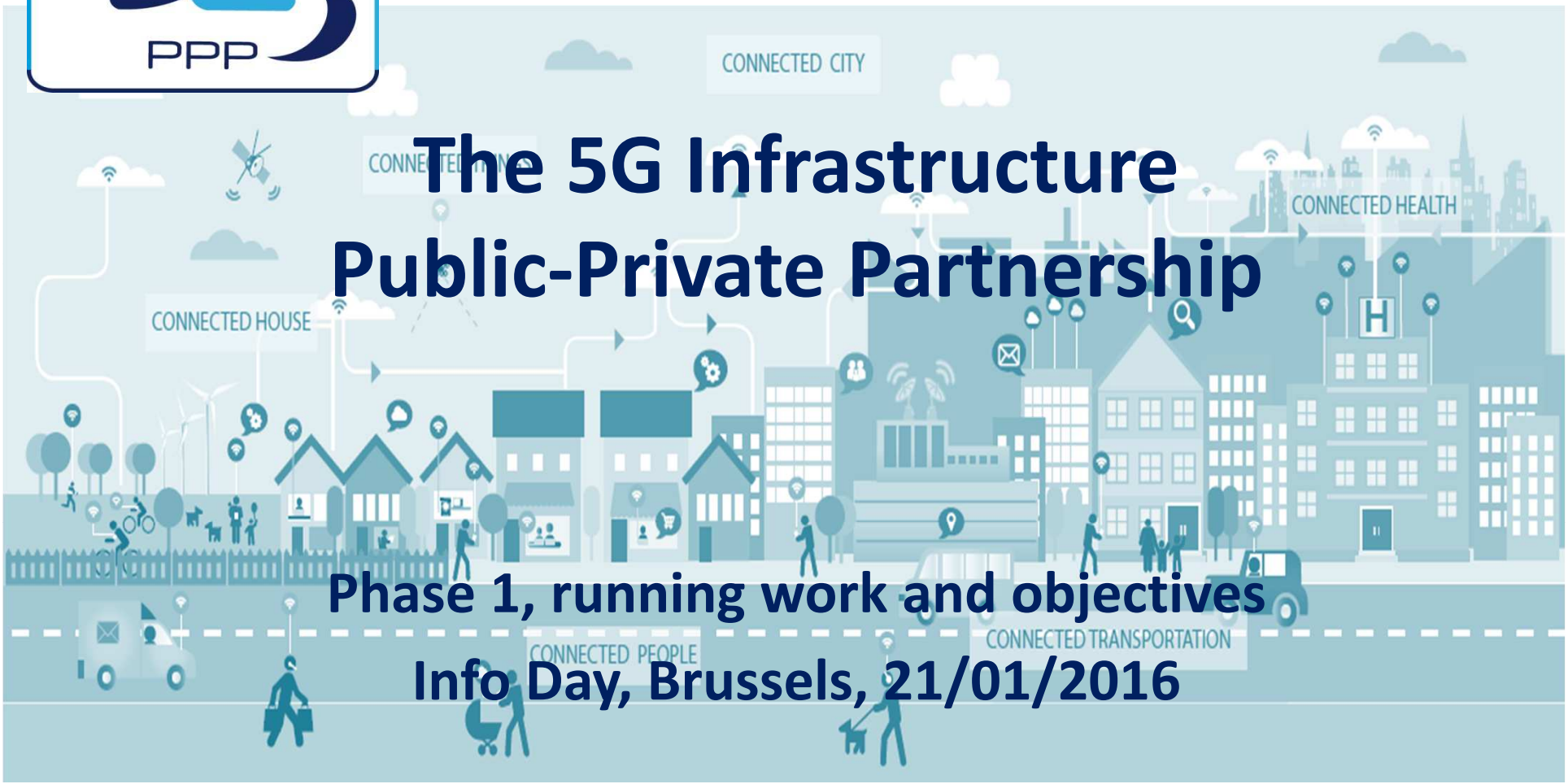


The 5G Infrastructure Public-Private Partnership

Phase 1, running work and objectives

Info Day, Brussels, 21/01/2016

Horizon 2020 5G PPP
Call 1 selected projects

Research projects
Innovation projects

5G Ensure Security

CogNet
Building an Intelligent System of Insights and Action for 5G Network Management

