

**EBU comments to the
RSPG Draft Opinion on the Digital Dividend,
RSPG09-272 of 13 May 2009**

The EBU welcomes the opportunity to present its comments on the Radio Spectrum Policy Group (RSPG) Draft Opinion on the Digital Dividend. The draft opinion focuses on the case that the sub-band 790-862 MHz which may be used by services other than broadcasting and EBU comments also focus on that case.

Item 1 Introduction

Spectrum is a scarce public resource and its use should be efficient and should not only maximise the economic benefits for the society but also its social value. Broadcasting services generates significant public value for the society. Broadcasting is one of the few truly universal services, enjoyed by every segment of society independently of their ability to pay for the services. As well as generating huge private value for viewers, television also generates positive externalities or 'public value' for society as a whole by promoting cultural diversity, social cohesion, educational content, etc. The RSPG Opinion should ask **the EC to encourage Member States to consider the social merits of the different services proposed for the use of the 790-862 MHz band.**

Where in a country the social benefits for using the sub-band for non-broadcasting services are justified (e.g. to provide broadband access to rural areas), Member States should ensure that the licenses given are effectively used to implement such services.

One key objective of the EC regarding the digital dividend is that Member States realise the digital dividend taking into account the potential benefits of an EU coordinated approach as well as individual national situations. As concluded in the RSPG Opinion RSPG07-161 (item 11 of Annex A of draft opinion), there may be EU wide benefits to the use of the digital dividend by broadcasting services. The current international regulatory framework defined by the GE06 Plan, provides a coordinated framework for digital terrestrial television while at the same time accommodating national requirements (e.g. specific planning methods, reception modes, system variants, accommodation of other services). The RSPG opinion should ask the **EC to encourage that any coordinated approach of the use of the 790-862 MHz band, gives enough freedom to Member States to decide the use taking into account their national service requirements.**

Item 2 Background

EBU supports the advice from the Council¹, RSPG and CEPT that any coordinated approach for the use of the 790-862 MHz should be on a non-mandatory basis. EBU agrees that it should be up to each Member State to decide the use of their digital dividend.

The 'digital dividend' means different things in different countries. The use of specific channels of the UHF band for digital terrestrial television services beyond digital switchover have already been planned and negotiated across the whole of the European Union and beyond to minimise the problem of interference and to ensure the optimum efficiency of spectrum usage across the entire region. In addition, major decisions have already been taken by national governments and regulators relating to specific or potential uses of any resulting digital dividend spectrum, driven by national market structure and specific needs for specific services such as high definition TV or mobile TV in individual markets.

Item 3.1 Development of technical elements

In answer to an EC mandate, the CEPT is about to conclude its work on minimum restrictive technical conditions for mobile services in the band 790-862 MHz. EBU Technical has contributed with detailed technical studies and it is our view that, in general, these conditions take into account to a certain extent the protection of the broadcasting services from interference caused by the mobile networks. However, according to CEPT Report 30² it should be understood that these general measures do not always provide full protection of broadcasting services. In order to resolve the remaining cases of interference additional mitigation techniques would be needed on a national/local basis.

It is the EBU view that it is the responsibility of national Administrations to implement all necessary measures to protect the reception of broadcasting services. It can be achieved e.g. by means of additional restrictions on mobile networks, where applicable, and/or by applying specific mitigation techniques. A general protection clause could be included in the mobile network licences which ensure protection of broadcasting services. The RSPG Opinion should ask the **EC to encourage Member States to implement such type of protection clauses in the mobile network licences. In addition, appropriate mechanisms should be put in place by the national Administrations for reporting interference cases as they are identified or experienced by the viewers.**

Further work may be required concerning future broadcasting receivers which will need to be designed to better cope with the interference from mobile ECN and ECS³. This would require active involvement of industry and standardisation organizations. Nevertheless, the EC could play a role of a catalyst in this process.

Item 3.3 Encouraging Member States to enter into frequency coordination agreements

The current international regulatory framework for the 470-862 MHz band is defined by the GE06 Agreement and it provides a framework for digital terrestrial television. Cross-border coordination

¹ 10820/08 Council Conclusions on the Digital Dividend. Brussels, 17 June 2008

² CEPT Report 30 "The identification of common and minimal (least restrictive) technical conditions for 790-862 MHz for the digital dividend in the European Union", Executive summary, page 2

³ Electronic Communication Networks (ECN) and Electronic Communication Services (ECS).

where one country decides to use the 790-862 MHz band for broadcasting services must be done under the GE06 framework.

Item 4.1 Range of services

The major limitation of implementing in practice the WAPECS policy, based on the principles of service and technology neutrality, is interference. Interference occurs e.g. when broadcasting and mobile services are delivered in the same bands. Therefore, technical conditions for the use of the band 790-862 MHz by ECN and ECS have to be established in such a way as to ensure protection of broadcasting services. As mentioned above in item 3.1, in order to resolve remaining cases of interference additional mitigation techniques would be needed on a national/local basis, i.e. beyond the minimum restrictive technical conditions as defined by CEPT Report 30. Application of the WAPECS principle aims at gaining flexibility, but it may not result in the most efficient use of the spectrum. Frequency planning done for well defined services and technologies maximises the efficiency of use of the spectrum.

