



Workshop Coexistence challenges UHF band 12 December 2014

Spectrum policy perspective in the UHF band and 700 MHz band

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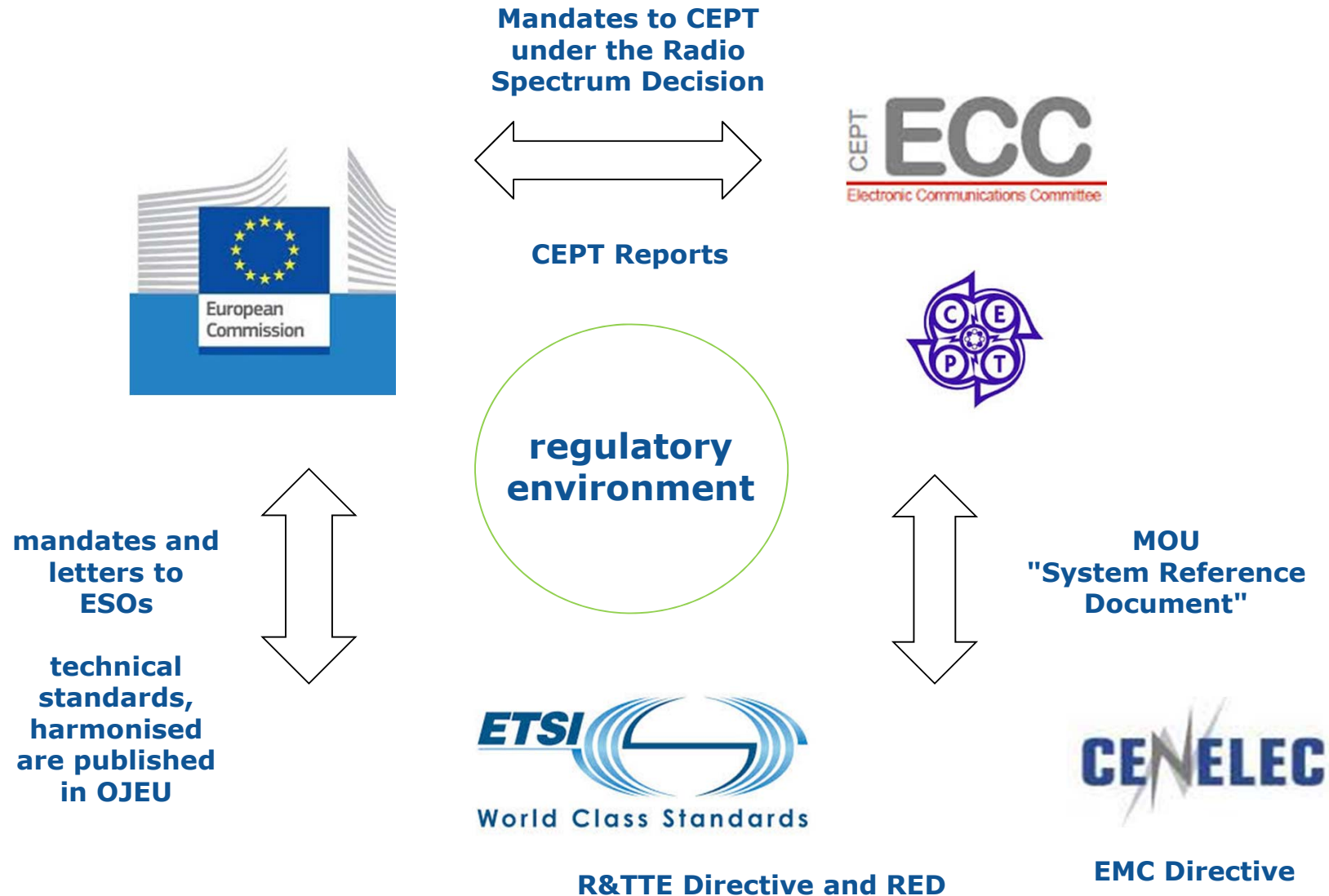
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* *Disclaimer: the views expressed are those of the author and cannot be regarded as stating an official position of the European Commission.*

