

## **Broadcast Networks Europe response to the Radio Spectrum Policy Group Public Consultation on the Radio Spectrum Policy Programme**

Broadcast Networks Europe (BNE) welcomes the opportunity to submit its comments on the Radio Spectrum Policy Group Opinion on the Radio Spectrum Policy Program.

Broadcast Networks Europe (BNE) appreciates the fact that beyond the specific points related to the Radio Spectrum Policy Program addressed in the European Commission Consultation, the RSPG Opinion is taken from a more general angle. Broadcast Networks Europe (BNE) is generally supportive of the considerations leading the RSPG to express an opinion on the high- priority spectrum policy objectives.

In addition, we would like to draw RSPG's attention to some aspects of the RSPG's Opinion which are of concern to Broadcast Network Operators, and we believe these views are more widely shared within the Broadcasting Industry. But prior to this, we would like to highlight some facts that we believe have been overlooked in the recent debate on UHF spectrum:

- Digital Terrestrial Television (DTT) provides near universal coverage (90% of the population and above) and access to television services from the public service and commercial broadcasters. Considerable public investments would be needed to reach high population coverage with fiber networks and to facilitate equivalent coverage would take a long time.
- Also in a long term perspective, the DTT platform will be the only platform that guarantees nearly all viewers throughout Europe access to a broad range of both free-to-air and pay television services.
- The DTT platform remains one of the most economic broadcast transmission systems. It allows broadcasters the potential to easily provide content to a maximum number of viewers at a low per-viewer cost. The DTT platform offers viewers the opportunity to benefit from regional and local content as well as portable and mobile reception which is unique to this platform.
- DTT is not only an existing service but it is, above all, a constantly renewing and developing service giving access to a wide choice of high-quality broadcasting content and which is ready to address the future consumer demand for new and enhanced services, such as HDTV and 3DTV.

Consequently, any political decision concerning the future use of spectrum should be grounded in:

- A truly verified economical and GDP assessment, based on a demand side analysis verifying what are the services that are really demanded and relevant to the consumer.
- An evaluation of the broader social benefits provided by the DTT platform, taking into consideration the demands of the EU and of its citizens, based on cultural values and democratic cohesion. We understand that assessing not only the economic but also the social impact of decisions related to spectrum management is a key priority for the RSPG.

Regarding the high priority spectrum policy objectives, Broadcast Networks Europe comments are as follows:

## **DIGITAL DIVIDEND AND SPECTRUM AVAILABILITY**

Many European countries have contributed significantly to the provision of low/medium power use of the 790-862MHz band and the provision of wireless broadband. However, BNE does have concerns that whilst the mobile industry has driven hard to achieve a harmonised outcome for mobile broadband use of this spectrum. There may be little appetite from the Mobile Operator community to deploy services to those areas that would most benefit from mobile broadband (i.e. large and isolated rural areas), considered uneconomic without some form of subsidy. Furthermore, high frequencies, e.g. 2.6 GHz, are better suited to the delivery of high bandwidth services rather than the 790-862 MHz spectrum which is better suited to achieving coverage objectives and lower data throughput rates.

**In any case, BNE considers that when a band is allocated to a new service, the costs associated to the migration of existing services should not be borne by the previous users**

Considering the present and future development of DTT services, Broadcast Networks Europe (BNE) believes that the main challenge for the long term development of terrestrial broadcasting services will be scarcity of spectrum and legal uncertainty concerning its availability.

In fact, whilst digitisation offers the opportunity to provide existing services within a reduced quantity of spectrum, with the growing demand for new DTT services it seems clear that the future need of bandwidth for broadcast services will increase rather than decrease. Where already achieved, the analogue switch off has only been successful thanks to the enrichment of the offering to the consumers, which stimulated the switch to digital. This enriched offering, as compared to that previously available with analogue transmission will need to be kept up to date with enhanced and new services such as HD, 3D and interactive services such as Push VoD.

Therefore, any regulatory approach allocating to broadcasting platforms only the spectrum required to support existing services in a fully digital environment, including current public service obligations, would reduce platform competition and limit the broadcasting industry from further developments to keep pace with consumer demand.

Last but not least, it would produce a strange paradox and a dangerous precedent: in unfairly discriminating against the very parties that, through considerable investment, have facilitated the digital migration.

**This is why Broadcast Networks Europe supports the recognition by the RSPG, that “bands below 800MHz, i.e., 174-230 MHz and 470-790 MHz, the digital dividend will be used mainly for the development of new enhanced broadcasting services which will also bring significant benefits to society in terms of the value to industry and consumers<sup>1</sup>”. Any analysis related to the release of “new spectrum” should therefore exclude any further reallocation of the UHF band. As rightly acknowledged in the recently adopted New Regulatory Framework, any final decision concerning spectrum allocation has to be taken at national level in a flexible and territory by territory basis. A one-size-fits-all approach would be sub-optimal.**

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<sup>1</sup> RADIO SPECTRUM POLICY GROUP OPINION ON THE DIGITAL DIVIDEND - 18 SEPTEMBER 2009, page 2.

Furthermore, the rich variety of services characterizing the European media landscape, such as the availability and penetration of media platforms (DTT, cable, satellite and internet) and different development of local television, we believe that national administrations should maintain the possibility to autonomously decide upon the allocation of Digital Dividend and the associated timing.

In addition to the big differences between the availability and penetration of media platforms, there are also differences in socio-economic conditions and costs associated with spectrum refarming. Further, it has to be noted that replacement cycles for consumer equipment differs significantly between countries and services. For instance, the typical time for TV set renewal is many years, while the time to replace mobile phones is much shorter. However, even in this latter case, although 3G networks have been in place since 2003, 2G services still remain a major focus of consumer demand, and are not expected to be turned off in the short term.