SELFNET
Framework for SELF-organized network management in virtualized and software defined NETworks

CHARISMA
Converged Heterogeneous Advanced 5G Cloud-RAN Architecture for Intelligent and Secure Media Access

SUPERFLUIDITY
Superfluidity: a super-fluid, cloud-native, converged edge system

5GEx
5G Exchange

VirtuWind
Virtual and programmable industrial network prototype deployed in operational Wind park

SONATA
Service Programming and Orchestration for Virtualized Software Networks

COHERENT
Coordinated control and spectrum management for 5G heterogeneous radio access networks

5G-Norma
5G NOvel Radio Multiservice adaptive network Architecture

METIS-II
Mobile and wireless communications Enablers for Twenty-twenty (2020) Information Society-II

SPEED-5G
quality of Service Provision and capacity Expansion through Extended-DSA for 5G

SESAME
Small cEllS coordinAtion for Multi-tenancy and Edge services

FANTASTIC-5G
Flexible Air iNTerfAce for Scalable service delivery wiThin wIreless Communication networks of the 5th Generation

5G-Xhaul
Dynamically Reconfigurable Optical-Wireless Backhaul/Fronthaul with Cognitive Control Plane for Small Cells and Cloud-RANs

Flex5Gware
Flexible and efficient hardware/software platforms for 5G network elements and devices

Xhaul
The 5G Integrated fronthaul/backhaul

mmMAGIC
Millimetre-Wave Based Mobile Radio Access Network for Fifth Generation Integrated Communications

Euro-5G
5G PPP Coordination and Support Action

Source: EURO-5G.

Phase 1 time plan

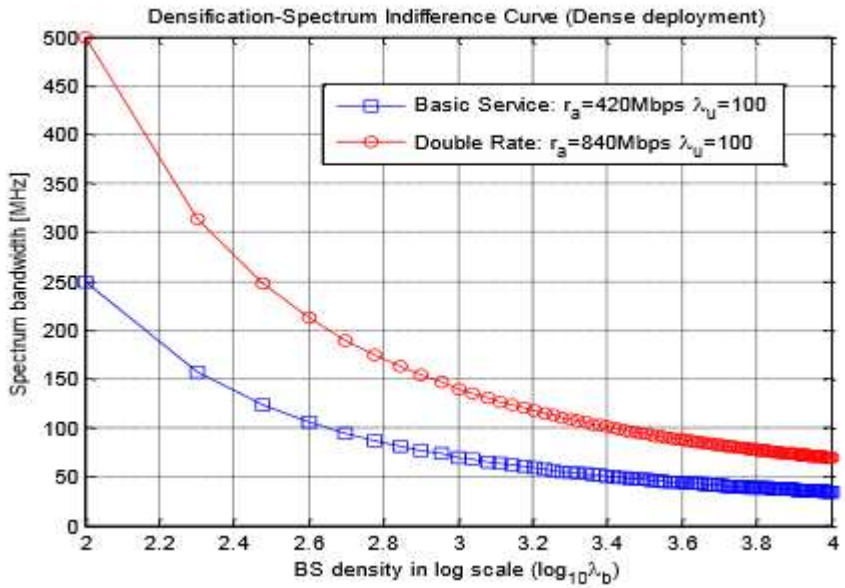
	Name	M1 = July 2015	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36
CSA	EURO 5G	Euro-5G																																				
R&I	5G-NORMA	5G NOvel Radio Multiservice adaptive network Architecture																																				
R&I	5G-Xhaul	Dynamically Reconfigurable Optical-Wireless Backhaul/Fronthaul with Cognitive Control Plane for Small Cells and Cloud-RANs																																				
R&I	5G-CrossHaul	Developing an integrated 5G backhaul and fronthaul transport network																																				
R&I	5G-Ensure	5G Enablers for Network and System Security and Resilience																																				
R&I	CHARISMA	Converged Heterogeneous Advanced 5G Cloud-RAN Architecture for Intelligent and Secure Media Access																																				
R&I	COGNET	Building an Intelligent System of Insights and Action for 5G Network Management																																				
R&I	COHERENT	Coordinated control and spectrum management for 5G heterogeneous radio access networks																																				
R&I	FANTASTIC 5G	Flexible Air iNTerfAce for Scalable service delivery wiThin wIreless Communication networks of the 5th Generation																																				
R&I	Flex5Gware	Flexible and efficient hardware/software platforms for 5G network elements and devices																																				
R&I	METIS II	Mobile and wireless communications Enablers for Twenty-twenty (2020) Information Society-II																																				
R&I	mmMAGIC	Millimetre-Wave Based Mobile Radio Access Network for Fifth Generation Integrated Communications																																				
R&I	SELFNET	SELFNET - FRAMEWORK FOR SELF-ORGANIZED NETWORK MANAGEMENT IN VIRTUALIZED AND SOFTWARE DEFINED NETWORKS																																				
R&I	SESAME	Small cElls coordinAtion for Multi-tenancy and Edge services																																				
R&I	SPEED-5G	quality of Service Provision and capacity Expansion through Extended-DSA for 5G																																				
R&I	SUPERFLUIDITY	Superfluidity: a super-fluid, cloud-native, converged edge system																																				
I	5GEx	5G Exchange																																				
I	SONATA	Service Programing and Orchestration for Virtualized Software Networks																																				
I	VirtuWind	Virtual and programmable industrial network prototype deployed in operational Wind park																																				

