From a consumer point of view, the target is to support ubiquitous access to a wider range of applications and services, offered at lower cost, with exceptional reliability and availability, and with increasingly efficient use of resources, including both radio spectrum and energy.

This new high-performance network will be operated via a scalable management framework that enables the rapid deployment of innovative applications, including sensor based applications, coupled with a reduction of network management operational expense.

In addition, new, robust but lightweight approaches to managing security and authentication will have to be provided to accommodate more pervasive, virtualized networks and services.

#### **5G-PPP and the New Net!Works/ISI ETP**

The 5G-Infrastructure PPP is associated with the newly combined Net!Works and Integral SatCom Initiative (ISI) ETPs where these ETPs have joined forces to address the 5G challenge. A substantial number of members of the steering board of this new ETP are, and will be, involved in setting up and defining the 5G-Infrastructure PPP. This synergy will ensure the wider ICT community has a strong voice in the evolution of the 5G-Infrastructure PPP.

## **How to Participate**

Visit the 5G-Infrastructure Association online at www.5g-ppp.eu or contact us by e-mail: info@5g-ppp.eu



The H2020 call for 5G projects (H2020-ICT-2014-2) is available at: http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/77-ict-14-2014.html



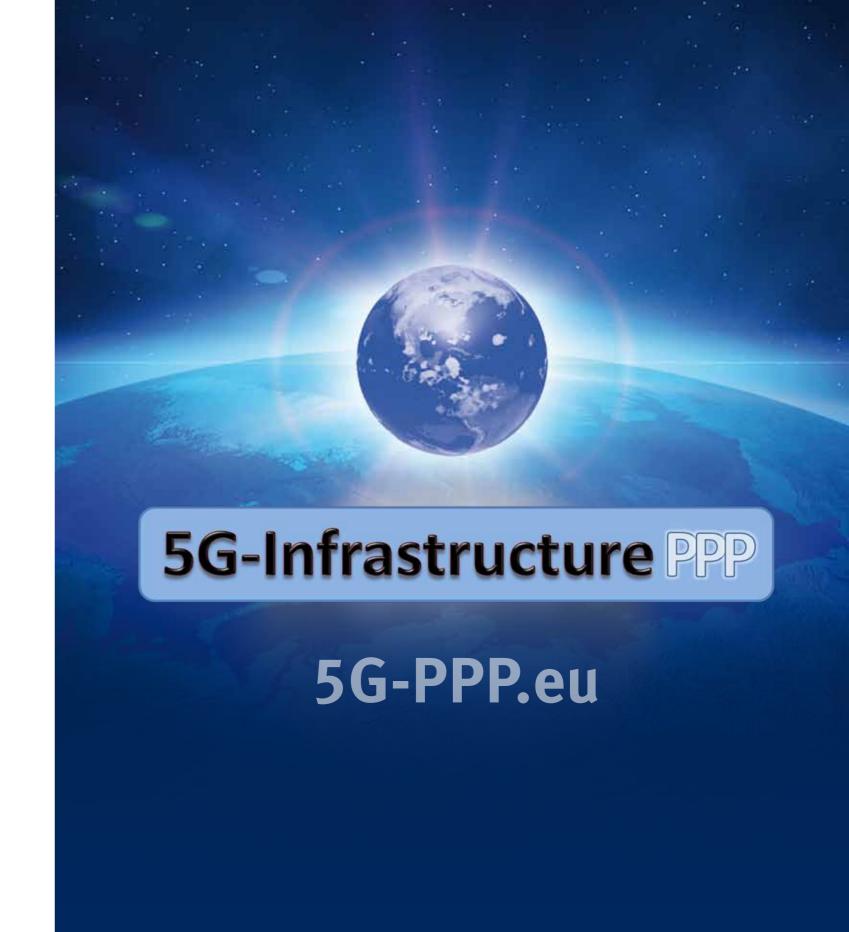
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The 5G-Infrastructure Public-Private Partnership (PPP) was launched under the 'Horizon 2020' umbrella by the European Commission and the newly established 5G Infrastructure Association. It will research the solutions, architectures, technologies and standards that will be necessary for the introduction of 5G communications infrastructure over the next decade.

The 5G-Infrastructure PPP brings together a broad range of stakeholders from the telecommunications and IT sectors, as well as from research institutes. The European Commission and the industry are committing approximately 1.4 billion euros of funding to 5G research over the period 2014–2020.

#### The opportunity for Europe

The European telecommunications industry has been historically in the forefront of the global competition since the early days of the GSM technology.

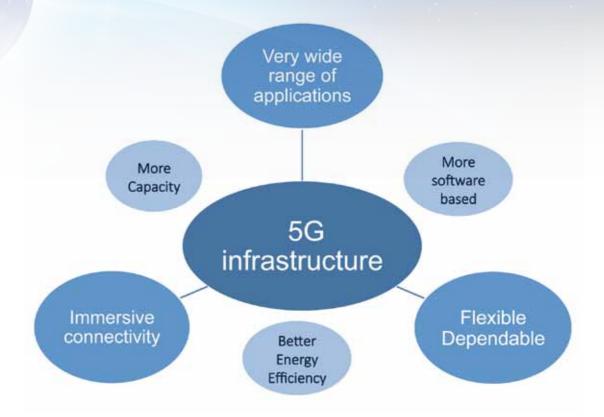
As European industry and society become more and more digitalized, providing advanced communications infrastructure is critical for the competitiveness and growth of the European economy as a whole. This initiative aims to stimulate the development of the world's most advanced network infrastructure and is a crucial stepping stone to ensuring the long-term competitiveness of the European networking industry at large, and of all industrial sectors that rely on advanced ICT services as part of their competitive profile.

This strategic investment is a powerful engine for creativity and future growth, and it will support the creation of European jobs and skills across all sectors. This initiative will help design the most important infrastructure to be introduced in the next decade and is a key opportunity for Europe to exercise leadership.

### What will 5G infrastructure involve

The communications network and service environment of 2020 and beyond will be infinitely more rich and powerfull than today. In the next decade, networks will be capable of connecting people, machines, information and content, in a truly flexible and mobile way. The future will encompass connected sensors, connected vehicles, smart meters and smart homes that are way beyond our current experience of tablet and smartphone connectivity.

Placing a particular emphasis on energy efficiency, the 5G-Infrastructure PPP will address the novel infrastructure requirements needed to meet the unprecedented growth in network capacity and performance that 5G services will require. There may also be a need to redefine the value chains and re-invent the roles and relationships between the players, while opening up new innovation opportunities. At the same time, the introduction of virtualization and software-defined networking will place greater demand on networks in terms of flexibility and responsiveness.



# What will the 5G-Infrastructure PPP deliver?

The development of new communications networks is dependent on the emergence of globally-accepted standards in order to ensure interoperability and economies of scale that allow both network operators and end-users to benefit from lower costs. The 5G-Infrastructure PPP aims to position the European industry in the driving seat of 5G standardization.

The 5G-Infrastructure PPP will deliver solutions, architectures, technologies and standards required for the universal roll-out of 5G networks during the next decade.

On an economic level, the target is to maintain and reinforce a strong EU industrial base in the domain of networking technologies, which is seen as a strategic sector by nations worldwide.



A strategic goal for the 5G-Infrastructure PPP would be to retain at least 40% of global market share in Europe for future network equipment sales.