



**HORIZON 2020
WORKING PROGRAMME
2016-2017
TOPICS TARGETING CHINA**



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-44-2016 Joint plant breeding programme to decrease dependency of the EU and China on protein imports

Scope: Develop efficient long-term breeding strategies to **improve diversification, crop productivity and stability**. It is expected that activities will broaden the genetic base of legume crops for breeding purposes. Cooperation between EU and China will be focused in the **mutual access to gene bank to through open databases** and also in the testing plant performance of a wide range of legume species and varieties in different geographic and environmental situations in both regions. Proposal will make use of a **wide range of breeding tools and methods** available in the EU and China



Research and Innovation Actions
Budget: €5,000,000

Open
Deadline date: 2016-03-17
Stage 2: 2017-09-13



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-44-2016 Joint plant breeding programme to decrease dependency of the EU and China on protein imports

Expected impact:

- Reduce overall long-term dependence of European and Chinese agricultural systems on protein imports
- Enlarged range of genetic resources of legume crops available for use in breeding programmes
- Enhanced common methods, tools and technologies for the characterisation and evaluation of new genetic resources
- Improve mutual access to genetic resources;
- New varieties adapted to local conditions in order to increase the overall productivity and quality of legume crops that should benefit both conventional and organic agriculture; and
- New varieties adapted to biotic and abiotic stresses in the context of climate change.





Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-45-2016 Increase overall transparency of processed agri-food products

Scope: To contribute to the **development of food-safety management systems for processed agri-food products**, enhancing aspects as **traceability and transparency** of the food chain. Proposals should develop specific models, tools, technologies and testing methods based on risk analysis to be implemented eventually by agri-food manufacturers and agri-food operators in Europe and China, complemented with good-practice guides. It is expected that proposals will produce feasibility studies for a **sustainable EU-China joint laboratory**. Proposals will be mainly focused in production sectors with a greatest impact in terms both of potential risks and commercial value (wines and spirits, dairy products, processed meat and fruit and vegetables)



Research and Innovation Actions
Budget: €128,000,000

Open
Deadline date: 2016-02-17
Stage 2: 2016-09-13



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-45-2016 Increase overall transparency of processed agri-food products

Expected impact:

- Contribute to the development of a common EU-China vision of global food safety issues that will increase trade and improve trade predictability in key production areas;
- Increase consumer confidence in processed agri-food products traded between the EU and China and in domestic markets;
- Improve the transparency of the food chain and manufacturers' sense of responsibility, in particular as regards processed agri-food products
- Reduce human health risks linked to food processing and packaging;
- Improve traceability tools along the food and feed chains; and
- Increase EU-China cooperation at technical and scientific levels.





Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-46-2017 Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health

Scope: The proposed research activities should assess the **links between livestock welfare and health**, the underlying factors, the related use of anti-microbial drugs and the subsequent presence of residues in products and their spread into the environment. They should in particular address **immunity and health, biosecurity measures and residue detection**. The proposed activities should, where possible, measure the potential impact of the proposed measures, including the socio-economic aspects and the scope for establishing schemes (standard-setting, management, policy, monitoring and verification components).



Research and Innovation Actions
Budget: €5,000,000

Planned opening: 2016-10-04
Deadline date: 2017-02-14
Stage 2: 2017-09-13



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-46-2017 Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health

Expected impact:

- Welfare-friendly production systems (housing, equipment, technology) to improve farm animal immunity, health and welfare effectively;
- Reduced veterinary drug use at farm level and reduced residue in animal products in order to improve food safety;
- Improved biosecurity at farm level; and
- Contribution to the development of common legislation and standard-setting in the EU and China.





Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-47-2017 Management of soil water resources in the EU and China and its impact on agro-ecosystem functions

Scope: Proposals will provide a **platform for research on soil-water resources management** based on a system approach by considering a number of regional climate scenarios in Europe and China. Linkages between agricultural soil hydrology and threats will have to be systematically assessed and adaptation and mitigation methods provided, taking into account land-use dynamics, economic context and social aspects of soil water management. Proposals will **develop and test good practices for sustainable on-farm water management and watershed practices adapted to local conditions.**



Research and Innovation Actions
Budget: €5,000,000

Planned opening: 2016-10-04
Deadline date: 2017-02-14
Stage 2: 2017-09-13



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-46-2017 Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health

Expected impact:

- Improved soil and water-use efficiency in agricultural production;
- Identification of tools, mainly at farm level, to improve soils' water-holding capacities and plant productivity in the presence of drought or flood risks. To be effective, the practices need to be conducted at farm level and then upscaled regionally;
- Identification of new and advanced sustainable technologies for soil-water management that will efficiently reduce crop-yield variability and the impact of extreme weather events on crops; and
- Evaluation and study of water balances at watershed level and evaluation of crops' real 'water footprint'.





Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-48-2017 Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership

Scope: Development of innovative **integrated urban farming systems** that use resources more efficiently and re-use of recycle heat, water, CO₂, waste or by-products from urban resources for horticultural production. Activities should showcase several **resource-efficient production systems in open or controlled environments**, thereby providing a demonstration for the production of safe and high-quality products in different urban spaces

The work should be **carried out at least in one European city and in one Chinese city**. Proposals should fall under the concept of the 'multi-actor approach' targeting all relevant actors, such as researchers, public authorities and private actors, and promote the engagement of urban communities.



Innovation Actions
Budget: €7,000,000

Planned opening: 2016-10-04
Deadline date: 2017-02-14



Call: SUSTAINABLE FOOD SECURITY – RESILIENT AND RESOURCE-EFFICIENT VALUE CHAINS

Topic: SFS-48-2017 Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership

Expected impact:

- The creation of shorter supply chains for safe, high-quality food and other horticultural products that reduce European and Chinese cities' ecological footprint by limiting losses and energy in transport and contribute to their food security;
- Resource-efficient low-carbon urban farming systems that:
 - Consume low amounts of water, energy, fertilisers, pesticides and space;
 - Use waste heat, CO₂, waste and rain water and other waste or by-products from urban source, contributing to the development of the circular economy;
 - Minimise environmental impacts;
- Improved knowledge of various business models for urban farming, including a thorough understanding of their potential for development, performance and impact on urban food systems in economic, environmental and social terms, and success factors or reasons for failures; and
- Increased cooperation at international level, in particular involving exchanges of knowledge and best practices between the EU and China.





Call: SMART AND SUSTAINABLE CITIES

Topic: SCC-02a-2016-2017 Demonstrating innovative nature-based solutions for climate and water resilience in cities

Scope: Projects should adopt a **'front-runner' and 'follower' cities approach to facilitate the rapid exploitation, replication and up-scaling of the solutions** and via large-scale demonstrations. Each project shall involve **at least 2 'front runner' cities and 3 'follower' cities from different Member States and/or Associated Countries**. International cooperation is encouraged (i.e. the EU-China Sustainable Urbanisation Partnership and the EU-China Innovation Dialogue).

Actions should aim to **improve urban resilience to climate change and enhance water resources management sustainability**. Trans-disciplinary and community-based approaches including social sciences and humanities in the co-designing, co-development and co-implementation of the solutions is considered necessary.

Innovation Actions

Budget: €40,000,000



Open

Deadline date: 2016-03-08

Stage 2: 2016-09-06



Call: SMART AND SUSTAINABLE CITIES

Topic: SCC-02a-2016-2017 Demonstrating innovative nature-based solutions for climate and water resilience in cities

Expected impact:

- The creation of an European reference framework and the establishment of EU leadership in a new global market
- Increased awareness of the benefits of re-naturing cities
- Enhanced stakeholder and citizen ownership of the solutions through their effective and systematic involvement in urban planning
- Increased international cooperation and global market opportunities through replication of approaches and solutions in non-EU countries, including in the context of the EU-China platform;
- Enhanced implementation of EU environmental policies
- Creating by 2020 healthier and greener European cities, with increased resilience to climate change and water-related challenges thanks to the implementation of nature-based solutions.