5G Infrastructure PPP
The European path towards global next generation communication networks

Examples of results

METIS II

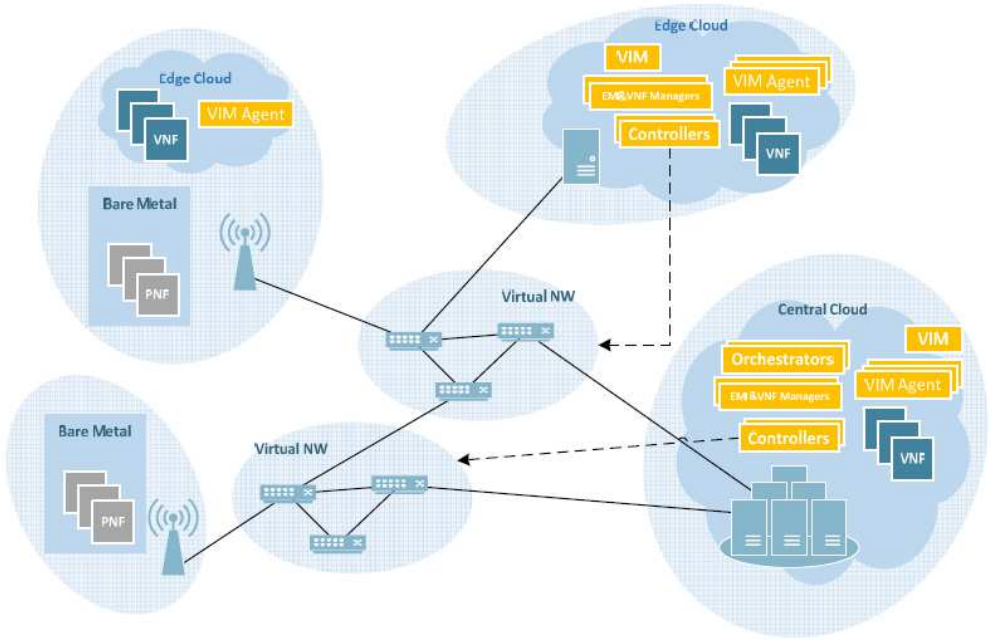
Preliminary spectrum scenarios and justification for WRC Agenda Item for 5G bands above 6 GHz