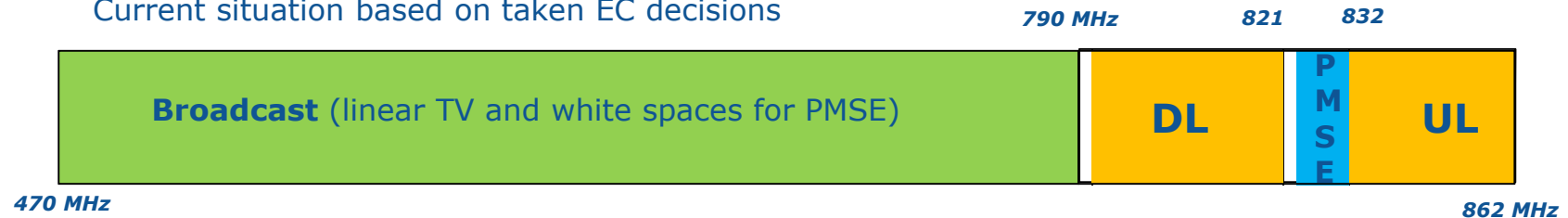


EU Radio Regulatory System



UHF TV Band and Digital Dividend

Current situation based on taken EC decisions



- **Two Mandates to CEPT**

1) *On technical considerations regarding harmonisation options for the digital dividend, 30 January 2007*

2) *On technical considerations regarding harmonisation options for the digital dividend in the European Union, 3 April 2008*

- **CEPT Report 29** on 'guidelines on cross border coordination issues between mobile services in one country and broadcasting services in another country' (June 2009)
- **CEPT Report 30** on 'the identification of common and minimal (least restrictive) technical conditions for 790-862 MHz for the digital dividend in the European Union' (October 2009)
- **CEPT Report 31** on 'frequency (channelling) arrangements for the 790-862 MHz band' (October 2009)



UHF TV band and Digital Dividend

Taking into account the ECC work in response to the EC Mandates on Digital Dividend, the European Commission adapted the following deliverables:

- *European Commission Recommendation 2009/848/EC on "facilitating the release of the digital dividend in the European Union"*
- *Commission Decision 2010/267/EU on "harmonised technical conditions of use in the 790-862 MHz frequency bands for terrestrial systems capable of providing electronic communications services in the European Union"*

Further EC deliverable includes UHF spectrum:

- *Commission Decision 243/2012/EU on "establishing a multiannual radio spectrum policy programme " (RSPP), 14 March 2012*

EU policy priorities

EU Policy objectives

- *Encourage efficient management and use of spectrum to best meet the increasing demand for use of frequencies reflecting the important social, cultural and economic value of spectrum*
- *Seek to allocate sufficient and appropriate spectrum in a timely manner to best meet the increasing demand for wireless data traffic*
- *Fostering access to broadband for all Union citizens at a speed of not less than 30 Mbps by 2020*

Ensure unity of two EU pillars

- *Thriving digital economy*
- *Sustainable European Audio-visual Model*

Create EU frame for managing national diversity

- *Develop coherent solutions for the future use of the UHF band*

Programme Making and Special Events

Mandate to CEPT on 'technical conditions Regarding spectrum harmonisation options for wireless radio microphones and cordless video-cameras (PMSE equipment), December 2011

- ***CEPT Report 32*** on 'Recommendation on the best approach to ensure the continuation of existing Programme Making and Special Events (PMSE) services operating in the UHF (470-862 MHz), including the assessment of the advantage of an EU-level approach (October 2009)
- ***CEPT Report 50*** (and its addendum) on 'Technical conditions for the use of the bands 821-832 MHz and 1785-1805 MHz for wireless audio microphones in the EU' (March 2013)
- ***CEPT Report 51*** (and its addendum) on 'Technical conditions for ensuring the sustainable operations of cordless video-cameras (November 2013)

Taking into account the ECC work in response to the EC Mandates on PMSE, the European Commission adapted the following deliverable:

- ***Commission Implementing Decision 2014/641/EU*** on 'harmonised technical conditions of radio spectrum use by wireless audio programme making and special events equipment in the Union, 1 September 2014

UHF Band, coexistence issues II

*Attention given to coexistence, in particular **LTE technology and radio broadcast receivers (television sets) and DVB-T/DVB-C tuners***