Call: SMART AND SUSTAINABLE CITIES

Topic: SCC-02b-2016-2017 Nature-based solutions for inclusive urban regeneration

Scope: Projects should adopt a **'front-runner' and 'follower' cities approach to facilitate the rapid exploitation, replication and up-scaling of the solutions and via large-scale demonstrations.** Each project shall involve at least **2 'front runner' cities and 3 'follower' cities from different Member States and/or Associated Countries.** International cooperation is encouraged (i.e. the EU-China Sustainable Urbanisation Partnership and the EU-China Innovation Dialogue).

Actions should address nature-based solutions for inclusive urban regeneration. They should also test to what **extent nature-based solutions can reduce crime and security cost and enhance wellbeing.** The participation of trans-disciplinary and multi-stakeholder design is encouraged (enhance social sciences and humanities together with architecture and others).

Innovation Actions
Budget: €40,000,000



Open

Deadline date: 2016-03-08

Stage 2: 2016-09-06



Call: SMART AND SUSTAINABLE CITIES

Topic: SCC-02b-2016-2017 Nature-based solutions for inclusive urban regeneration

Expected impact:

- The creation of an European reference framework and the establishment of EU leadership in a new global market
- Increased awareness of the benefits of re-naturing cities
- Enhanced stakeholder and citizen ownership of the solutions through their effective and systematic involvement in urban planning
- Increased international cooperation and global market opportunities through replication of approaches and solutions in non-EU countries, including in the context of the EU-China platform;
- Enhanced implementation of EU environmental policies
- Creating by 2020 healthier, culturally diverse and greener regenerated European cities, with better living conditions for all.





Call: ENGAGING TOGETHER GLOBALLY

Topic: ENG-GLOBALLY-08a-2016/2017 Cultural and socio-economic aspects of urban issues in China (Research and Innovation Action)

Scope: Proposals shall face the exceptionally rapid urban growth in China and the considerable **challenges to policy-makers and city planners.** Joint European-Chinese research will take into consideration the **essential elements of city development** (infrastructures, taxation, health...) to improve reciprocal knowledge on urbanisation processes between the EU and China. Though the joint format research will benefit from the access to data and expertise from both sides, with a view to **proposing new models of sustainable urban development adapted to local socio-economic, cultural and political specificities.** (The work carried out by the Joint Programming Initiative Urban Europe (JPI UE) and by the Strategic Forum for International Science and Technology Cooperation (SFIC) should be taken into account when relevant).



Research and Innovation Action
Budget: €1,500,000

Planned opening: 2016-10-04
Deadline date: 2017-02-02



Call: ENGAGING TOGETHER GLOBALLY

Topic: ENG-GLOBALLY-08a-2016/2017 Cultural and socio-economic aspects of urban issues in China (Research and Innovation Action)

Expected impact:

- Provide in-depth insights on EU-China cultural and socio-economic aspects on urbanisation highlighting the common challenges and possible solutions that may apply in both EU and China.
- Specific impacts are expected in the field of city planning, policy making, regulatory regime, governance and public services.
- The Coordination action is expected to increase stakeholder awareness, exchanges and synergies between Chinese and European industrial, academic and public players engaged in sustainable urbanisation research, innovation and application.
- Improved complementarity and coordination between different sustainable urbanisation funding programmes supported by the EU, the EU Member States and China should be achieved.
- The CSA should ensure a better match between the supply of innovative technological solutions and the needs of city planners and managers in charge of organising services linked to sustainable urbanisation.
- It is also expected to increase the capacity of industrial actors to develop and provide more effective solutions for the needs of sustainable urbanisation, and of city planners and managers to make informed choices on innovative technologies.





