**Introduction**

The 33rd ECC meeting held in Bratislava, Slovakia has decided to setup a correspondence group as a starting point to deal with the long term vision for the UHF broadcasting band. This correspondence group should:

* frame the studies to support the development of a long-term vision for the UHF-band in Europe focusing primarily on technical issues, but addressing also economical, social and regulatory aspects.
* formulate key questions which have to be answered by the group which will be responsible for these studies, taking into account the need to collect data on existing situation in each CEPT country.

**Background**

Traditionally, broadcasting and broadband communication services have had their own regulations, own market structure and own dedicated network infrastructure. Currently, a number of developments are taking place worldwide demanding a long term strategy at the CEPT level, focusing in particular in a framework vision for the UHF broadcasting band.

This activity intends to address the future challenges balancing the future spectrum needs of the various involved stakeholders associated with Terrestrial Television, Mobile Broadband and other applications which are currently sharing spectrum in the UHF broadcasting bands (e.g. PMSE).

The debate is stimulated by the fact that several outstanding matters are currently being discussed at diverse *fora*, e.g. in the preparation of WRC-15, agenda item 1.1, dealing with studies on additional spectrum requirements for International Mobile Communications (IMT) and potential candidate frequency bands) and notably in relation to the European Radio Spectrum Policy Programme (RSPP)[[1]](#footnote-1)which identifies the need to make 1200 MHz of spectrum available for wireless broadband services. In this context, it has to be noted that CEPT is currently in the process of responding to the EC Mandate on the 700 MHz[[2]](#footnote-2) which, *inter alia*, establishes that a “*EU spectrum policy should establish a long-term view of the future use of the whole UHF band currently allocated to terrestrial TV broadcasting in the EU (470-790 MHz[[3]](#footnote-3)) taking into account the long-term developments of digital terrestrial television and their societal value, as well as the possibility of long-term convergence in broadcasting and wireless broadband to deliver voice, data and audio-visual services via a converged platform*”.

**Studies required to support the development of a long-term vision for the UHF-band**

In developing a policy framework encompassing the UHF broadcasting band (in particular the 470-694 MHz), the studies need to consider the strategic objectives in each of the sectors involved, namely the broadcasting (i.e. DTT), mobile broadband and other relevant applications such as those making use of the UHF broadcasting bands (mainly PMSE applications).

These studies should take into account the demand and supply of services envisaged for the UHF spectrum based on the technological evolutions of the various platforms (e.g. mobile and digital terrestrial television). Additionally, the impact of any potential spectrum redeployment and the timescales involved is to be duly considered given the existing international harmonization process such as the GE-06.

The studies should comprise the following:

BACKGROUND

* mobile platforms world (broadband)
* broadcasting services (HD, coding, modulation/systems, receiving modes)
* Other Services (PMSE, RAS)

THE SPECTRUM CONTEXT

* GE-06
* RSPP
* WRC-15(1.1)
* EC Mandate 700 MHz
* PMSE

TECHNOLOGY, SERVICE AND NETWORK EVOLUTIONS

* Broadcasting (content : linear/non linear, TV and other contents, new receiving platforms, evolution of technology)
* Mobile (categories of data traffic, technology such as eMBMS)
* Convergence (services/terminals)
* Other sectors (WSD, CR, PMSE)

NATIONAL POLICIES FRAMEWORK

* Broadcasting regulation
* Wireless Broadband (Digital Agenda)

THE LONG-TERM VISION

* Strategic objectives
* Options for facilitating the evolution of mobile and broadcasting delivery of services
* Options for spectrum harmonisation (Pros and Cons)
* Timelines
* Cost impact

**Key questions**

The way forward of the UHF band should address the following aspects:

* The technologies available (e.g., OFDM based systems such as LTE, DVB-T, etc.), their evolution and their possible convergence;
* The possibility of “hybrid” networks (to be defined) and the related issue of transition, economical models, and the possibility of convergent/cooperative services (to be defined)
* The flexibility required to address the various situations in CEPT countries relating to content regulations or dependency on terrestrial TV in relation to other platforms;
* The need to provide a good level of certainty to each sector;
* Cross-border coordination issues between different network topologies and impact on equitable access taking into account GE-06 Agreement;
* Various reception environments (e.g. indoor/outdoor, fixed, portable, etc.) and coverage requirements (e.g. country-wide, regional and local);
* Coexistence with PMSE-applications;
* Possible emergence of cognitive techniques (e.g. use of white space by applications other than PMSE).
* Other (TBD)

1. Decision Nº 243/2012/EU of the EU Parliament and of the Council 14 March 2012 [↑](#footnote-ref-1)
2. MANDATE to CEPT to develop Harmonised Technical conditions for the 694-790 MHz (“700 MHz”) frequency band in the EU for the provision of wireless broadband Electronic Communications Services and other uses in support of EU spectrum policy priorities [↑](#footnote-ref-2)
3. Subject to the release of the 800 MHz band from broadcasting services in all EU Member States in the future [↑](#footnote-ref-3)