- ***EC letter of 30.11.2009** requested a number of actions in the area of EMC standardisation necessary to accompany the deployment of electronic communication services in the 800 MHz band*
- ***EC letter of 13.02/2013** requested for additional EMC and radio standardisation work supporting implementing of the 800 MHz Decision*

*Following those letters, a **joint CENELEC-ETSI Working Group on Digital Dividend issues** initiated work for revision of standards supporting the process of coexistence (revision of EN 55020)*

*Moreover, coexistence is addressed in **ECC Report 207** on adjacent band coexistence of SRDs in the band 863-870 MHz in light of the LTE usage below 862 MHz (January 2014)*

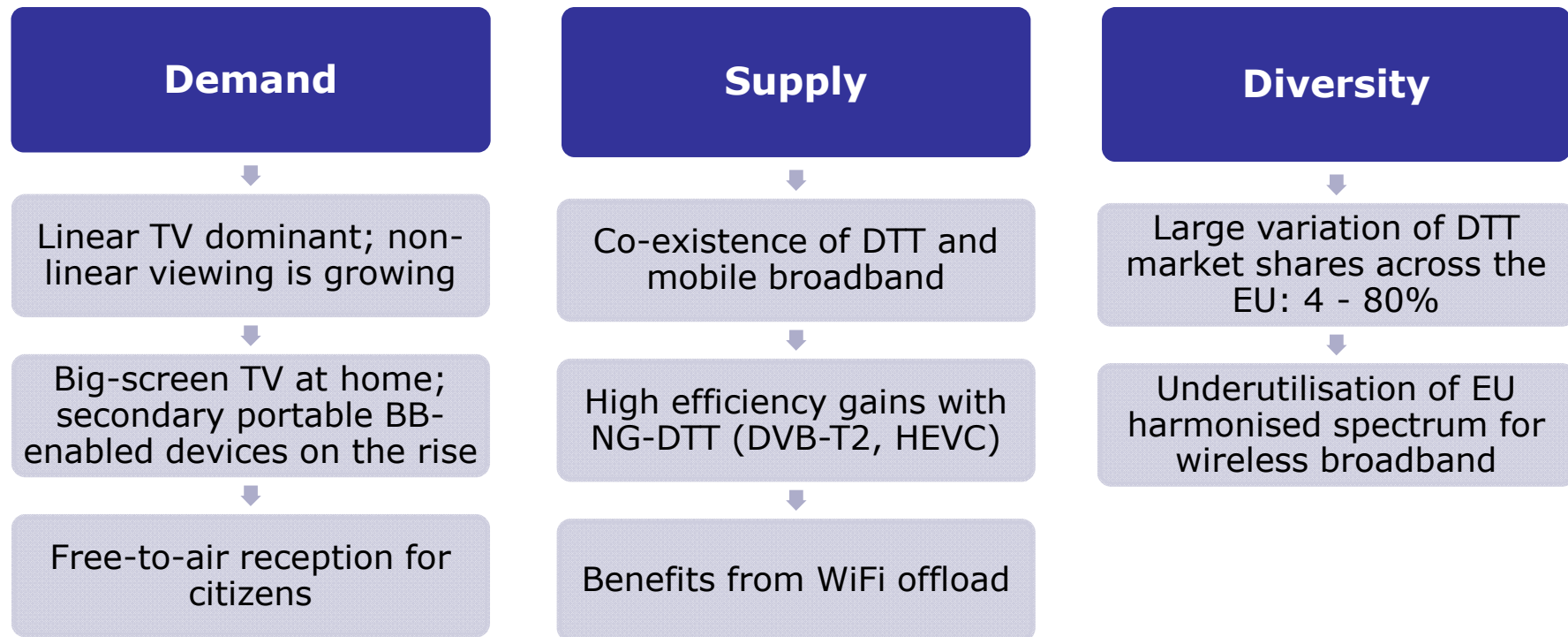
Future of the UHF band

Evolution on the use of the UHF band is under study:

- **Report to the European Commission from Mr Pacal Lamy** on the results of the work of the High Level Group on the Future Use of the UHF Band (470-790 MHz) presented to VP Ms Kroes on 1 September 2014
- **Draft RSPG Opinion** on a long-term strategy on the future use of the UHF band (470-790 MHz) in the European Union (RSPG14-585(rev1) under public consultation)
- **ECC Report 224** on the Long Term Vision for the UHF broadcasting band (approved 28 November 2014)
- **Commission position in time for WRC-2015**

