

### 5G in European Context

# Energy meets 5G Mobile Networks Expert meeting

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## 5G European Contestination Service Ser



#### 5G Public Private Partnership (5G PPP) Research

#### **Programme**

**Addressed Next generation Network systems** 

Up to €700 million of public funding

To be matched by expected private funding of about €3.5 billion

#### Covers policy areas as well:

**Pre-standardisation** 

**Spectrum** 

**International cooperation** 

#### Multi Stakeholders approach

Vision and technological requirements: <a href="https://5g-ppp.eu/wp-content/uploads/2015/02/5G-Vision-Brochure-v1.pdf">https://5g-ppp.eu/wp-content/uploads/2015/02/5G-Vision-Brochure-v1.pdf</a>

Verticals papers, see 5G-PPP web site

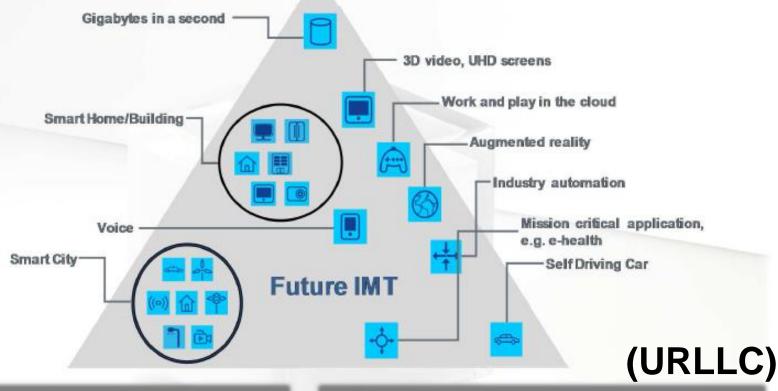
**Working Groups** 

#### 5G in a Nutshell





#### (eMBB) 1.Enhanced Mobile Broadband



(mMTC)

2.Massive-Machine Type Communication

3.Ultra-reliable and Low Latency Communication

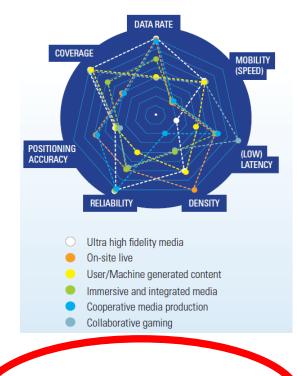
#### **FACTORIES** DATA RATE COVERAGE MOBILITY (SPEED) **POSITIONING** (LOW) ACCURACY LATENCY RELIABILITY DENSITY Time-critical process control Non time-critical factory automation Remote control Intra/Inter-enterprise communication Connected goods EHEALTH

# POSITIONING ACCURACY RELIABILITY DENSITY/ NB OF DEVICES Assets and Interventions management Robotics Remote monitoring Smart Medication

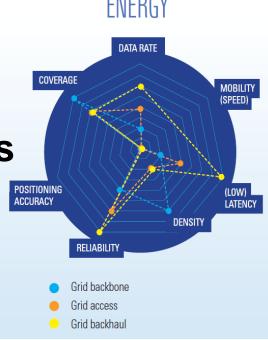


**Vertical Requirements** 

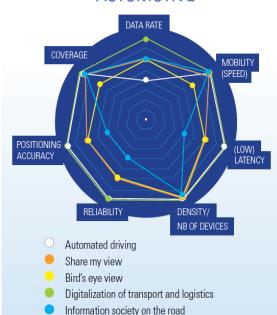
MEDIA & ENTERTAINMENT



Source: White Paper, "5G Empowering the Vertical Industries, February 2016.



#### **AUTOMOTIVE**





#### **Preparing** 5G PPP Phase 3 (WP18-20)

Survey on user needs, studies on applications/services Early 5G introduction Lower frequency bands

Later 5G introduction Higher frequency bands

Phase 3 b) Integrated Verification Trial services/functions

radio+network+applications -

Demo/Trial - Integration radio+ network

Phase I Core Techs

Phase 2 - Demos **PoC- Core Techs** Components

Work in Progress

2022 2017 2020 2021 Y2015 2016 2018 2019



## Thank YOU

And wishing you a successful workshop to help us bridge the Telecom/5G -Energy digital Interests!