Examples of results

5G-NORMA

Functional Network Architecture and Security Requirements

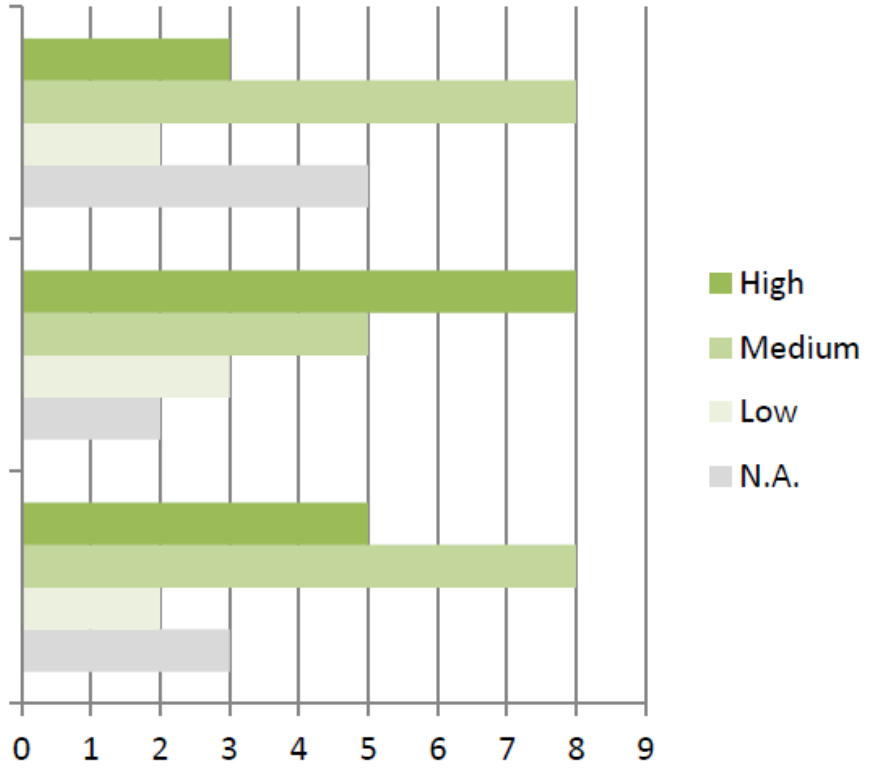


Business KPIs

B1: Leverage effect of EU research and innovation funding in terms of private investment in R&D for 5G systems in the order of 5 to 10 times;

B2: Target SME participation under this initiative commensurate with an allocation of 20% of the total public funding;

B3: Reach a global market share for 5G equipment & services delivered by European headquartered ICT companies at, or above, the reported 2011 level of 43% global market share in communication...



5G Infrastructure PPP
The European path towards global next generation communication networks

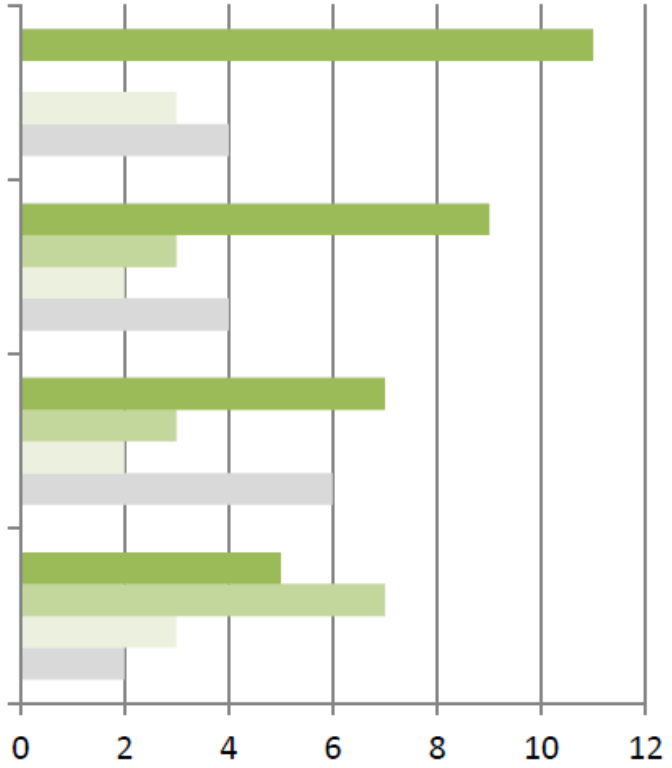
Performance KPIs

P1: Providing 1000 times higher wireless area capacity and more varied service capabilities compared to 2010.

P2: Reducing the average service creation time cycle from 90 hours to 90 minutes.