Call: ENGAGING TOGETHER GLOBALLY

Topic: ENG-GLOBALLY-08b-2016/2017 EU-China innovation platform on sustainable urbanisation

Scope: Proposals shall establish a **platform bringing together policy makers, national authorities, industry, academia and other stakeholders in EU and China in sectors important for sustainable urbanisation**. It should mobilise key urbanisation related initiatives such as the European Innovation Partnership on Smart Cities and Communities and the Joint Programming Initiative on Urban Europe. Proposals shall develop, as core element, a **joint EU-China strategic R&I agenda on sustainable urbanisation**, in consultation with relevant stakeholders. The platform should promote linkages between **sustainable urbanisation demonstration projects in European and Chinese cities**, including by running a competition that will lead to the selection of a small number of demonstration sites in China and in Europe.



Coordination and support Action
Budget: €1,500,000

Planned opening: 2015-12-08
Deadline date: 2016-04-14



Call: ENGAGING TOGETHER GLOBALLY

Topic: ENG-GLOBALLY-08b-2016/2017 EU-China innovation platform on sustainable urbanisation

Expected impact:

- Provide in-depth insights on EU-China cultural and socio-economic aspects on urbanisation highlighting the common challenges and possible solutions that may apply in both EU and China.
- Specific impacts are expected in the field of city planning, policy making, regulatory regime, governance and public services.
- The Coordination action is expected to increase stakeholder awareness, exchanges and synergies between Chinese and European industrial, academic and public players engaged in sustainable urbanisation research, innovation and application.
- Improved complementarity and coordination between different sustainable urbanisation funding programmes supported by the EU, the EU Member States and China should be achieved.
- The CSA should ensure a better match between the supply of innovative technological solutions and the needs of city planners and managers in charge of organising services linked to sustainable urbanisation.
- It is also expected to increase the capacity of industrial actors to develop and provide more effective solutions for the needs of sustainable urbanisation, and of city planners and managers to make informed choices on innovative technologies.





Call: GREENING THE ECONOMY

Topic: SCS-10-2016 Multi-stakeholder dialogue platform to promote innovation with nature to address societal challenges

Scope: The EU multi-stakeholder innovation platform should aim to develop an integrated evidence base and a European reference **framework on nature-based solutions and to promote the co-design, testing and deployment of improved and innovative nature-based solutions in an integrated way and at multiple scales and levels.**

This can be best achieved through strategic, effective and sustained dialogue, interactions and exchanges between science, policy, business and society to mainstream both the available knowledge into policy making and practice, and the needs of policy makers and practitioners into research and innovation policy and agendas.

In agreement with the Commission services, **projects should ensure appropriate flexibility** so as to respond in real time to potentially fast-changing policy scenarios.

Coordination and support action
Budget: €8,550,000



Open

Deadline date: 2016-03-08



Call: GREENING THE ECONOMY

Topic: SCS-10-2016 Multi-stakeholder dialogue platform to promote innovation with nature to address societal challenges

Expected impact:

- Strategic, effective and sustained multi-stakeholder dialogue between science, policy, business and society, functional within six months of the onset of funding;
- Emergence of a global market for nature-based solutions through:
 - EU-wide evidence and increased awareness among stakeholders, decision and policy makers, practitioners and public about the multiple benefits, cost-effectiveness and economic viability of nature-based solutions to address societal challenges;
 - Better use of available knowledge for informed decision making, innovative solutions and more effective deployment;
 - Reduced (regulatory, institutional, cultural etc.) barriers;
- Identification of users' needs, market potential and knowledge gaps to inform a market-oriented EU research and innovation policy agenda for nature-based solutions;
- Improved coordination among EU Member States and Associated and Accession Countries on research, innovation and demonstration activities for nature-based solutions;
- Improved cooperation and synergies with relevant strategic international research and innovation programmes and key strategic international partners.





