



5G Infrastructure Public Private Partnership (5G PPP) Overview

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5G IA

www.5G-IA.eu

The VOICE of
EUROPEAN INDUSTRY
for the DEVELOPMENT
and EVOLUTION of
5G



**PHASE 1:
5G Core Research
main achievements:**

- 5G System design & Evaluation aspects
- 5G Air interface innovations
- Network management & Security innovations
- Virtualization & Service deployment innovations
- 100s of contributions to standardization

**PHASE 2:
5G Vertical Trials**

Factories of the Future:

- Time-critical process control
- Non-time-critical factory automation
- Remote control
- Real-time workshop communication
- Connectivity paths

Energy:

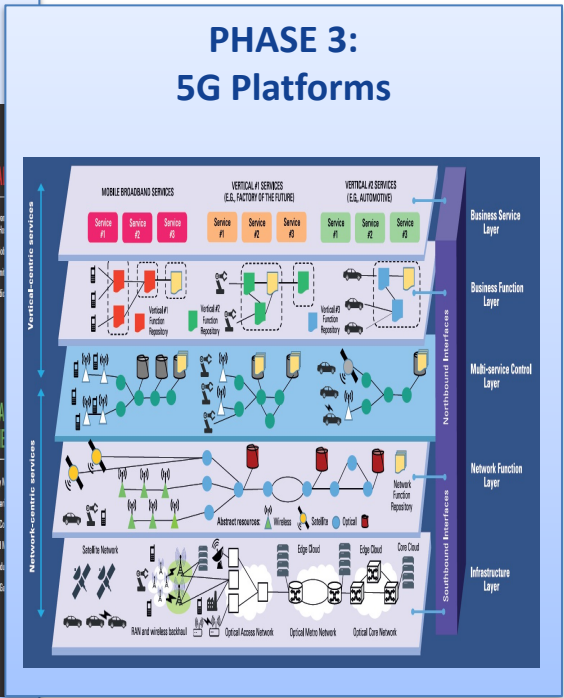
- Grid access
- Grid backhaul
- Grid backbone

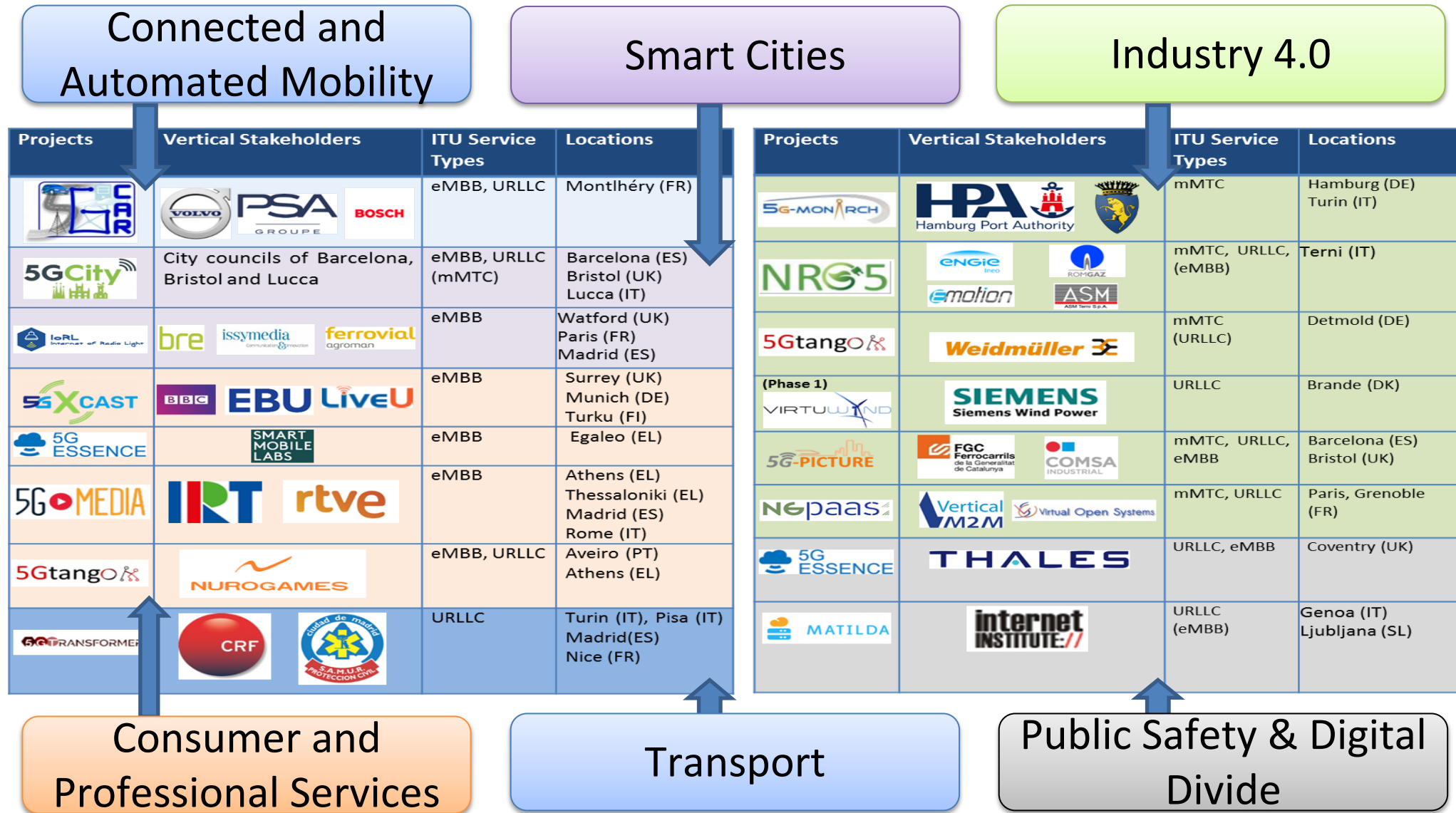
Automotive:

- Automated driving
- Scan My View
- Self's Eye View
- Signification of Transport and Logistics
- Information Society on the road

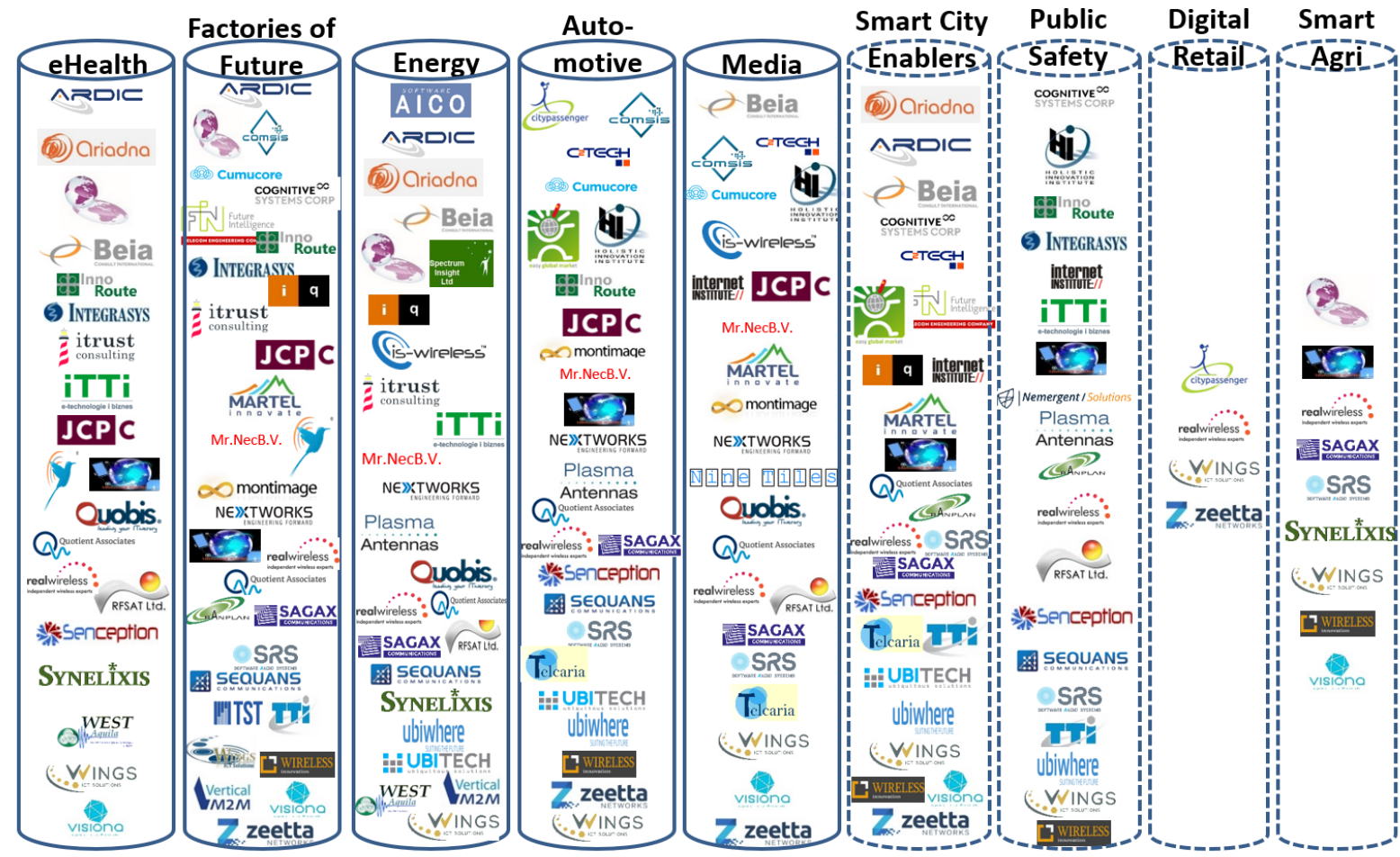
Other verticals:

- Healthcare: Remote medical assistance, Smart roads
- Media/Entertainment: Ultra High-Fidelity, Virtual Live Sport Experience, Smart Machines Generated Content, Immersion and Integration, Cooperative Media Primitives, Collaborative AR





Mapping SMEs to Verticals



SMEs shown in alphabetical order


Phase III – End to End Facilities and advanced Validation trials

-  Main Facility that offers Services to ICT-19 with well defined SLAs
-  Experimentation Facility for advanced Experimentation and Testing
-  Moving Experimentation Facility Site
- E** 5G-EVE
5g-eve.eu/end-to-end-facility
- V** 5G-Vinni
www.5g-vinni.eu/facility-site
- G** 5Genesis
5genesis.eu
-  **Additional 5G PPP Projects Platforms & Nodes:** Aachen, Aalto, Bristol, Brussels, Dublin, Groningen, Heroya, Kista, Oulu, Reutlingen and Trondheim





5G
Performance
Evaluation




Cellular System,
Functional, Logical
& Physical
Architectures

Phase 3 Key Achievements from the 5G PPP include **Over 80 highlighted results** from projects in phase 3 under **20 program level achievements** as shown by the symbols here. **Please click on the symbols to see the relevant results.**



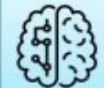
Radio Access
Network



5G
Fronthaul,
Backhaul and
Metrohaul



Technology
Enablers



Network
Management
and
Orchestration
of Services



Software
Networks



Security,
Privacy and
Resilience



5G Services
Platforms and
Programming
Tools for
NetApps



5G Business,
Standardization
and Regulation



5G Verticals 1:
Industry 4.0



5G Verticals 2:
Agriculture and
Agrifood



5G Verticals 3:
Automotive



5G Verticals 4:
Transport and
Logistics



5G Verticals 5:
Smart Cities and
Utilities



5G Verticals 6:
Public Safety



5G Verticals 7:
Smart (air)Ports



5G Verticals 8:
Energy



5G Verticals 9:
eHealth and
Wellness



5G Verticals 10:
Media,
Entertainment
and Tourism

- Created **5G technology leadership** for the European industry through the hard work of 5G-PPP projects, WGs, and TFs
- Successfully achieved most of the challenging business and technical **KPIs** and is well on track for the societal ones
- Mobilized huge **private investments** in 5G
- Stimulated a high level of **SME participation** and created a positive impact on the innovation capacity of SMEs
- Has organized **meaningful and disruptive trials** all over Europe

For more information, refer to the **5G PPP Annual Monitoring Report 2019**
<https://5g-ppp.eu/annual-progress-monitoring-reports/>

- Over 1300 scientific publications (Phase II and III)
- A major impact on 5G standards with over 800 Tdoc contributions to SA1, SA2 and RAN3, and ETSI TR 103.611 for the definition of architecture options
- Beyond standards, proving the 5G system is working for verticals in 70 test/experiment sites
- An active engagement in the IMT-R IMT 2020 evaluation process



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The 5G PPP is co-funded by the Horizon 2020 programme of the European Union



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