



# PPDR BB Spectrum Situation

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Chair WG Spectrum Harmonisation

# Support for PPDR BB work

- User organisations and government operators
  - Police of Sweden,
  - Mol + Police of Finland,
  - Mol + Police of Austria,
  - Police of Belgium,
  - National Police of Italy,
  - Police of Netherlands,
  - Mol of France,
  - Mol of the Czech Republic,
  - Mol of Croatia,
  - Mol of Macedonia,
  - Police of Cyprus,
  - Police of Ireland (An Garda Síochána),
  - Directorate for Emergency Communication (DNK) of Norway,
  - The Swedish Civil Contingencies Agency (MSB),
  - Suomen Virveverkko Oy (Operator Finnish VIRVE PPDR network),
  - ASTRID S.A. (Operator Belgian PPDR network).





# BB-PPDR

- World – ITU - 196 Countries
- CEPT – 48 Countries
- EU – 28 Countries
- National Authorities – 1.



# PPDR BB spectrum - World

- WRC 2015 – Just completed

RESOLUTION 646 (REV.WRC-15)

**Public protection and disaster relief**

The World Radiocommunication Conference (Geneva, 2015),

*considering*

- a) that the term “public protection radiocommunication” refers to radiocommunications used by responsible agencies and organizations dealing with maintenance of law and order, protection of life and property and emergency situations;

# Resolves

- to encourage administrations to use harmonized frequency ranges for PPDR to the maximum extent possible, taking into account the national and regional requirements and also having regard to any needed consultation and cooperation with other concerned countries;



# Resolves

- to encourage administrations to consider parts of the frequency range 694-894 MHz, as described in the most recent version of Recommendation ITU-R M.2015, when undertaking their national planning for their PPDR applications, in particular broadband, to achieve harmonization, taking into account *emphasizings c) and e) above*;

# BB-PPDR spectrum – CEPT 48

- Reports 239, 240 & 218 are now approved.
  - 700 primary band for harmonisation measure
  - 400 adding additional opportunity on national level
- Report 53/60 to EC on 700 Mandate.
  - Being finalized March 2016
- ECC Harmonisation Measure for BB-PPDR has started.





CEPT  
**ECC**  
Electronic Communications Committee



## ECC Report 240

Compatibility studies regarding Broadband PPDR and other radio applications in 410-430 MHz and 450-470 MHz and adjacent bands

Approved 30 September 2015



CEPT  
**ECC**  
Electronic Communications Committee



## ECC Report 239

Compatibility and sharing studies for BB PPDR systems operating in the 700 MHz range

Approved 30 September 2015

CEPT  
**ECC**  
Electronic Communications Committee



## ECC Report 218

Harmonised conditions and spectrum bands for the implementation of future European Broadband Public Protection and Disaster Relief (BB-PPDR) systems

