

Comments on the draft RSPG Opinion on the Digital Dividend

ECTA welcomes the RSPG's work on the digital dividend and the opportunity to comment on its recommendations to the European Commission. We broadly support the objectives of the RSPG's draft Opinion, in particular the benefits of harmonization and coordination, and promoting innovative services such as very high speed wireless broadband services in the 800 MHz band.

Our comments aim at suggesting further refinements to the RSPG's recommendations, especially with regard to harmonisation and highlighting competitive issues currently not addressed in the RSPG's draft Opinion.

Comments on the RSPG's recommendations

1. The RSPG recommends that the EC should assess the advantages and disadvantages of options for a coordinated non-mandatory EU approach to the availability of the 800 MHz band for ECN and ECS, other than broadcast transmission networks and services, as this is essential in order to determine the appropriate level of coordination between Member States;

○ ***The advantages of making the digital dividend available for telecoms services***

Making the 800 MHz band available for telecoms services can result in greater overall economic and societal benefits than using this spectrum for broadcasting services. End users would also enjoy the benefits of very high speed wireless broadband services using advanced technologies.

Various studies have been carried out in order to compare and quantify the advantages of telecoms and broadcasting services in the 800 MHz band. Studies by Analysys and Hogan & Hartson for ARCEP and Analysys Mason for the Dutch Ministry of Economic Affairs and MICUS Management Consulting for the European Commission have shown that using the 800 MHz spectrum for telecoms services would result in greater contribution to the economy in terms of GDP and job creation.

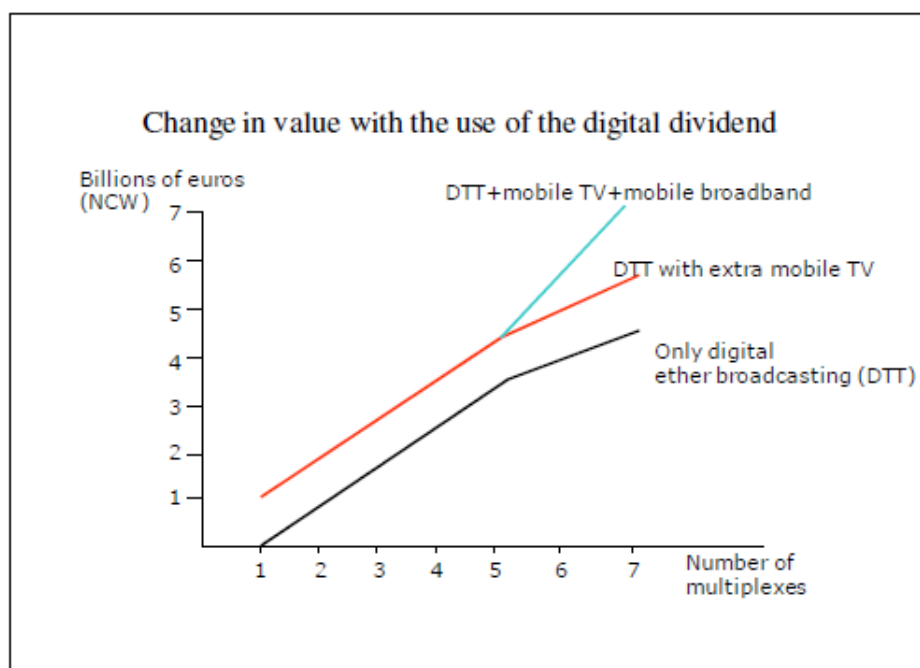
The French study¹ compared the advantages of using the 72 MHz sub-band for wireless broadband and broadcasting services. The conclusion was that the incremental value of the sub-band would be relatively small for broadcasting, resulting in 48 HD TV channels instead of 40 such channels. The incremental value for wireless broadband services on the other

¹ Analysys Mason and Hogan & Hartson, Valuation of the digital dividend in France, 27 May 2008
[http://www.analysysmason.com/PageFiles/4324/Valuation%20of%20the%20digital%20dividend%20in%20France%20\(English%20Version\).pdf](http://www.analysysmason.com/PageFiles/4324/Valuation%20of%20the%20digital%20dividend%20in%20France%20(English%20Version).pdf)

hand would be very high, making broadband mobile services available to 99% of the French population instead of only in urban areas, which represents approximately 70% of the population. As a consequence, the allocation of the sub-band to broadband mobile services could generate in France an extra value of about EUR 26 billion over 12 years (2012 – 2024).

The MICUS study² has estimated that in a best case scenario broadband development will result in a creation of 2,112,000 jobs in Europe between 2006 and 2015 and broadband-related effects would result in an increase of GDP € 1,080 billion by 2015.

The Dutch³ study and the subsequent Dutch public consultation document of 4 June 2009⁴ contain the following diagram:



Source: Analysys Mason

From a consumer experience perspective the digital dividend spectrum could ensure good wireless broadband coverage in rural areas (in some rural areas coverage is likely only in the UHF band) and much higher quality indoor coverage in both urban and rural areas.

