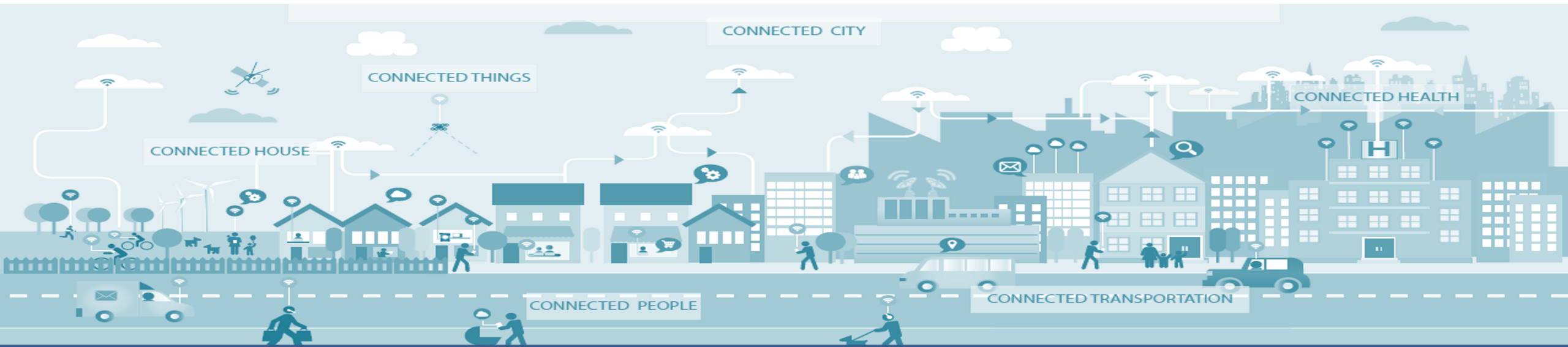
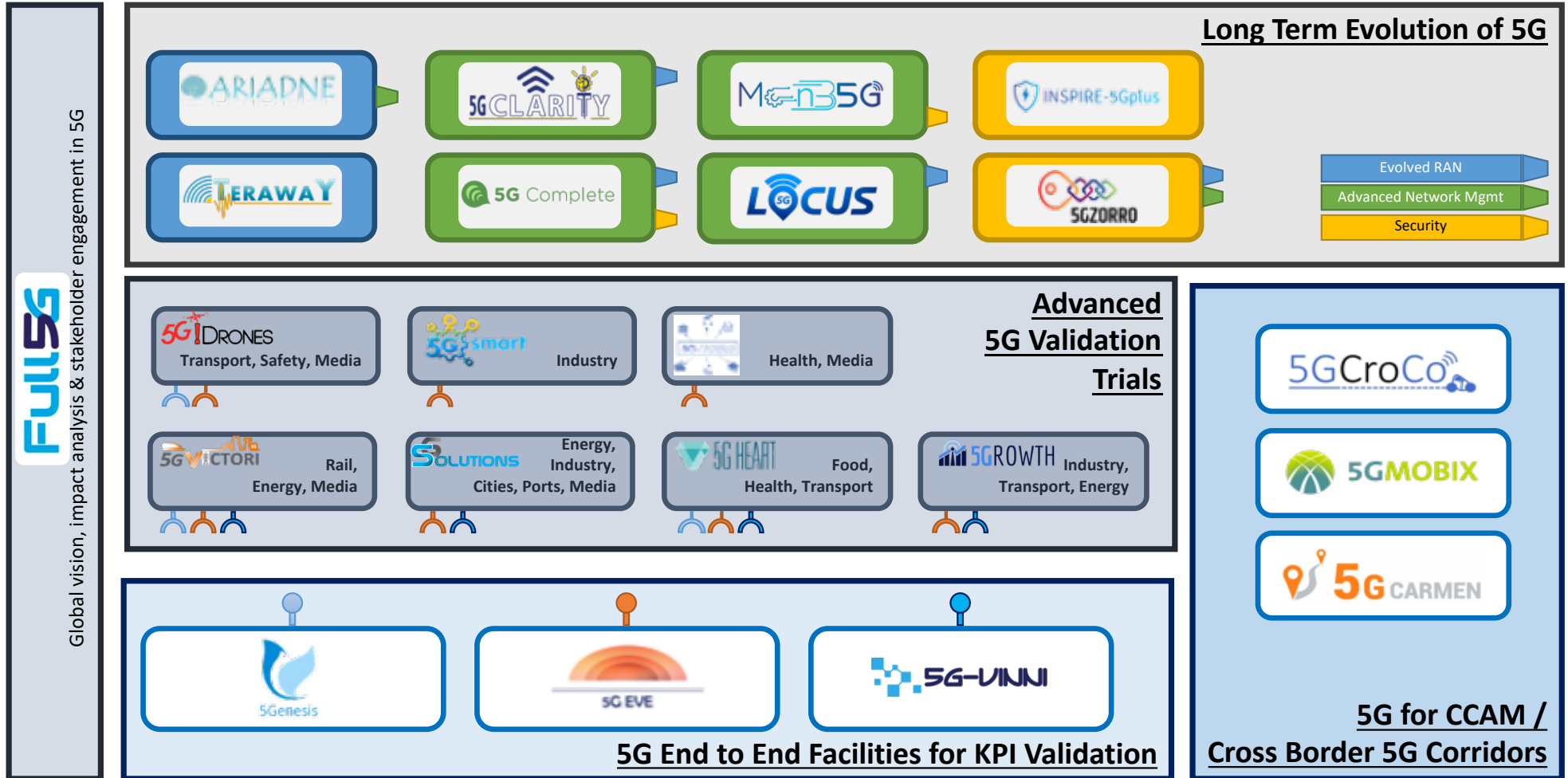


