

PMSE Workshop

Current and Future Use of Spectrum by Audio PMSE

The UHF-Band in Austria

Franz Ziegelwanger

Paris, 7th September 2015

Use of the UHF band for Audio PMSE

Content:

- Importance of Audio PMSE applications in Austria
- 470 – 694 MHz, 700 MHz duplex gap, 823 – 832 MHz for Audio PMSE
- Plan for implementation of the 700 MHz band in Austria: future for Audio PMSE
- L-Band for Audio PMSE
- Other bands usable for Audio PMSE

Importance of Audio PMSE applications for Austria

- GE06: Austria has to coordinate with up to 13 neighbouring-/ and affected countries
- re-planning of UHF band may influence PMSE usage
- thousands of licences for Audio PMSE using white spaces in UHF 470-790 MHz
 - open air festivals near the Austrian border during summer time
 - lack of spectrum is a problem already today
- dense usage on basis of GE06 especially in “Hot Spots” difficult, if UHF spectrum for PMSE is further reduced



470 – 694 MHz, 700 MHz duplex gap, 823 – 832 MHz for Audio PMSE

- frequency coordination with neighbouring countries to serve future demand for digital terrestrial television
- further importance of terrestrial broadcasting platform
- guaranteed use for DTT for at least 10 years below 694 MHz
 - => therefore also secured for PMSE
 - => additionally foreseen further measures taking into account Decision 2014/641/EU

Plan for implementation of the 700 MHz band in Austria: future for Audio PMSE

- currently used for DTT:

DVB-T (2 nationwide, 1 regional MUX): licenses expire by 2016 (renewal in 2015)

DVB-T2 (3 nationwide MUX): licenses granted in 2013

- PMSE use (mainly wireless microphones)

- plan for MFCN starting from 2020 -> 700 MHz band for wireless broadband

- ECC/DEC(15)01: MFCN frequency arrangement ... including 'non MFCN' options such as ... PMSE ... for the use of the duplex gap of the MFCN FDD 2x 30 MHz...

- no harmonisation decision taken on the use of the frequency gap

- => Austria: maintain the use for PMSE

L-Band for Audio PMSE

- 1492 – 1518 MHz implemented in Austria since 2011, future usability also pending on outcome of WRC-15
 - not used by Audio PMSE up to now – availability of equipment ?
- 1350 – 1400 MHz under study in CEPT for PMSE tuning range, implementation also foreseen in Austria
 - availability of equipment within this tuning range to be provided by industry by ...?

Other bands usable for Audio PMSE

- 174 - 216 MHz: still in use by older equipment, 248 licences
- 230 – 250 MHz: still very intensive use, more than 20.000 licences in the field, but mainly not used by “professional” users
- 863 – 865 MHz: very intensive usage in Austria, licence exempt
- 1785 - 1805 MHz: less equipment available – no visible use in Austria up to now...
- Video PMSE becomes another topic for discussion (2.3 GHz etc. ...)

Franz Ziegelwanger

Division Telecommunications and Post

Director technical

franz.ziegelwanger@bmvit.gv.at

bmvit – Austrian Federal Ministry for Transport, Innovation and Technology

Radetzkystr. 2

A-1030 Vienna

www.bmvit.gv.at