Call: GREENING THE ECONOMY

Topic: SCS-11-2016 Supporting international cooperation activities on water

Scope: Proposals should aim to create a **framework and permanent dialogue in international water research and innovation programmes and funding and investment institutions**. Proposals should also investigate activities to align with and support the post-2015 sustainable development agenda, in particular the **Sustainable Development Goal on water and its impact on other goals**, such as nutrition, education, health, etc. Flagship actions for possible joint funding between the members of the JPI Water, international cooperation partners and international programmes of strategic importance for the EU should be identified and prepared for.

This action should also organise and develop the knowledge base required to **address water challenges and EU policy priorities within a global perspective**.

Cooperation and support action
Budget: €8,550,000



Planned opening: 2015-12-08
Deadline date: 2016-03-08



Call: GREENING THE ECONOMY

Topic: SCS-11-2016 Supporting international cooperation activities on water

Expected impact:

- Increasing the scale and ambition of water research and innovation activities beyond the level that would otherwise be sustainable, increasing the overall coherence and efficiency of the use of European resources and valorising European know-how on water solutions at global level in the context of the post-2015 sustainable development agenda;
- Making the Water JPI, in collaboration with the European Commission, a privileged and attractive partner for global cooperation in research and innovation, notably in the context of the Belmont Forum;
- A strengthened role of the Water JPI for underpinning knowledge and evidence for supporting the implementation of related EU policies and for fostering the EU's position in global water-related negotiations and fora.





COMPETITIVE LOW-CARBON ENERGY

Topic: LCE-29-2017 CSS in industry, including Bio-CCS

Scope: The application of CCS to industrial sectors other than power is expected to **deliver half of the global emissions reductions from CCS by 2050**. Proposals shall pilot under realistic conditions to significantly lower the energy and capture costs. Projects must include activities to **explore local or regional transport and storage needs and solutions**. It is needed to focus on progressing technologies and environmentally benign and cost-effective technologies. Collaboration with **industrial users** and knowledge sharing with stakeholders is essential. **International cooperation in research and innovation is also encouraged**, in particular with **China**.

Research and Innovation Action
Budget:



Planned opening: 2016-09-20
Deadline date: 2017-01-05



Call: COMPETITIVE LOW-CARBON ENERGY

Topic: LCE-29-2017 CSS in industry, including Bio-CCS

Expected impact:

- The cost- and resource-effective application of CCS in industrial operations will expand the available options for CCS and provide a stepping stone to its wider deployment
- The concomitant deployment of CCS both in fossil-fuel power production and in energy-intensive industries could facilitate clusters of CCS projects, thereby improving economies of scale for both CO₂ transport and storage.
- CCS in energy intensive industry can help ensure a competitive position for existing EU industries in a future carbon-restrained world, thus reconciling competitiveness with EU climate goals.





Call: 2016-2017 MOBILITY FOR GROWTH

Topic: MG-3.2-2017 Protection of all users in crashes

Scope: User protect has been an area where European industry has exhibited technology leadership, but this is now being increasingly challenged worldwide. Proposals on Protection for users in crashes should **focus on fully integrated safety systems**, regarding vehicle based systems, personal protection and/or crash simulation. Gender aspects and other demographic aspects should be taken in consideration. **Participation of SMEs with experience** in these areas and links with Member States initiatives are encouraged. Also, **international cooperation is encouraged**, in particular with industrialized countries and emerging economies, such as China



Research and Innovation Action
Budget: €225,500,000

Open
Deadline date: 2017-01-26
Stage 2: 2017-10-19



Call: 2016-2017 MOBILITY FOR GROWTH

Topic: MG-3.2-2017 Protection of all users in crashes

Expected impact:

- Actions are expected to make a direct contribution to the reduction of fatalities and severity of injuries, as well as the number of injured persons. They will deliver measures that will make the 'triangle' of European road users, vehicles and infrastructure safer. In this way, actions are expected to contribute to important savings in the health system linked with the reduction of accidents and injuries.
- Proposers are expected to demonstrate how the project results will have a significant impact on road safety casualties and injuries and how they will make an effective contribution to the standardisation of products and testing techniques.
- A credible strategy is expected to demonstrate the future full scale manufacturing of critical products developed in the project in Europe.





