EUROPEAN COMMISSION
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Resources Based, Manufacturing and Consumer Goods Industries
Engineering Industries

Brussels,
ENTR

NOTE TO THE FILE

Subject: Workshop: Coexistence challenges of the evolution in the use of the UHF band

Following LTE deployment in the 800 MHz band ('the digital dividend') 'stakeholders are challenged by finding solutions for the coexistence between existing technology in the same band and in adjacent bands and the technology used by new communications services. Noting this development, the Commission services believe that stakeholders should discuss challenges in a timely manner and also reflect on coexistence in the UHF TV broadcasting band taking into account the Lamy Report[1]. Work should start with the 700 MHz band focusing on possible measures, including consideration of the need for generic standards applicable in the 700 MHz band. In that context it would be appropriate to pay attention to "the lessons learned" from the standardisation efforts with respect to the 800 MHz band. The workshop is intended to share views among the participants on this issue, which could take into account whether facilitating coexistence of services requires further mandating with regard to standardisation.

CONTEXT FOR THE WORKSHOP

Responding to the Commission's Digital Agenda for Europe and to the Europe 2020 strategy for smart, sustainable and inclusive growth, the Radio Spectrum Policy Programme (RSPP) reflects the importance of the availability and efficient use of spectrum for the establishment of an internal market. The policy objectives of the RSPP include avoidance of harmful interference or disturbance by other radio or non-radio devices, inter alia, by facilitating the developments of standards which contribute to the efficient use of spectrum, and by increasing immunity of receivers to interference, taking particular account of the cumulative impact of the increasing volumes and density of radio devices and applications. Electromagnetic compatibility of equipment to ensure resilience also plays an important role in fulfilling these objectives.

---

1 Report: https://ec.europa.eu/digital-agenda/en/news/report-results-work-high-level-group-future-use-uhf-band , Press release: http://europa.eu/rapid/press-release_IP-14-957_en.htm

In 2009 the Commission published a Communication regarding the Digital Dividend[2] which contained a roadmap for actions aimed at drawing the benefits of the switchover to digital television in the European Union. One of its results was the adoption of a Commission Decision on the harmonisation of technical conditions in the 790-862 MHz band (800 MHz band).[3] This Decision reallocates the use of the frequency 800 MHz band and establishes a set of requirements that enable the deployment of new technology on an EU wide scale, especially radio communications services, both fixed and mobile.

Stakeholders were challenged by finding solutions for a number of coexistence issues in the same and/or adjacent bands, also noting a new radio frequency electromagnetic environment different from the existing one.

A joint CENELEC-ETSI Working Group on Digital Dividend issues initiated work for revision of standards supporting the process of coexistence. Since 2010 the Commission services have organized three workshops addressing coexistence of mobile communications technology deployed in the 800 MHz band with other technologies, in particular LTE. Following the latest workshop held on 18 October 2012 focussing on the readiness of equipment standard and related issues, CENELEC and ETSI were requested for additional work on EMC issues and radio standardisation supporting the process of implementation of the 800 MHz Decision.

Specific issues addressed in a letter dated 13 February 2013 were identified for revision or development of harmonised standards aiming at a further improvement of equipment immunity in the field of broadcast receivers, equipment relevant for the reception of digital terrestrial TV services, noting operation below 790 MHz, and the robustness of Short Range Devices equipment.

From the legislative perspective it is important to note that broadcast receivers were not under the scope of the R&TTE Directive and as such they are complying with immunity requirements as per the EMC Directive. A new directive for radio equipment, Directive 2014/53/EU (RED) has been approved (the 16th of April 2014). This new Directive will replace R&TTE Directive 1999/5/EC from 14th of June 2016. Broadcast receivers will be covered by the scope of the new RED. There is a transitional period until 13 June 2017; during this period the Broadcast receivers may still comply with the old legislation i.e. with the EMC Directive and Low Voltage Directive.

Moreover, at the ITU World Radio Conference of 2012[4] the allocation of the 700 MHz band for wireless broadband from 2015 has been agreed on a co-primary basis with broadcasting. Further discussion on the long term use of the UHF band in the European Union has been initiated.[5]

---

[2] European Commission Communication COM(2009) 586/2 on 'Transforming the digital dividend into social benefits and economic growth

[3] Commission Decision 2010/267/EU on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union.

[4] World Radio Conference, held in January/February 2012 in Geneva. Resolution 232[COM5/10}(WRC-12): "Use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and related studies".

[5] Results of the work of the High Level Group on the future of the UHF band (470-790 MHz) by Pascal Lamy, 1 September 2014.

Also in 2012 the Commission published[6] a communication on promoting the shared use of radio spectrum resources, noting the development of white spaces below 694 MHz, which requires discussions in terms of coexistence challenges.

- **OBJECTIVES OF THE WORKSHOP**

The challenge of coexistence of different types of equipment in the UHF band requires attention and the workshop should aim at reaching conclusions needed for further generic steps towards achieving coexistence, noting the evolution in the use of the UHF band, in particular the 700 MHz band in several Member States.

The main objectives of this workshop are

- Establish a list of known and expected problems and verify that this reflects reality as currently known
- To take stock of progress achieved so far in the area of standardisation, in particular with respect to the 800 MHz band
- To examine the results and outcomes of the work by the JWG ETSI-CENELEC on the Digital Dividend
- To identify tasks and establish priorities and timing for further standardisation work and accompanying mitigation measures for the co-existence of equipment in the UHF band, with particular focus in the mid-term on the 700 MHz band; in this regard consider ongoing and potential future developments.

Foreseen participants

- DG ENTR and DG CNECT (co-organisers)
- Member States, EMC WP & TCAM Committee
- ECC (ECO/CEPT)
- CENELEC (TC 210, TC 209, others)
- ETSI (ATTM, ERM, others)
- EUANB, R&TTE Ca
- Digital Europe, Orgalime, Cable Europe, GSMA, EBU/Broadcast Network Europe, APWPT, TNO
- ANEC

[6] European Commission Communication COM(2012) 478 fnal on ' Promoting the shared use of radio spectrum resources in the internal market' .