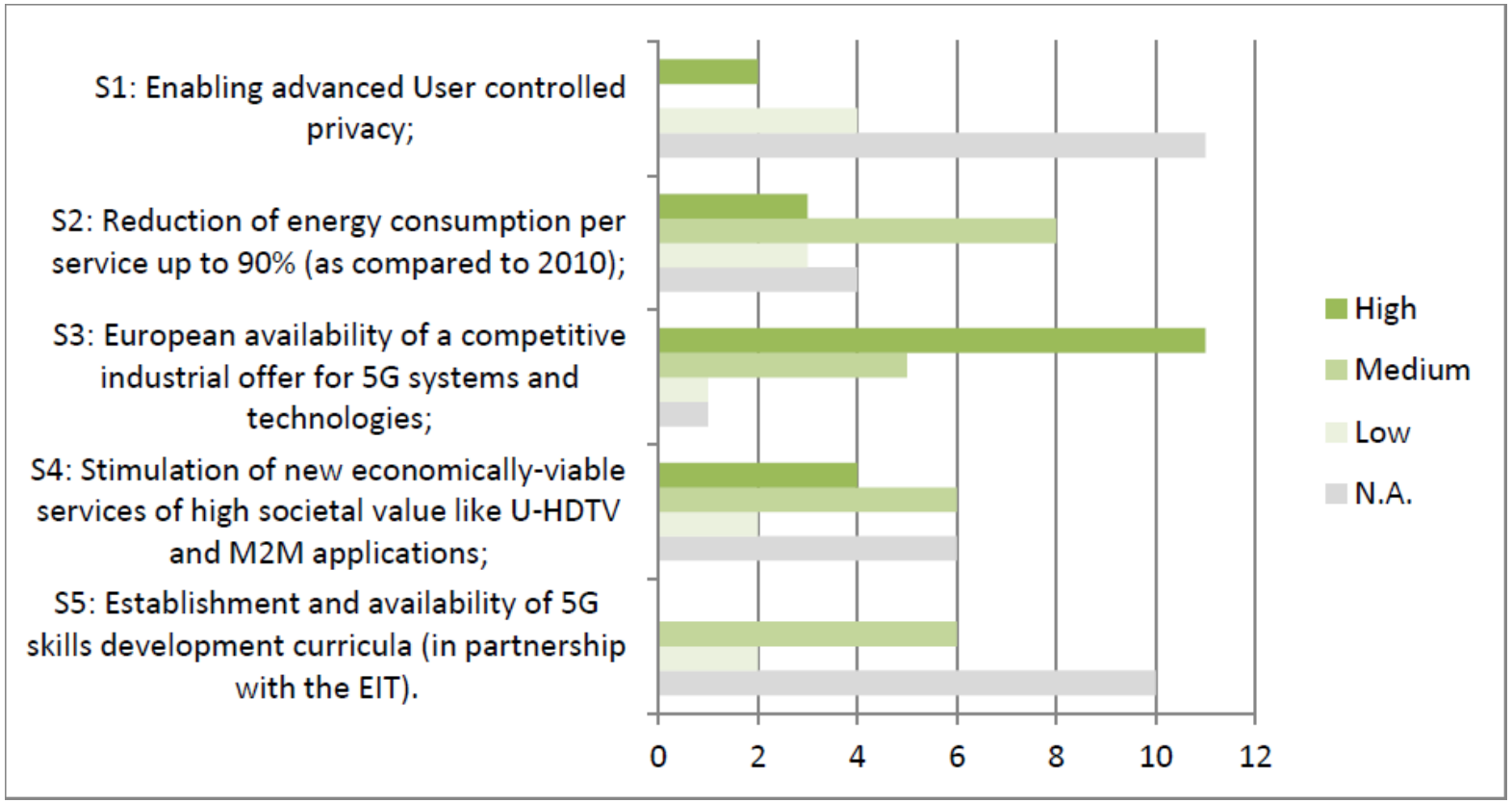
P3: Facilitating very dense deployments of wireless communication links to connect over 7 trillion wireless devices serving over 7 billion people.

P4: Creating a secure, reliable and dependable Internet with a "zero perceived" downtime for services provision.



5G Infrastructure PPP
The European path towards global next generation communication networks

Societal KPIs



5G Infrastructure PPP
The European path towards global next generation communication networks

Governance of the programme

- The Steering Board provides guidance on the overall partnership initiative, including:
  - the cooperation between Actions and joint events to promote results of the Actions, concepts and systems,
  - recommend on collaboration and synchronisation of activities, including but not limited to on management of outcomes, common approaches towards standardisation, SME involvement, links with regulatory and policy activities, and commonly shared dissemination and awareness raising activities.
- The Technology Board organises technical meetings and workshops, and establish calls within the organisation for research proposals to address research gaps.