Call: 2016-2017 MOBILITY FOR GROWTH

Topic: MG3.5 Behavioural aspects for safer transport

Scope: To make all transport modes safer, an **increased understanding is needed of the behaviour of individual users**, and of their interaction with their associated safety-related systems and services. Proposals should address aspects such as distraction and health related factors; social and demographic factors; risk appraisal, and measures to modify transport user behaviour. Given that each transport mode has developed extensive knowledge on user behaviour, **transfer of knowledge between transport modes and multi-modal solutions are recommended**, as well as the inclusion of non-traditional transport modes, such as personal mobility devices. The **participation of SME** is strongly encouraged. Also, **International cooperation is encouraged**, in particular with industrialized countries and emerging economies, such as China



Research and Innovation Action
Budget: €22,000,000

Open
Deadline date: 2016-01-20
Stage 2: 2016-09-29



Call: 2016-2017 MOBILITY FOR GROWTH

Topic: MG3.5 Behavioural aspects for safer transport

Expected impact:

- Solutions will contribute to achieving the objective of the Transport White Paper to ensure that the EU remains a world leader in the safety of all modes of transport.
- Research and innovation on this topic will result in: reduction of fatal, serious and minor accidents through measures to mitigate unsafe transport user behaviour patterns; economic savings linked to the reduction of accidents; safer use of vehicles and increased awareness of other users; effective enforcement and training schemes based on reliable behavioural models; safe integration of new types of vehicle and increased usage of 'soft' modes.





Call: 2016-2017 GREEN VEHICLES

Topic: GV-11-2016 Stimulating European research and development for the implementation of future road transport technologies

Scope: Proposals should consider a **comprehensive approach ranging from components to system integration and including enabling technologies and other transport modes**, where relevant. Among the aspects that proposals should include, it is possible to find: updating research agendas and roadmaps developed by the European Technology Platform ERTRAC; monitoring of road transport research projects and their impacts; definition of multi-annual and annual plans; facilitate exchange between cities in Europe, Asia and Latin America, and track global progress on urban electric mobility and support UN activities. The implementation requires **close collaboration with the leading stakeholders in transport RTD in Europe**, as well as **international cooperation** with emerging countries, in particular China and Brazil



Coordination and Support Action
Budget: €3,500,000

Open
Deadline date: 2016-01-26



Call: 2016-2017 MOBILITY FOR GROWTH

Topic: MG3.5 Behavioural aspects for safer transport

Expected impact:

- This action will bring together the leading European stakeholders in road transport research to monitor projects, develop roadmaps, and support their implementation.
- It will contribute to a further harmonisation of research and innovation, and therefore contribute to the European Research Area, in particular also in the view of innovation, as well as to the European strategies for a future transport system.
- The action will also accelerate time to market of new mobility solutions.
- In addition, this initiative will contribute to climate action and sustainable development objectives.





Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL Topic: ICT-07-2017 5G PPP Research and Validation of critical technologies and systems

Scope: This challenge frames the **5G PPP initiative**, whose phase 2 will be implemented under this LEIT-ICT Work Programme. The challenge is to **eliminate the current and anticipated limitations of network infrastructures**, by making them capable of supporting a much wider array of requirement than is the case today and with capability of flexibly adapting to different "vertical" application requirements. This challenge includes **optimisation of cost functions** (capex/opex) and of scarce resources, as well as migration towards new network architectures. Proposals should address **Research and Innovation Actions** [(i) Wireless access and radio network architecture/technologies; (ii) High capacity elastic-optical networks; (iii) Software Networks] or **Coordination and Support Actions**, to ensure a programmatic view of the programmatic view of the implemented 5G Innovation Actions.



