Very High Capacity and 5G Networks

Spectrum and Infrastructure Policy for 5G

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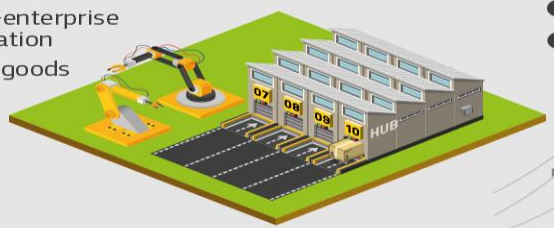
5G Opportunities and challenges

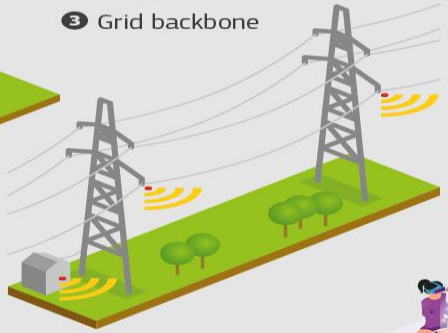
FACTORIES OF THE FUTURE

1. Time-critical process control
2. Non time-critical factory automation
3. Remote control
4. Intra/Inter-enterprise communication
5. Connected goods



ENERGY

1. Grid access
2. Grid backhaul
3. Grid backbone



e-HEALTH

1. Assets and interventions management in Hospitals
2. Robotics
3. Remote monitoring
4. Smarter medication

AUTOMOTIVE

1. Automated driving
2. Share My View
3. Bird's Eye View
4. Digitalisation of Transport and Logistics
5. Information Society on the road

MEDIA & ENTERTAINMENT

1. Ultra High Fidelity Media
2. On-site Live Even Experience
3. User/Machine Generated Content
4. Immersive and Integrated Media
5. Cooperation Media Production
6. Collaborative Gaming

5G Action Plan: European strategy for 5G introduction

Early 5G launch in selected areas → 2018

Commercial launch of 5G services in at least one major city in all MS → 2020

5G in all urban areas and along main transport paths → 2025

Coordinated launch throughout single market

Comprehensive roll-out with geographical and sectorial focus

European Electronic Communications Code

The Code promotes investment and timely deployment of 5G networks and services

- **Harmonised principles and criteria** for authorisation regimes and sharing conditions
- A **reference framework** on conditions and fees for tights of use and design of assignment processes
- A **peer review** to achieve internal market **consistency** on spectrum authorisation by building best practice
- Promotion of spectrum **trading and leasing**
- **Coordinated timing** of 5G spectrum assignment
- **Common** assignment **deadline** for **5G Pioneer Bands**: **December 2020**
- **Sufficiently long duration of rights** for 5G harmonised spectrum: **20 years** of regulatory predictability
- Facilitation of **small cells deployment** and **RLAN access**: removal of administrative obstacles and undue restrictions

European 5G Observatory

European Commission

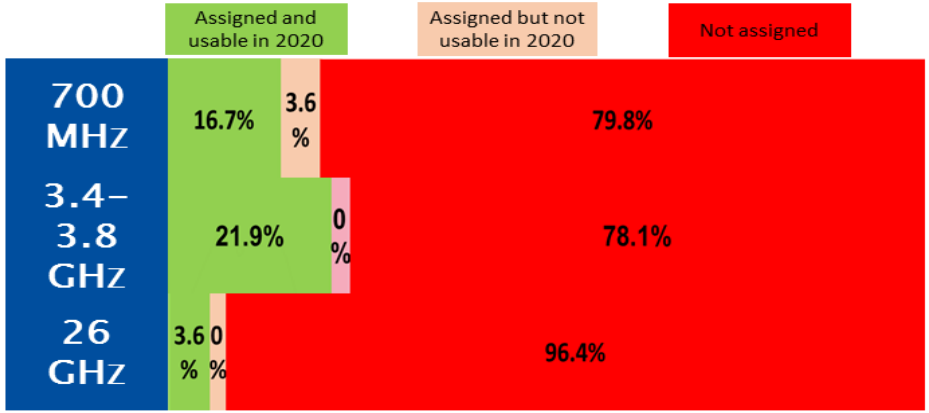
5G Observatory - progress towards 5G market introduction

10 5G roadmaps and national plans

10 published national 5G roadmaps:

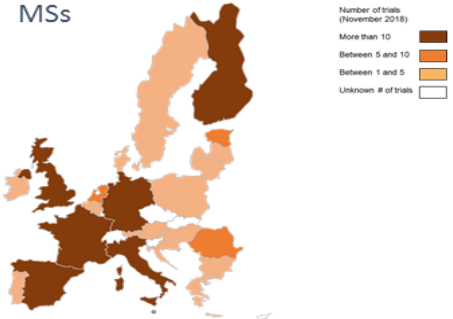
- Austria
- Estonia
- Finland
- France
- Germany
- Luxembourg
- Netherlands
- Spain
- Sweden
- UK

13.9% 5G PIONNER SPECTRUM



147 5G TRIALS

147 5G trials in the 28 MSs



35 5G CITIES

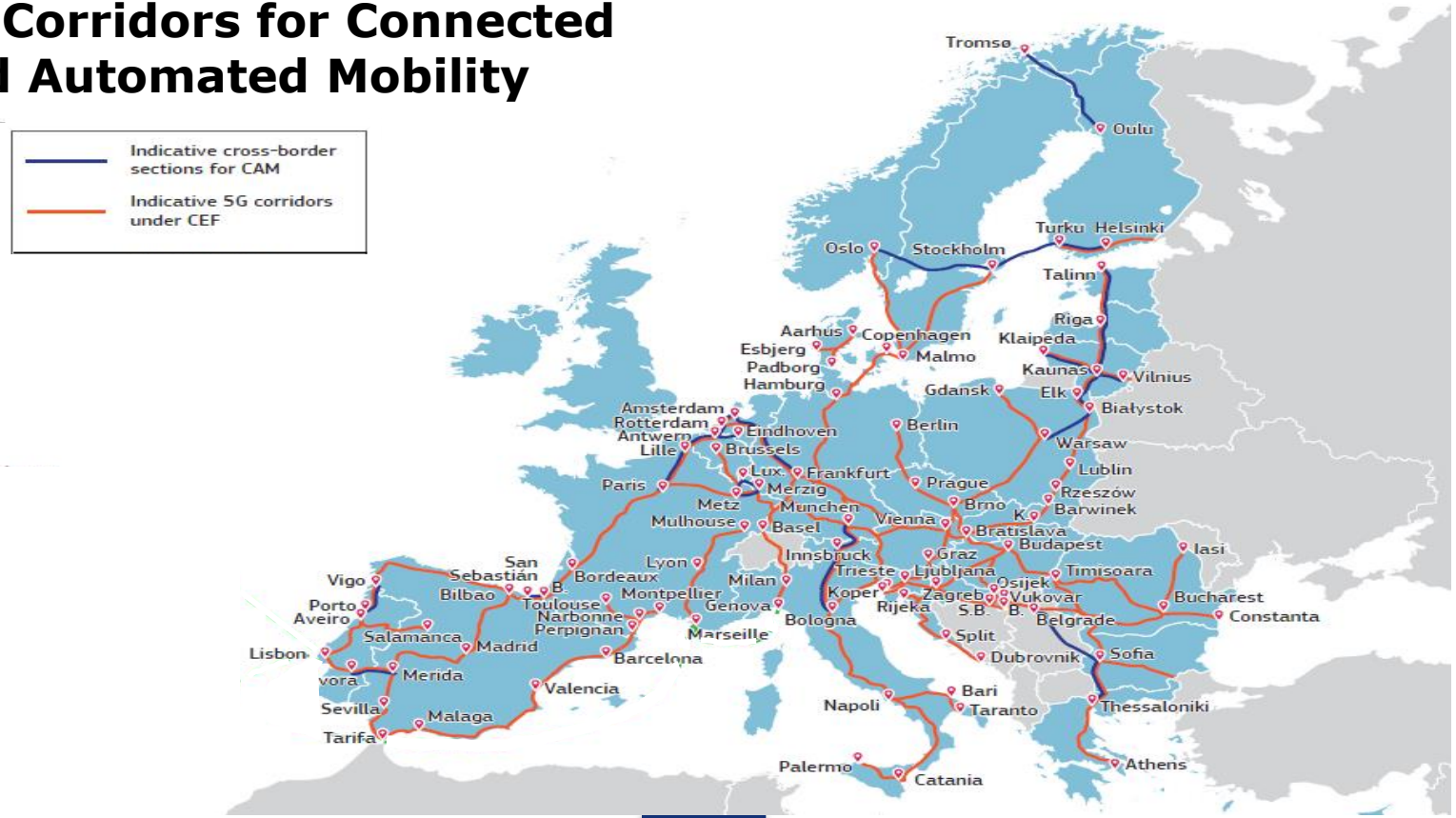
35 5G-enabled Cities identified

10 5G CORRIDORS

10 "digital cross-border corridors" established

European Commission

5G Corridors for Connected and Automated Mobility



Thank you!