Item 4.3 Timeframes for making available the Digital Dividend in the 800 MHz

European countries have started the deployment of digital terrestrial television at very different stages and every country is now at a different phase of the switchover process. The process should be smooth and well planned; for example, it is essential for the success of the digital terrestrial platform that analogue television is not switched off before the DTT services achieve at least similar coverage and before the percentage of households equipped for DTT reception is high enough to ensure a successful switchover process. The RSPG Opinion should ask that the **EC encourages Member States to take account of their national situation with respect the switchover process and the roll-out of DTT when taking decisions on the use of the sub-band and put in place all necessary measures to facilitate the process.**

Item 4.4 International frequency coordination

Digital terrestrial television's use of UHF spectrum has been laid down by the ITU's GE06 plan that minimises the interference between signals across 108 countries. This plan uses all channels from 21-69 of the UHF spectrum and it has been established on the basis of equitable access to the spectrum. It would be difficult to harmonise any sub-bands within 470-862 MHz across Europe without either reducing the capacity available for broadcasting services, or a major rearrangement of the whole Bands IV/V 470-790 MHz. The former may lead to violation of the principle of equitable access to the spectrum between different Member States. Concerning the latter, it is not possible to relocate a significant proportion of the relevant GE06 Plan entries within the band above 790 MHz to the band below, while maintaining the coverage requirements and service quality which served as the basis for the establishment of GE06 Plan.

Furthermore, it is to be noted the GE06 Agreement is an international treaty and any international coordination must respect the provisions of this Agreement.

Item 4.5 Costs of clearing out the 800 MHz band

Broadcasters are already investing heavily in the transition from analogue to digital TV, but any harmonisation of UHF spectrum use for mobile services across the EU will incur additional expenses for not only broadcasters (e.g. re-engineering transmitters and antennas, additional gap-fillers to

cope with additional interference/loss of coverage due to an increased use of the 470-790 MHz band, marketing/communication campaigns etc.) but for viewers as well (e.g. re-adapt fixed reception antennas).

Additional costs may be incurred by the fact that ECN and ECS will cause interference to broadcasting reception; the costs related to resolving such interference cases may be significant.

The RSPG Opinion should ask **the EC to encourage Member States to provide funding of the necessary changes to the broadcasting networks and to ensure that there is no detrimental impact on the coverage area of broadcasting services.**

Item 5 Assessing the merits of a coordinated EU approach

It is to be recalled that the Council Conclusions recognise the potential benefits of a coordinated EU approach in allocating the digital dividend to other electronic communication services than the broadcasting services, while taking into account the principle of subsidiarity and general interest objectives of the EU and of the Member States, such as cultural diversity and media pluralism, as well as individual national situations and time plans for the switchover.

When asking the EC to assess the merits of a coordinated EU approach, the draft Opinion could mention the different types of benefits to be considered such as economic, social, cultural and political. The Opinion could also explicitly mention that when examining the likely effects of different options and scenarios for coordination, the consequences to existing or planned services in the 790-862 MHz are also to be analysed and to be taken into account.

Item 7 The Opinion of the RSPG

In line with the comments above, the following remarks are addressed to some of the RSPG recommendations proposed in the draft opinion:

- Recommendation 4: The general minimum restrictive technical conditions for mobile services in the band 790-862 MHz do not always provide full protection of broadcasting services and additional mitigation techniques would be needed on a national/local basis. EC should encourage Member States to implement the necessary measures to protect the reception of broadcasting services including, where applicable, a protection clause in the mobile network licences.
- Recommendation 5: The coordination of the 790-862 MHz sub-band for non-broadcasting services should not adversely affect the coverage of broadcasting services nor should it be done at the expense of the on-going roll-out of DTT services. The EC should encourage Member States to take due account of their national situation with respect to the switchover process and the roll-out of DTT and put in place all necessary measures to facilitate the process. In addition coordination with broadcasting services should be done under the framework of the GE06 Agreement, while respecting the principle of equitable access to the spectrum.
- Recommendation 7: It is understood that facilitating EU-wide long term availability of a given frequency band minimise market uncertainty and boosters certainty for the industry to invest in new and innovative services. Stability is also important for the broadcast industry therefore this recommendation should also be extended to broadcasting services using the 470-790 MHz.

And the following additional recommendations are proposed:

- In many countries the switchover process is well advanced or even completed. In many cases, releasing the 790-862 MHz band will require changes to the broadcast networks, i.e. additional expenses for broadcasters and viewers. The EC must encourage Member States to ensure funding of the necessary changes to the broadcasting networks and to ensure that there is no detrimental impact on the coverage area of broadcasting services.
- Radio spectrum is a scarce natural resource, and all users should support efficient use of it in all frequency bands. European broadcasters have shown commitment to efficiency by driving forward the digital switch-over; the UHF spectrum is the primary band for digital television terrestrial services which highly contribute to bridge the digital divide. The EC should encourage Member States to consider the social merits of the different services proposed for the use of the 790-862 MHz band. Where in a country the social benefits for using the sub-band for non-broadcasting services are justified (e.g. to provide broadband access to rural areas), Member States should ensure that the licenses given are effectively used to implement such services; they should also ensure that the frequency resources made available to a given service are used in an efficient manner.
- The release of the 790-862 MHz from broadcasting services increases the pressure on the use of the lower band, the 470-790 MHz, for broadcasting services. It is then needed that all measures which could facilitate the optimisation of the frequencies allocated to the broadcasting service are put in place. For example, if broadcasting transmitters with the same coverage area are co-sited, the number of frequencies that can be used in that area can be increased; national regulation should be in place to facilitate and promote co-sitting transmitters. The EC should encourage Member States to put in place all regulatory measures necessary to facilitate the optimisation of the spectrum in their national territory.
- Appropriate mechanisms should be put in place by the national Administrations for reporting interference cases (i.e. interference from ECN and ECS into broadcasting reception) as they are identified/experienced by the viewers. In addition, suitable ways of covering costs associated with resolving such interference cases should be identified.
- Further work may be required concerning future broadcasting receivers which may have to be designed so that they better cope with the interference from ECN and ECS. The EC could play a role in bringing together all relevant players, including industry and standardisation organizations.