### **INTERFERENCE MANAGEMENT**

**We encourage the authorities to ensure that the quality of broadcasting services are not negatively impacted by harmful interference from users of adjacent spectrum and from potential other users of white spaces in the same band. It is worth noting that broadcast networks were conceived, designed and deployed to operate in an environment free from interference from other services. If the spectrum allocated to them becomes polluted, it will be costly and in some cases impossible to restore the required quality and reach of service.**

Necessary measures should be taken to ensure that appropriate controls / restrictions are introduced to protect existing broadcast services prior to the award of spectrum licenses to accommodate other technologies. To this end, we encourage the RSPG to ensure that appropriate measures and procedures to avoid or mitigate interference are established transparently prior to any assignment of frequencies, making use of trials to test the effectiveness of the protocols developed. Otherwise stakeholders from the broadband sector and from the broadcast industry will face significant legal uncertainty and a lack of planning reliability. Furthermore, we note that the providers of new services resulting in interference to broadcasting services should be obliged to address the source of harmful interference and if unable cease services. In addition and as for previous Plans, it has to be considered that the Ge06 Plan is the basis for interference protection and will be subject to change over time as new broadcast stations enter service in accordance with Article 5. Evolution of the Plan has to continue to be an option over the whole band which means that channel 60 and below need to be protected. In addition we are keen to emphasize that the development of white space devices should not obstruct the potential for the deployment of additional broadcasting services.

**The utmost care should be taken in terms of spectrum management strategy to minimize harmful interference. When a new service is allocated in a given band, measures should be taken to guarantee that existing services (in band and in adjacent bands) are protected from interference, and the economic burden for harmful interference resolution should not be born by the incumbent licensed user of the spectrum and adjacent bands.**

Concerning the allocation to LTE of the 800 MHz band, the ECC recommendation recognizes that the technical measures prescribed in its appendix 1 are inadequate to fully protect from

harmful interference the broadcasting service operating below 790 MHz, and asks Member states to take any additional action in order to mitigate the risk of interference. We encourage the European Union to evaluate more closely the measures necessary to protect the DTT services in countries that have decided to allocate the 800 MHz band to LTE rather than leave this issue to be addressed by national administrators, and ensure that the process for granting the 800MHz frequencies should incorporate the necessary measures.

Concerning the paradigm of interference management, we are assisting, to a certain degree, to a shift from ex-ante avoiding to an ex-post resolution. This change is driven by the desire to ensure enhanced exploitation of spectrum and increased flexibility of use, thus leading to increased economic value, but the unfortunate downside is an increase in the level of interference. Some services, like the broadcasting and the satellite services, are by their and social impact, affect simultaneously a vast number of users and require considerable efforts for their resolution. This is even more true for safety of life applications. Therefore, any future approach to interference management, should duly take into account the interference protection demands of these services.

Moreover, there should be no over-confidence in the capacity of national authorities to enforce ex-post solutions to harmful interference resolution and it should be acknowledged that the operational scenarios authorities will have to face will vary greatly from country to country.

Cognitive radio (together with software defined radio) is viewed as the technology that will enable greater flexibility in the access to spectrum and a more efficient exploitation of the resource. However, the actual performance and the impact of these technologies need to be carefully studied on a band by band basis, and careful regulation needs to be put in place to prevent the high risk of harmful interference to incumbent services. Moreover, it has to be noted, that the vast majority of cognitive devices (like for instance white space devices), will be put on the market under the provisions of the R&TTE Directive, that was not meant to regulate this type of technology. The Directive should therefore be reviewed in order to take into account cognitive radio and software defined radio. In any case, it is important to recognise that irrespective of the use of a given part of spectrum at a given location at a given point in time, the situation will be subject to change in the future (International conference plans are starting points, not the end of the story of development of services using these frequency plans). To this end, we note that in no way should the use of the UHF band white spaces by other services prevent the future optimization of the use of this band by broadcasting services.

### **MARKET-BASED APPROACH**

**Any market-based approach applied to spectrum management should have no impact on the quality of broadcasting services. Both RSPG and the European Commission should not go beyond the agreement reached by the European Parliament and the Council in December 2009.**

The New Regulatory Framework (NRF) contains several measures introducing flexibility in the management of spectrum. These new rules are the result of a long negotiation in which several amendments were introduced by the Council and the European Parliament aiming also at preventing any *prejudice to measures taken at Community or national level, in*

*accordance with Community law, to pursue general interest objectives, in particular with regard to content regulation and audiovisual and media policies<sup>2</sup>.*

Concerning service and technology neutrality the new regulatory framework clearly recognizes the necessity to limit the application of technology and service neutrality in some cases - i.e. in order to avoid harmful interference, to ensure technical quality of services and to promote cultural and linguistic diversity and media pluralism, for example by the provision of radio and television broadcasting services<sup>3</sup>.

Concerning the secondary market of frequency trading, the regulatory framework introduces several limits to the trading of frequencies with the aim of preventing any spectrum interference and the consequent effects on the quality of services. In particular, spectrum trading should be limited to transfers between companies offering similar services; change of use should not be allowed if protection from harmful interference is not guaranteed<sup>4</sup>.

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<sup>2</sup> Recital 25, DIRECTIVE 2009/140/EC.

<sup>3</sup> Article 9.4, DIRECTIVE 2009/140/EC.

<sup>4</sup> Article 9b, DIRECTIVE 2009/140/EC