Research and Innovation Actions
Coordination and Support Actions
Budget: €10,000,000

Planned opening: 2016-05-10
Deadline date: 2016-11-08



Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL

Topic: ICT-07-2017 5G PPP Research and Validation of critical technologies and systems

Expected impact:

a. Research and Innovation Actions, among others objectives:

- Overarching impact: 40% of the world communication infrastructure market for EU headquartered companies;
- Demonstrated progress towards core 5G PPP KPI's
- Novel business models through innovative sharing of network resources across multiple actors;
- Trustworthy interoperability across multiple virtualised operational domains, networks and data centres;
- Solutions for the management of multi domain virtualised networks with coverage of security architectures based on industry characterised threat models.

b. Coordination and Support Actions

- Maximised output and exploitation of 5G PPP project results in key domains (standardisation, spectrum) through managed projects cooperation on horizontal issues;
- Constituency building, stakeholder support, support to key international cooperation events; dissemination, support to core international cooperation activities, to relevant stakeholder events;
- Definition of future R&I actions through roadmapping.





Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL **Topic: 5G PPP Convergent Technologies**

Scope: Network and service providers are faced with increasing challenges to **manage convergence technologies**. The challenge thus tackles scalability and usability of mixed network technological approaches that can benefit from previous research, towards validation of deployment at scale. Proposals should address **Innovation Actions** [(i) Ubiquitous 5G access leveraging optical technologies; (ii) Flexible networks applications], or **Research and Innovation Actions** - as Cooperation in access convergence. This last activity takes advantage of the supporting 5G research and demonstration facilities offered by Taiwan towards collaborative 5G research with the EU, and aims at **developing and demonstrating an integrated convergent access** across different air interface technologies and the fronthaul/backhaul/core network.

Innovation Action
Research and Innovation Actions
Budget: €10,000,000



Planned opening: 2016-05-10
Deadline date: 2016-11-08



Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL **Topic: 5G PPP Convergent Technologies**

Expected impact:

a. Innovation Actions, among other objectives:

- Validated access network architecture with integrated optical technologies for the realisation of critical access and transport control function
- Demonstration of technological applicability to dense access scenarios supporting the 1000 capacity increase objective
- Contribution to standards, notably 5G and optical access
- Open environments for creation of network apps

b. Research and Innovation Actions – Cooperation in access convergence

- Contribution to the ITU-R objectives for the next generation mobile network including requirements on data rates, mobility, connection density, latency, energy efficiency, spectrum efficiency, and traffic volume density
- Contribution to the 1000 fold mobile traffic increase per area, in the context of the target application
- Contribution to the 1ms latency objective in the context of the target application
- Results exploitation in the context of standardization and spectrum requirements





Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL **Topic: ICT-37-2016 CHINA: Collaboration on Future Internet**

Scope: The work has to involve analytical nature, and requires a **good understanding of both the Chinese and European models for research support, standardisation support, and lead market introduction.** The work targets the analysis of the Chinese research / standardization / innovation ecosystems, of their main partners and conditions of contributions and participation for foreign companies, including the legal environment. It includes a **comparative analysis with the European research systems**, and further identifies key CN national projects, that could form the basis of joint EU-CN collaborations.



Coordination and support action
Budget: €1,000,000

Planned opening: 2015-10-20
Deadline date: 2016-01-19



Call: INFORMATION AND COMMUNICATION TECHNOLOGIES CALL Topic: ICT-37-2016 CHINA: Collaboration on Future Internet

Expected impact:

- Identification of opportunities of EU-CN technological cooperation in strategic sectors and associated road-mapping, including support for technical and policy cooperation between EU-CN IoT or 5G Large Scale Pilots of common interest.
- Comparative analysis of EU-CN Research and innovation ecosystems and conditions of win-win participation.





Call: PERSONALISED MEDICINE

Topic: SCI-HCO-07-2017 Global Alliance for chronic disease (GACD)

Scope: Topic details will be developed in line with the timetable of the GACD priority setting process and will be provided during the course of 2016.



Research and Innovation Actions
Budget: €24,000,000

Planned opening: 2016-07-29
Deadline date: 2017-04-11