Agreed Results of the HLG

FACT SHEETS



TRANSITION ROADMAP for release of the 700 MHz band



Lamy's recommendation I: "2020-2030-2025" model for the UHF band (470-790 MHz)

For the mobile sector

- ✓ *Release of the 700 MHz band **in 2020** (+/- 2 years)*

For the DTT/broadcasting sector

- ✓ *Safeguards for using sub-700 MHz spectrum **until 2030***

For all: predictable and forward-looking framework

- ✓ *Transition roadmap*
- ✓ *Stock-taking of market developments **by 2025***
- ✓ *Coordinated EU position for **WRC-15 and beyond***



Lamy's recommendation II: "Flexibility" option for the 470-694 MHz sub-band

Rationale

- ✓ *Different DTT penetration levels across the EU*
- ✓ *Ensure coherent, adaptable and efficient spectrum use*
- ✓ *Allow additional use for wireless broadband*

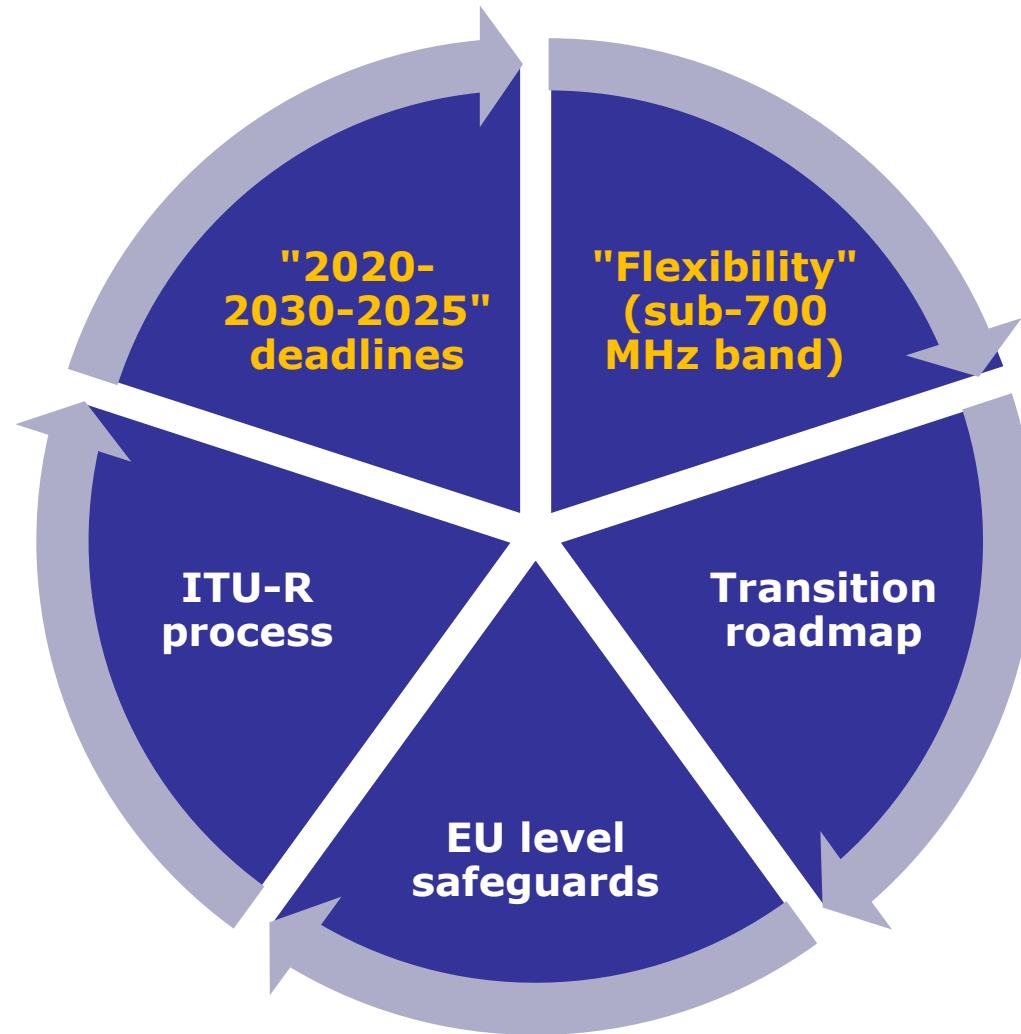
Downlink-only use for wireless broadband

