

EU Spectrum Policy

Andreas Geiss, Head of Unit*

Spectrum Policy

*Directorate General for Communications Networks, Content
and Technology (DG CONNECT), European Commission*

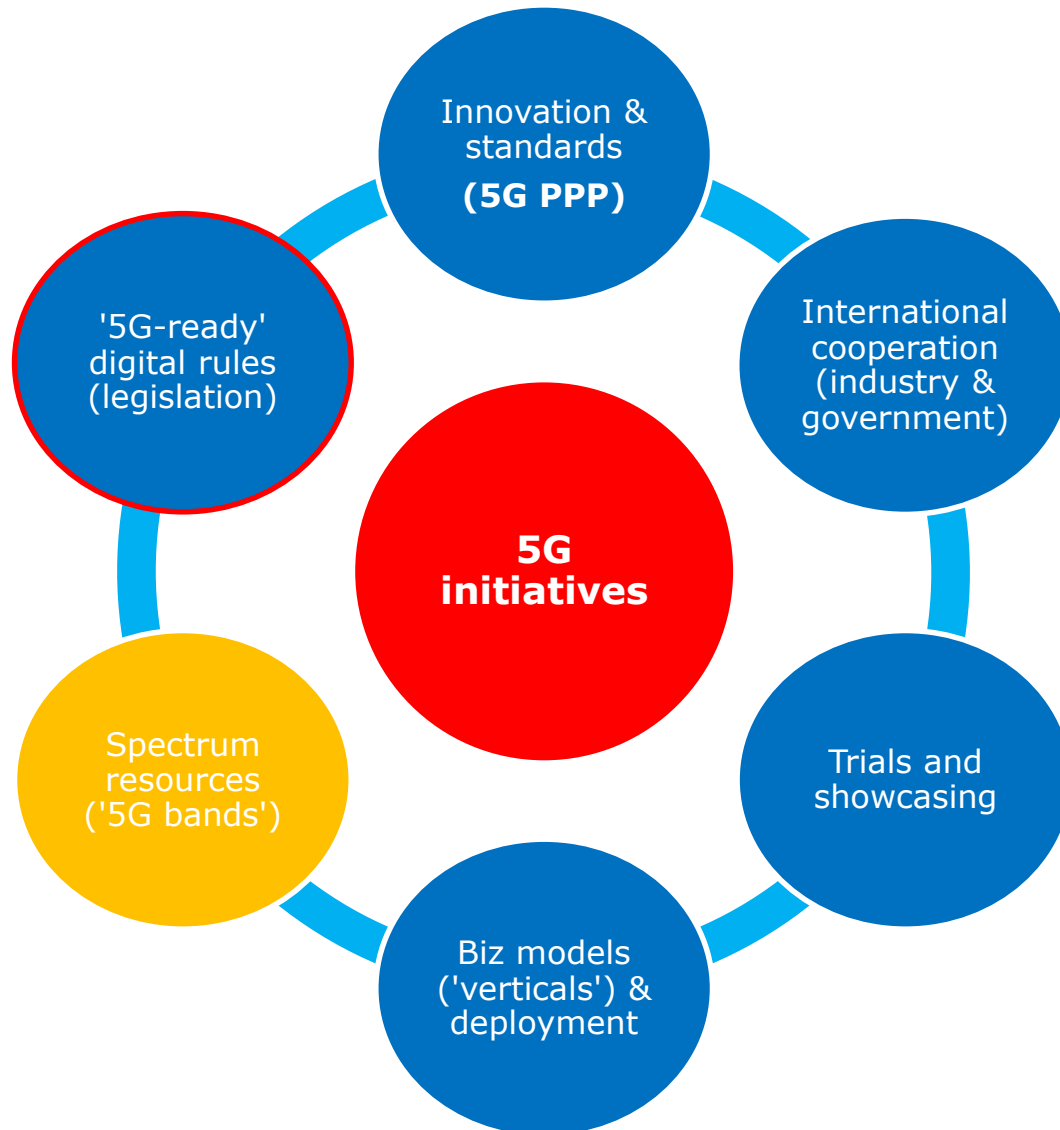
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- ✓ **Ensure most advanced connectivity for all citizens and EU economy:**
 - ✓ Ensure best coverage solutions; prevent cross-border interference
 - ✓ Promote end-user access to Wi-Fi based connectivity
 - ✓ Ensure service quality by improved competition
- ✓ **Create an investment-friendly environment to support 5G; more predictability and legal certainty throughout the EU :**
 - ✓ 25 year license duration
 - ✓ Facilitate timing coordination of spectrum authorisations
 - ✓ Increase consistency of assignment processes through a peer review mechanism
 - ✓ More transparent and predictable procedures and conditions for spectrum authorisation, renewal and trading/leasing
 - ✓ Facilitate rapid small-cell deployment