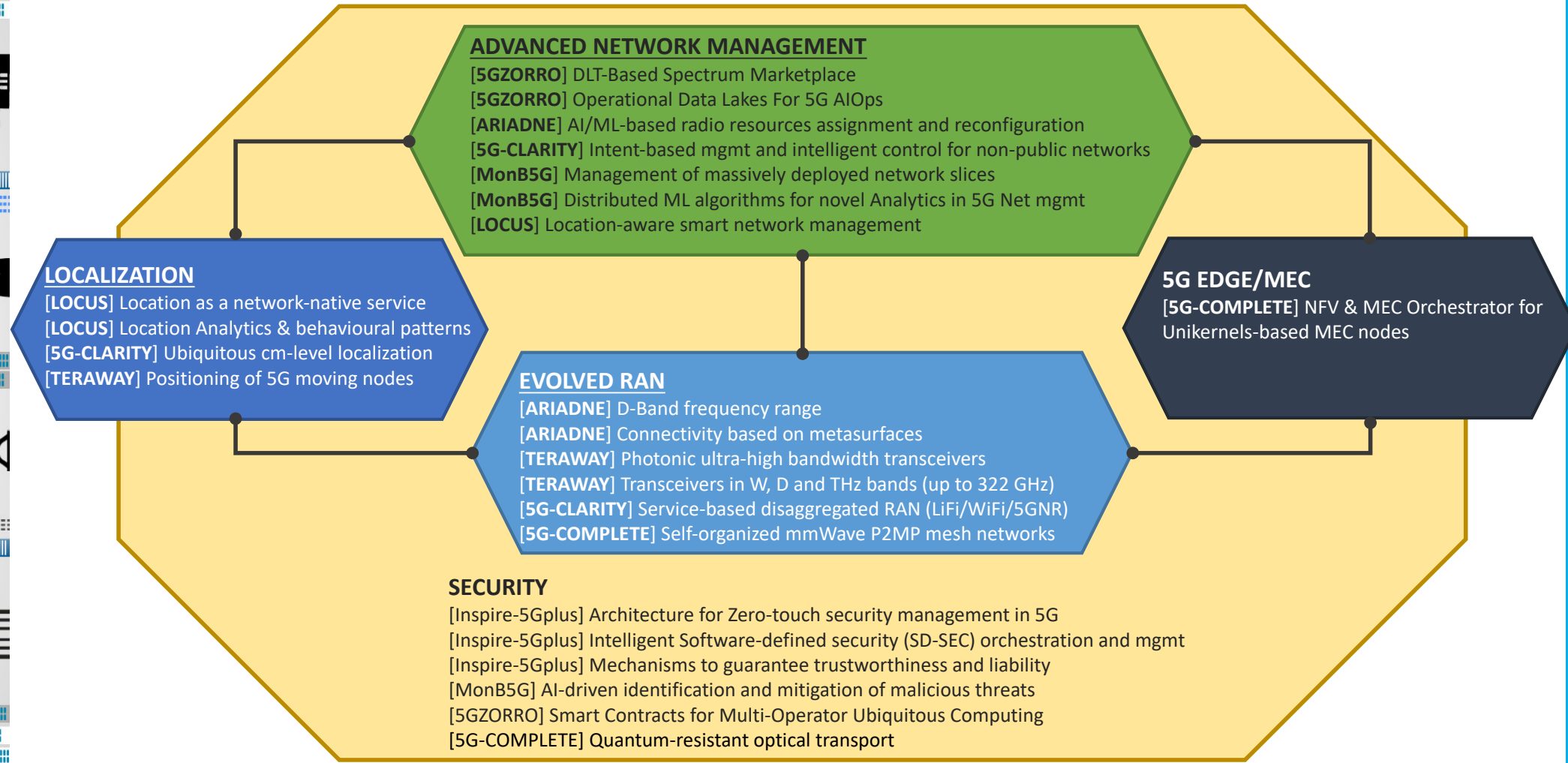
### 5 PPP Technology Board: Current Status and future activities