- ✓ *Subject to national situation*
- ✓ *Ensure primacy for DTT use*
- ✓ *Retain opportunities for PMSE use*
- ✓ *Facilitate innovation and frequency coordination*

Outlook

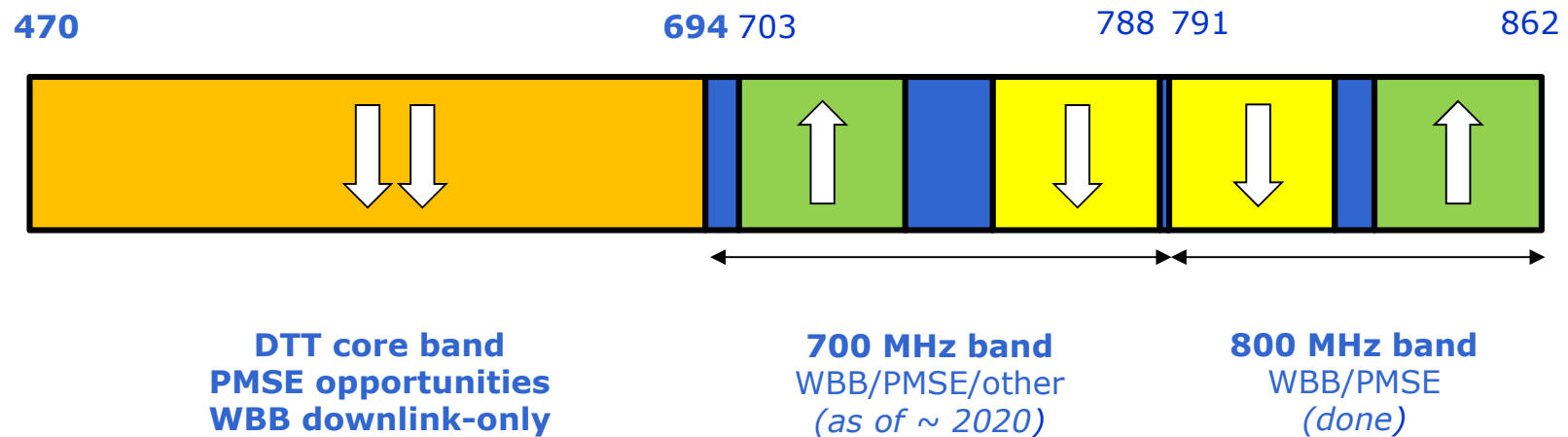
- ✓ *Studies on scenarios and conditions*
- ✓ *Input to ITU process (benchmark!)*

The overall scope of action



Considered Long-term solution in Lamy's Report (at least until 2030)

UHF broadcasting band: *possible* evolution of the 470-862 MHz



UHF Spectrum, 700 MHz Band

A co-primary use (broadcast and WBB) of the 700 MHz spectrum is decided on the WRC-2012 at ITU level and will be discussed further on the WRC-15

- ***An EC Mandate to CEPT was issued on the 700 MHz band, 'to develop harmonised technical conditions for the 694-790 MHz frequency band in the EU for the provision of wireless broadband electronic communication services and other uses in support of EU Spectrum Policy priorities' (March 2013).***
- ***CEPT Report 53 (A) on the 700 MHz band was approved on 28 November 2014 by the ECC***

Standards as an instrument to contribute to the coexistence challenges

*Noting the evolution of the use of the UHF band, in particular the 700 MHz band in several Member States, **further challenges of coexistence** of different types of equipment in the UHF band **should be addressed***

The development of standards and other possible measures could contribute to efficient use of spectrum, taking into account both efficient spectrum management and increasing immunity of receivers to interference

Thank you for your attention !

*Link to the brochure 'The European regulatory environment for
radio equipment and spectrum'*

http://www.cept.org/files/1051/ECC_ETSI_2011.pdf

Link to the Lamy report:

<https://ec.europa.eu/digital-agenda/en/news/report-results-work-high-level-group-future-use-uhf-band>