Approved October 2015

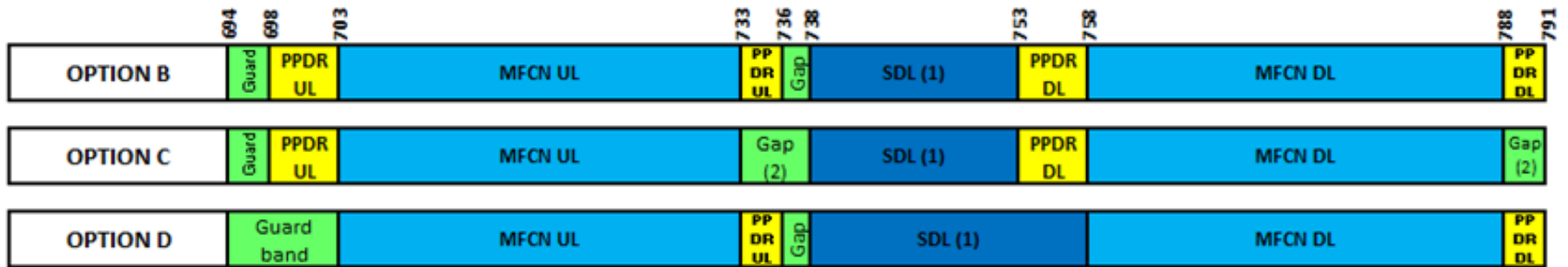


# Spectrum options for BB-PPDR

## PPDR in spectrum harmonised for MFCN (ECC/DEC(15)01)



## PPDR dedicated spectrum:



## PPDR in a combination of MFCN and dedicated spectrum:

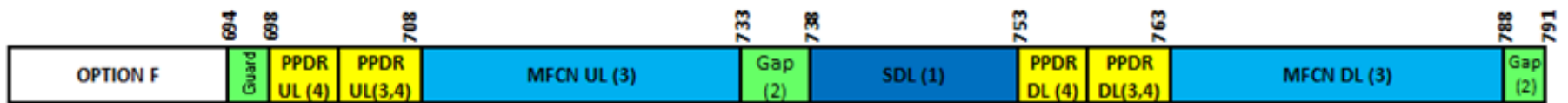


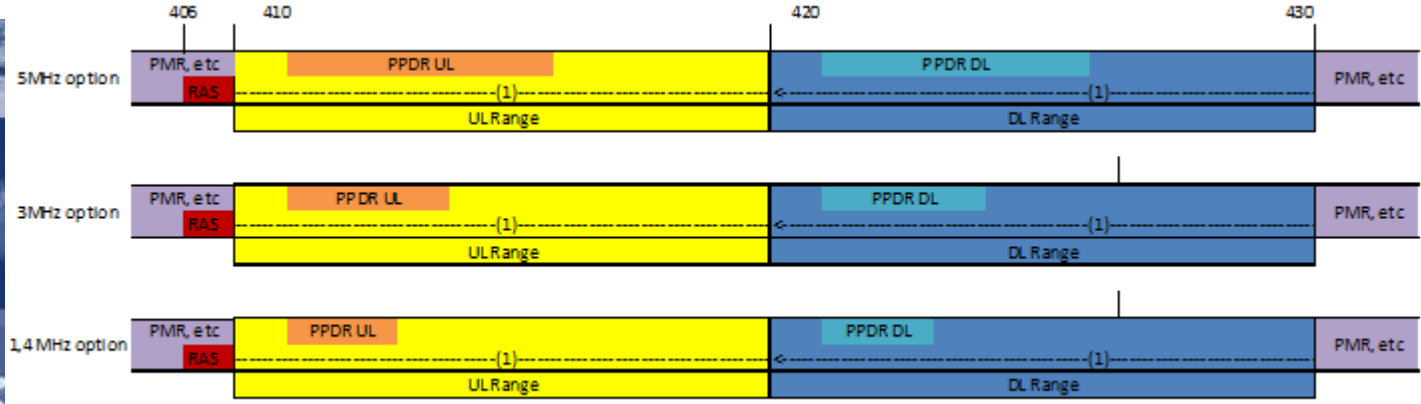
Figure 2: 700 MHz Options for BB-PPDR



0.6 DISCARDED 700 MHz OPTION E

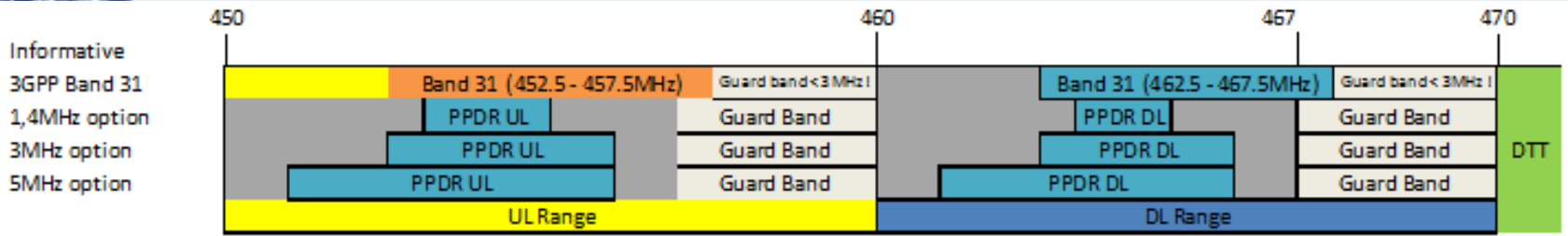


Figure 3: Discarded 700 MHz Option E



(1) possible tuning range

No LTE Band  
Heavy PMR usage  
Radio Astronomy  
MIL Radar





*Article 4*

When Member States designate and make available radio spectrum in the 700 MHz frequency band for use other than stipulated in Article 3, they shall do so, on a non-exclusive basis and in compliance with the respective parameters set out in the Annex, for one or more of the following options:

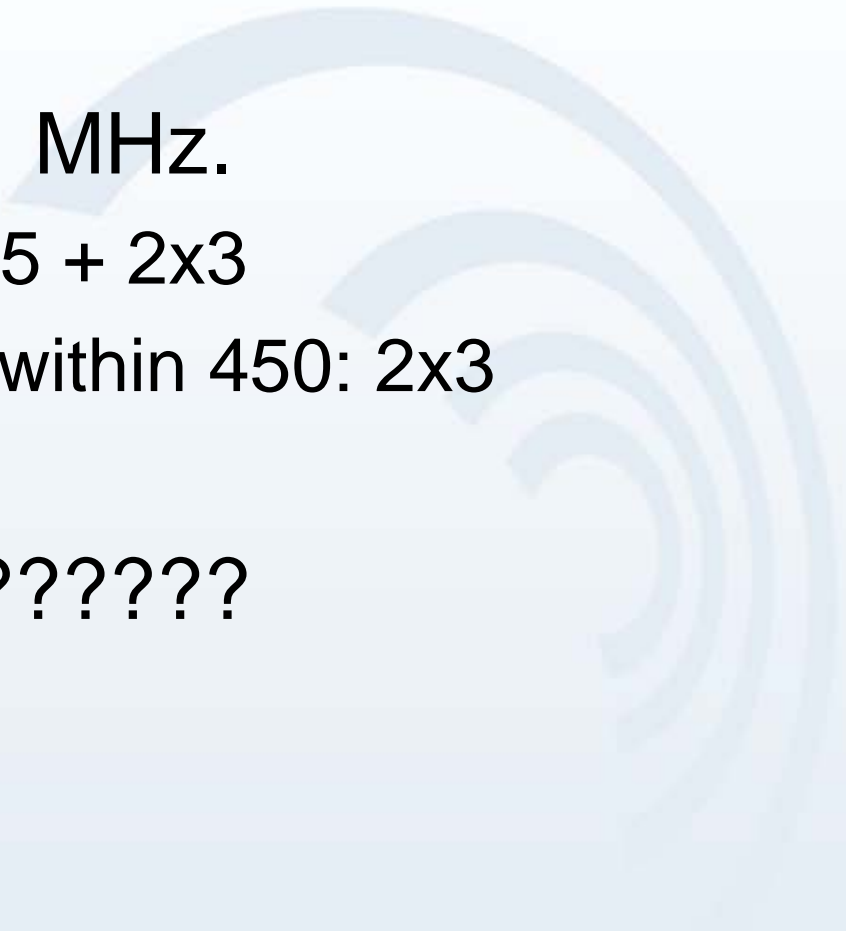
1. terrestrial systems capable of providing electronic communications services in the 738-758 MHz frequency band or parts of this band;
2. wireless audio PMSE equipment in the frequency bands 694-703 MHz and/or 733-758 MHz on a non-interference and non-protection basis;
3. PPDR radio communications in the frequency bands 698-736 MHz and 753-791 MHz;
4. 'Internet of Things' radio communications in the frequency bands 733-736 MHz and 788-791 MHz on a non-interference and non-protection basis.

**Subject: Draft Commission Implementing Decision on the harmonisation of the 694-790 MHz frequency band for systems capable of providing electronic communications services and other uses in the Union**



# PPDR BB spectrum – Country x

- France – 2 x11 MHz.
  - Within 700: 2x5 + 2x3
  - Planning also within 450: 2x3
- Your Country ????????



# Support for PPDR BB work

- Industry
  - Motorola Solutions,
  - Selex ES,
  - Airbus D&S,
  - Sepura,
  - DBK A/S,
  - Thales,
  - Hytera,
  - Ericsson,
  - Nokia
- Sector Associations
  - TCCA (TETRA + Critical Communications Association),
  - PSC-E (Public Safety Communication Europe),
  - FEU (Federation of the European Union Fire Officer Associations)





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