## Phase III projects – Reference Figure



# Phase III projects – ICT20 Topics



## New Projects coming on board

### ICT-42-2020: 5G-PPP 5G Core Technologies innovation

### ICT-53-2020 call: 5G-PPP 5G for Connected and Automated Mobility (CAM)

		
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# SNS PROGRAMME PROPOSAL



Draft proposal for a  
European Partnership under Horizon Europe  
Smart Networks and Services  
Version 30 June 2020

## Summary

The European communication networking and services sector is proposing the Smart Networks and Services Partnership to secure European leadership in the development and deployment of next generation network technologies and services, while accelerating European industry digitization. It will position Europe as a lead market and positively impact the citizens' quality of life, while boosting the European data economy and contributing to ensure European sovereignty in critical supply chains.

This document is supported by



- Proposal supported by different communities
  - representing significantly more than 1000 organisations from
    - Industry
    - SMEs
    - Research community (R&D centers and Universities)
- Proposal is allocated to
  - Horizon Europe
    - cluster “Digital, Industry and Space”
    - area of Intervention “Next Generation Internet” as the center of gravity
    - with some links to other areas such as “Key Digital Technologies” and “Artificial Intelligence” in other Areas of Intervention
  - CEF – Connected Europe Facility, sub-program on 5G deployments at major European transport routes



# Produced results in the context of TB

## Key achievements v3.0

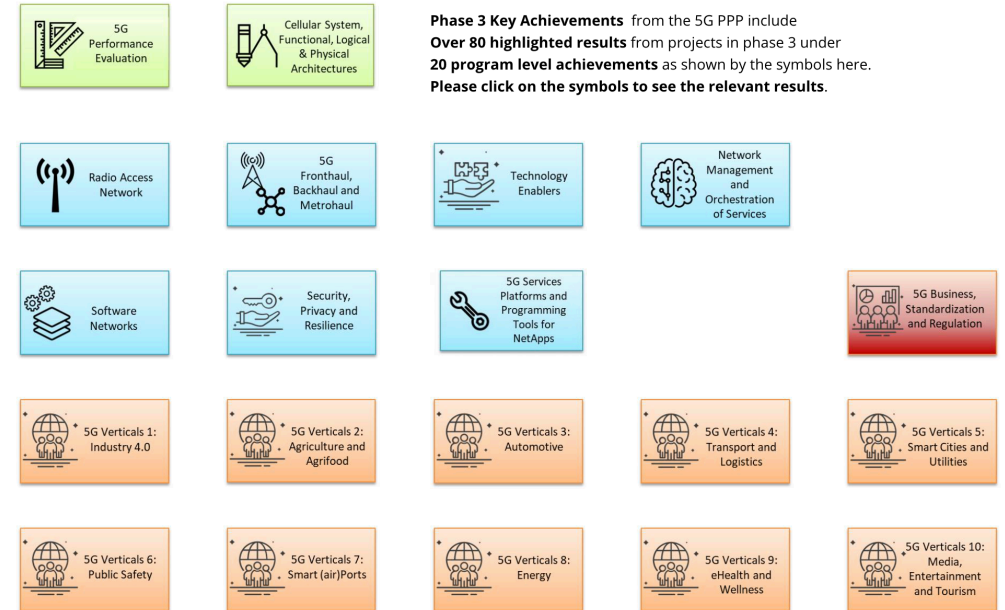
<https://5g-ppp.eu/key-achievements-v3/>

