R&I actions are needed to remove obstacles to researchers' mobility and to improve labour market matching. Special attention should be given to pan-European structures capable of bridging the gaps in the EU labour market and particularly in the European Research Area while reducing inequalities and ensuring social justice.