Working Groups

5G Infrastructure PPP
The European path towards global next generation communication networks

Pre-standards

Spectrum

Vision and Societal Challenges

Architecture

Use cases and performance evaluation models

Software Networks
(SDN and NFV)

Activity 5G PPP Contractual Arrangement, KPIs

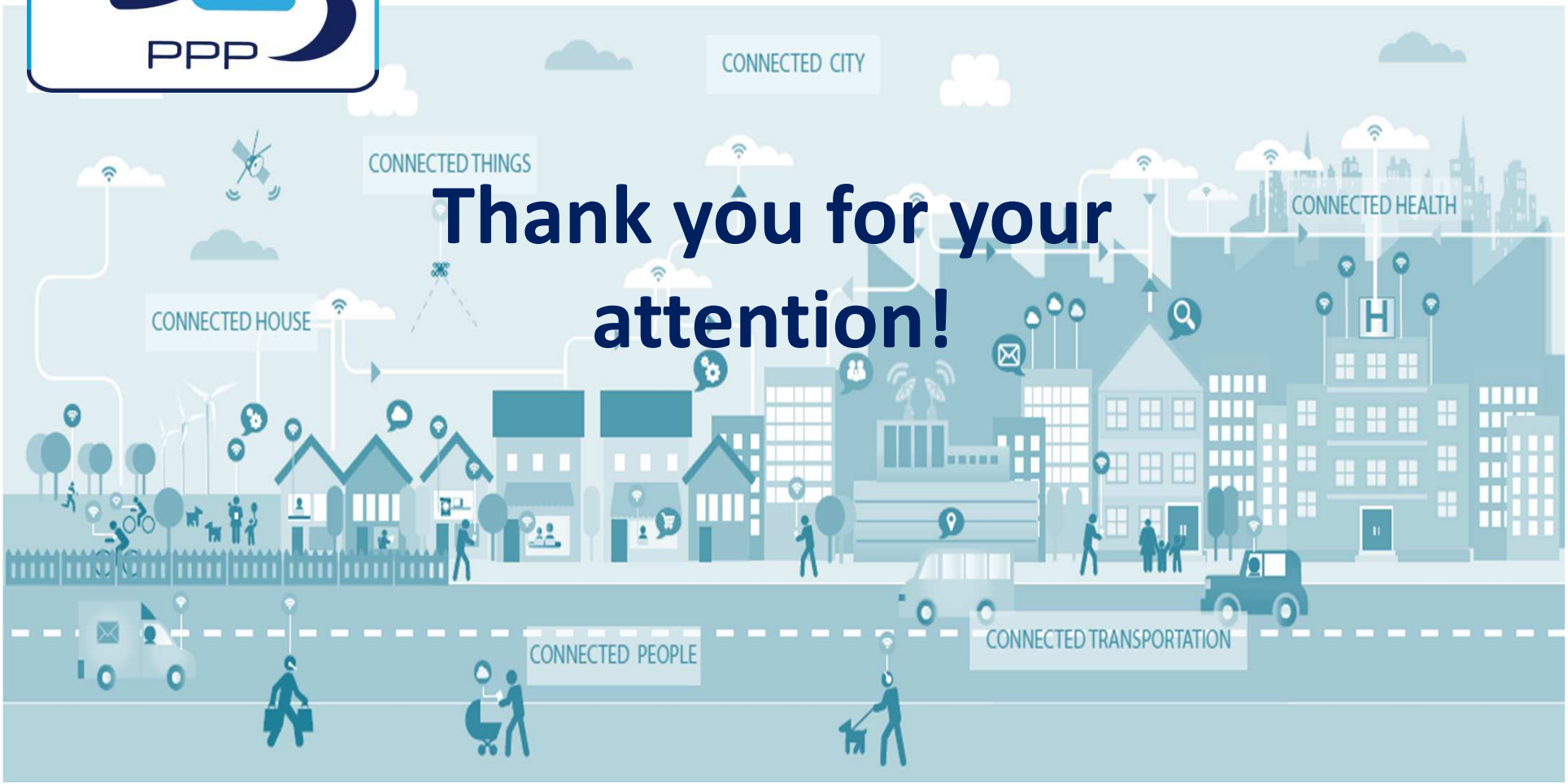
Activity 5G International cooperation

Network Management, QoS and Security

Activity Community building and Public Relations

SME support

http://5g-ppp.eu



Thank you for your attention!