### Cross 5G PPP Initiative Documents Cross 5G PPP Initiative Documents

1	European Annual Journal 2020
2	5G Pan-EU Trials Roadmap Version 4.0
3	5G PPP Automotive WG Initial Proposal on how 5G Strategic Deployment can support Connected and Automated Mobility (CAM) in Europe
4	5G PPP Software Network White Paper: "Cloud Native and Verticals' Services – 5G PPP projects analysis
5	5G PPP Architecture White Paper Consolidated version 3.0
6	5G PPP Test, Measurement and KPIs Validation Working Group White Paper – June 2019: "Validating 5G Technology Performance – Assessing 5G Architecture and Application Scenarios
7	5G PPP Automotive White Paper: "Business Feasibility Study for 5G V2X Deployment", Version 2.0
8	5G PPP Annual Progress Monitoring Report
9	On-Board procedure to ICT-17 infrastructure projects
10	5G network support of vertical industries in the 5G PPP ecosystem

### 5G PPP Project Papers

	Title	Reference Information
5G-CARMEN	"LightEdge: Mapping the Evolution of Multi-access Edge Computing in Cellular Networks"	IEEE Communications Magazine, to appear



**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.

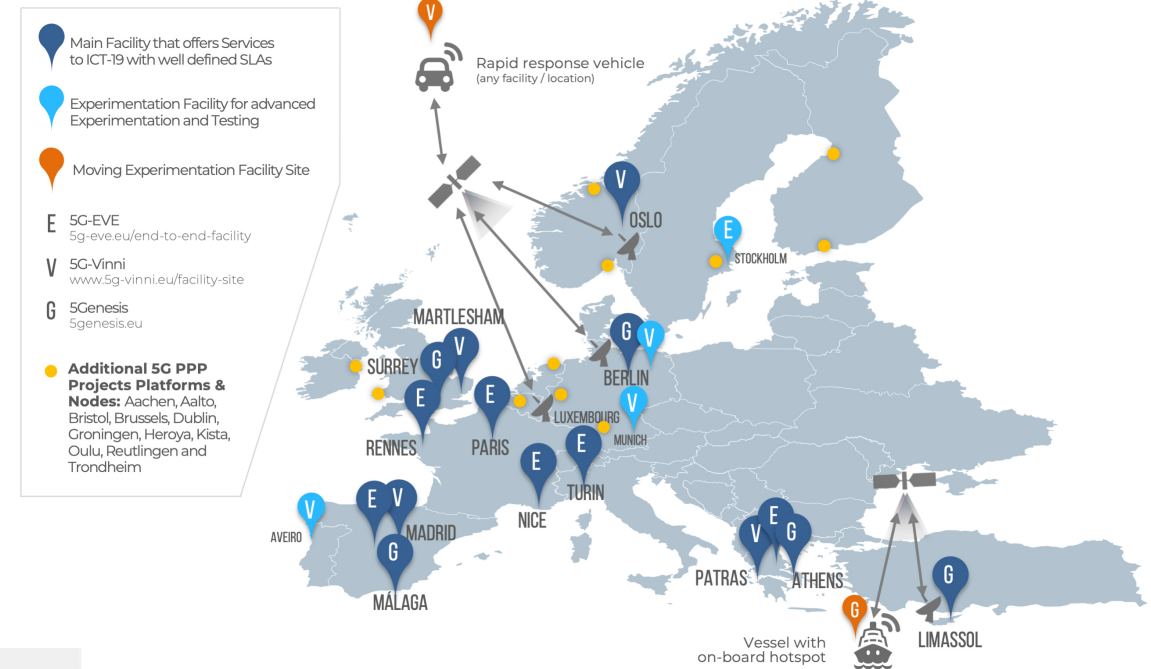
## Top technical documents

<https://5g-ppp.eu/top-ten-papers/>

# Produced results in the context of TB

## Work on cartographies

<https://5g-ppp.eu/5g-ppp-platforms-cartography/>



## Standards Tracker Online Tool

[Home](#) » Standards Tracker Online Tool

### Standards Tracker - an online collaboration tool for verticals and standards specialists

5G is bringing benefits to a growing number of industry verticals, spanning automotive, broadcasting and media, energy and utilities, healthcare, manufacturing, maritime, mining, public safety, satellite and rural connectivity. Investments in 5G should go hand in hand with inputs to the standards development process to ensure end-user requirements are properly met and that the capabilities, interfaces, and performance characteristics they need are accounted for.

This may sound like a daunting task for many verticals with little or no experience of working with a community of telecom industry specialists. This is where this Standards Tracker comes into play as a collaboration platform helping to lower entry barriers for verticals. It is designed to help specialists from industry verticals navigate their way through the various and often complex processes and stages, define technical requirements and maximise impacts with the resources available to them. It also guides standards specialists in embracing newcomers to create a bigger and more diverse community with potentially high impacts through mutual support.