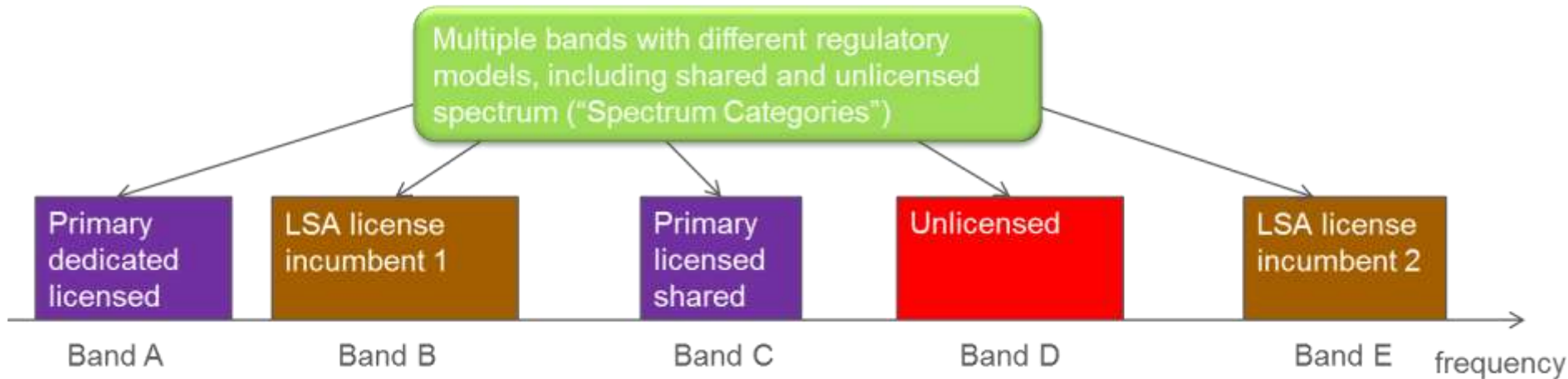
- ✓ **Increase spectrum use efficiency:**
 - ✓ Better combination of general authorisations and individual rights
 - ✓ Clear rules to support spectrum sharing solutions
 - ✓ "Use it or lose it" tools to counter-balance long rights durations

- ✓ **More consistency in the EU and subsidiarity:**
 - ✓ RSPG strategic advise prior to any coordination measure
 - ✓ Effective solutions to cross-border interference problems
 - ✓ Encourage joint authorisation processes by Member States
 - ✓ Spectrum use flexibility in view of specific national circumstances

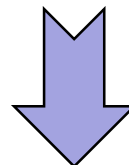
5G and Spectrum Policy



Spectrum: Future Landscape



Dedicated licensed spectrum complemented with various forms of shared spectrum



"Toolbox" of different sharing enablers required

In order for 5G system to work under such scenarios

Spectrum Sharing

In the Report from the Commission on the Radio Spectrum Inventory (2014) the Commission "considers that a sustainable way to satisfy spectrum demand in the medium and long term is to invest more time and resources in identifying and developing more sophisticated spectrum sharing concepts", which include

- Licensed Shared Access (LSA) assignment;
- Geographical spectrum sharing with devices linked to geo-location databases; and
- Densification, increase in spectrum re-use and spectrum sharing between operators

Example: Italian Pilot on Licensed Shared Access (LSA)

Location: 201 viale America, Rome
Duration: May 2015 - September 2016

Participants
EC Joint Research Centre
Italian Ministry for Economic Development
Fondazione Ugo Bordoni
Nokia NSN
Red Technologies
Fairspectrum
Cumucore
Poste Mobile
Athonet

LSA Pilot - Objectives

- **To support the objective of efficient use of spectrum**
- **To test the CEPT and ETSI frameworks on spectrum sharing with focus on 2.3-2.4 GHz band (ref: EC Mandate of March 2014)**
- **To validate the LSA sharing framework for the Italian NRA**
- **Applicability of LSA approach to other frequency bands ?**
- **Use cases: Fixed Service; PMSE; Telemetry**