

Towards 5G Standardisation

5G Multi Lateral Workshop Lisbon, 20 October 2015

Bernard Barani European Commission Deputy Head of Unit "Network Technologies"

5G-PPP Vision





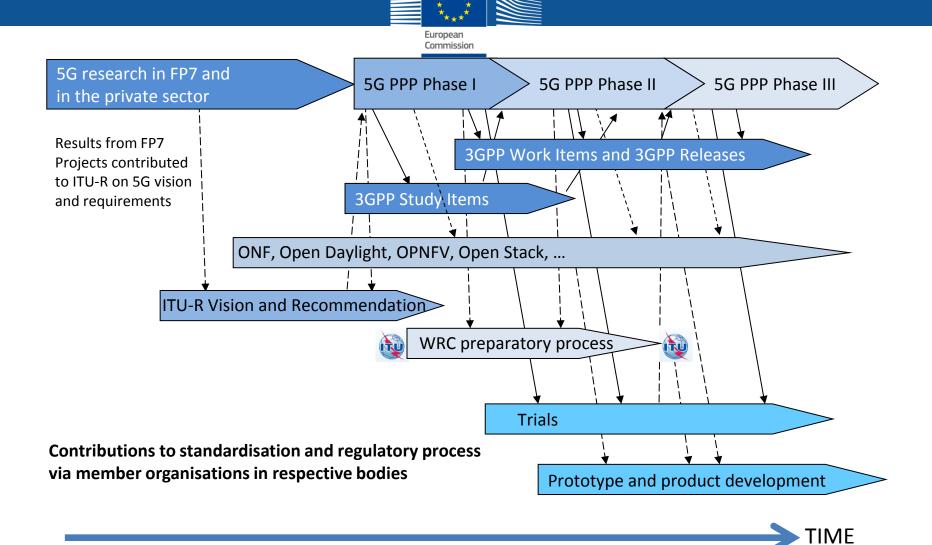
- An ecosystem for sustainable technical and business innovation
- Value-added services
 - Immersive user experience
 - Expanded Internet of Things
 - New mission critical services (low latency, high reliability)
- SG Vision

 Not it can be a force it because it is a force it is a force

- Unified and programmable infrastructure
- Support of multi tenancy and network resource slicing models
- Design to be a sustainable and scalable technology
- Commercial deployment of 5G systems in years 2020+
 - Field trials planned from year 2018 onwards, not yet based on commercial products
 - First commercial roll-outs expected to start in year 2020
 - Strong links to verticals

http://5g-ppp.eu/wp-content/uploads/2015/02/5G-Vision-Brochure-v1.pdf

5G-PPP Interactions



5G-PPP R&I Projects





European Commission

5G Ensure Security Research projects
Innovation projects

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

METIS-II

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

COHERENT

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

SPEED-5G

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

5G-Norma

5G NOvel Radio Multiservice adaptive network Architecture

SESAME

Small cEllS coordinAtion for Multi-tenancy and Edge services

FANTASTIC-5G

Flexible Air iNTerfAce for Scalable service delivery wiThin whreless Communication networks of the 5th Generation

mmMAGIC

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

Flex5Gware

Flexible and efficient hardware/softwar e platforms for 5G network elements and devices

5G-Xhaul

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

Xhaul

The 5G Integrated fronthaul/backhaul

Launch: 1st of July 2015 www.5G-PPP.eu

5G R&I phase 2: 2017-2018+





Focus on Proof of Concepts, Experiments, Verticals Critical technologies and Systems (R&I)

- Radio Network and Architectures
- Optical Core
- SDN/NFV, architecture, net mgt;

Convergent technologies (Innov)

- Optical support to access
- Network apps
- Research cooperation in access nets

Some Issues and standardisation impacts

Visions and Vision perimeters

From RAT's enhancements (new) to polymorphic networks, achitectures

From limited to high verticals integration

How to capture the requirements

Priority services?

Socio economics, From specific innovations to economy digitisation at large

Timing

Service introduction roadmaps

Innovation and openness

Towards network as platforms for innovation, which bodies