Its focus for now is on 5G standardisation work within 3GPP as a leader in supporting vertical industries and the roles played by associations like the 5G Infrastructure Association, 5G Automotive Association, 5G Alliance for Connected Industry and Automation and Public Safety Communication Europe. As the 5G standards landscape continues to evolve, so will the tool.

If you are interested in joining this work as an industry vertical, association, regulator or policy maker, please get in touch with me: Stephanie Parker, Trust-IT: [s.parker@trust-itservices.com](mailto:s.parker@trust-itservices.com).

How to use the tool and join in

#### 3GPP for Vertical Industries

- ☐ Latest updates
- ☐ Meetings and Events
- ☐ Practical Guide
- ☐ Working Groups

#### Requirements Tracking

- ☐ Automotive
- ☐ Healthcare
- ☐ Broadcasting and Media
- ☐ Energy and Utilities
- ☐ Industrial Internet of Things
- ☐ Maritime
- ☐ Public Safety and Critical Communications
- ☐ Rail and Mobility
- ☐ Satellite

#### Mapping of Common Requirements

## Recent white papers

1. 5G Trials for Cooperative, Connected and Automated Mobility (CCAM) along European Cross-Border Corridors (October 2020)
2. 5G Strategic Deployment Agenda for Connected and Automated Mobility in Europe – (October 2020)
3. Empowering Vertical Industries through 5G Networks – (September 2020)
4. Business Validation in 5G PPP Vertical Use Cases – (June 2020)
5. On Board Procedure to 5G PPP Infrastructure Projects – (April 2020)
6. 5G PPP 5G Architecture White Paper – Consolidated Version – (February 2020)
7. 5G-PPP Software Network WG Paper: “Cloud-Native and 5G Verticals’ services” February 2020,
8. 5G network support of vertical industries in the 5G PPP ecosystem, February 2020



# Verticals White Paper: Demonstrated and planned 5G functionalities in verticals

5G Features	Automotive	Transportation	Media	Smart City	Healthcare	Smart Factories	Energy	Public Safety	(Air)Ports	Tourism	Agrifood
Network Slicing	X	X	X	X	X	X	X	X	X	X	X
Mobile Edge Computing	X	X	X	X	X				X	X	X
Functional Split in RAN		X	X								
Advanced Security	X			X					X		
Smart network management			X	X	X		X	X			
Location services & Context Awareness	X	X	X		X	X		X	X		
5G NR capabilities	X	X	X	X	X	X	X	X	X	X	X
Softwarization	X		X		X				X		
Service chaining		X	X		X						
Traffic steering			X								
Spectrum and Coverage	X	X	X								
Guaranteed QoS	X	X		X	X	X	X				

# Verticals White Paper: Demonstrated and planned 5G functionalities in verticals

5G Features	Automotive	Transportation	Media	Smart City	Healthcare	Smart Factories	Energy	Public Safety	(Air)Ports	Tourism	Agrifood
Network Slicing	X	X	X	X	X	X	X	X	X	X	X
Mobile Edge Computing	X	X	X	X	X				X	X	X
Functional Split in RAN		X	X								
Advanced Security	X			X					X		
Smart network management			X	X	X		X	X			
Location services & Context Awareness	X	X	X		X	X		X	X		
5G NR capabilities	X	X	X	X	X	X	X	X	X	X	X
Softwarization	X		X		X				X		
Service chaining		X	X		X						
Traffic steering			X								
Spectrum and Coverage	X	X	X								
Guaranteed QoS	X	X		X	X	X	X				

# Verticals white paper: Lessons learned

- 5G networks are not only about faster and more reliable networks.
- 5G is bringing on a level of flexibility in the deployment of new services, which have a diverse set of characteristics, for which 4G networks would not be able to support.
- Researchers are enabled to create rather novel services, parts of which can be even implemented over different network slices.
- 5G networks have been designed to be fully modular and allow the dynamic chaining of virtual functions and allocation of resources.
- These characteristics are the catalyst for the creation of an innovation ecosystem that is expected to shape the full digitization of vertical industries.

# Upcoming white papers & TB eWorkshop

1. Edge computing for 5G networks
2. AI & ML in cellular networks
3. Indoor 5G networks

The next TB eWorkshop is being planned for the 9<sup>th</sup> & 10<sup>th</sup> of December 2020