² Dr. Martin Fornefeld, Gilles Delaunay, Dieter Elixmann, The Impact of Broadband on Growth and Productivity, 2008

<http://www.micus.de/pdf/bb-study/FinalReport-MICUS-BroadbandImpact.pdf>

³ Analysys Mason, Final Report dated 24 July 2008, Economic and Social Limitations to Alternative use of 'Digital dividend' Spectrum

<http://www.ez.nl/dsresource?objectid=164458&type=PDF>

⁴ Consultation document 'Digital Dividend' in the UHF frequency band (470 – 862 MHz), Dutch Ministry of Economic Affairs, 4 June 2009

<http://www.ez.nl/dsresource?objectid=164918&type=PDF>

It is much more expensive to roll out a wireless network and provide the same broadband services in a different band, for example in the US costs in the 2.4 GHz band are up to six times higher than in 700 MHz band.

In this vein the economic and societal advantages of making available more than 72 MHz for wireless broadband services from the digital dividend would be also greater than to allocating it exclusively for broadcasting services. The harmonized freeing up and allocation of the 72 MHz sub-band should be considered as a starting point and ideally approximately 100-115 MHz should be made available for telecommunications services across Europe.

○ ***There is a strong case for mandatory harmonization***

A harmonised approach to the allocation of the 800 MHz band is key to ensure economies of scale in Europe. As the RSPG has recognized in its draft Opinion *'if Member States take a unilateral approach there is a significant risk of fragmentation [...] which could have consequent costs resulting from smaller markets'*, therefore *'the greater the number of countries and size of market, and all making available similar frequencies, the better'*.⁵

Europe will not benefit from economies of scale from other regions (US, parts of Asia and Africa) and consequently cannot afford fragmenting the single market by permitting any Member State to ignore the digital dividend or to take otherwise unilateral action. National markets versus a pan European market would increase the cost of R&D and ultimately equipment prices (including terminal equipment such as handsets and other devices) disadvantaging European consumers and businesses compared to other parts of the world.

Ofcom's analysis of aligning its approach to the digital dividend with other countries has shown that there would be large benefits from doing this, including:

- lower equipment prices for consumers
- more efficient use of spectrum
- improved opportunities for new generations of mobile broadband
- more scope for competition and innovation in new wireless services.⁶

Ofcom estimated that benefits to citizens in the UK would be totalling £2-3 billion over twenty years from synchronising action with the rest of Europe.⁷

The concern that a mandatory approach may slow down the process of freeing the digital dividend and making it available for wireless broadband services seems unfounded. On the contrary, mandatory harmonisation is more likely to preclude delays and fragmentation and is a speedier process than loose coordination across 27 Member States.

Moreover, mandatory harmonization could be limited to the obligation to release the 800 MHz for wireless broadband services after the analogue switch-off. This approach would not hinder the process in those Member States, which have already taken the decision to grant mobile licenses for 800 MHz to do so, based on the technical elements developed by CEPT.

Whilst harmonisation can ensure an appropriate level of flexibility for Member States it also guarantees that no Member State is permitted to take unilateral action and to fragment the single market. Consequently, it ensures the biggest market size.

⁵ Draft RSPG Opinion on the Digital Dividend, page 8

⁶ Ofcom, 'A better Digital Dividend for Britain', 2 February 2009
http://www.ofcom.org.uk/media/news/2009/02/nr_20090202

⁷ Ibid.

Most recently several African countries have taken the decision to follow the US band plan in order to be able to use the forthcoming equipments developed for the US market and to benefit from economies of scale. It would be very a clear disadvantage for European consumers and businesses if the European frequencies were not harmonised while other parts of the world are moving rapidly towards a digital dividend based on the US band plan.

Moreover, a coordinated timetable ensures legal and market certainty enabling planning for all stakeholders in a naturally slow process.

2. The RSPG recommends that the EC act on the recommendations contained in this Opinion as quickly as possible and no later than 31 October 2009 in order to minimise EU level uncertainty in the ability of Member States to make available the 800 MHz band in order to promote growth, competition and innovation in the provision of ECN and ECS;

ECTA fully supports the deadline recommended by the RSPG to the Commission. As described above, certainty, which is largely created by a foreseeable timetable is much needed for all stakeholders.

However, the most effective means to minimize uncertainty is the adoption of a mandatory harmonising measure for the freeing up and making available of the 790-862 MHz band in order to create the same conditions that resulted in the success of the GSM system.

3. The RSPG recommends that the EC encourages Member States who are making available the 800 MHz band for new and/or enhanced ECN and ECS to apply WAPECS principles, particularly of service and technology neutrality, recognising that Member States may maintain broadcasting use in all or a portion of the band;

ECTA fully supports the rule that the principles of technology and service neutrality should apply to the 800 MHz band, on the condition that it is mandatory for all Member States to make it available for telecommunications services as well. Broadcasting should be permitted to be maintained only if in a technology and service neutral allocation process one or more winning bidders decide to use it for broadcasting services. It should be not allowed, however, to reserve all or a portion of the 800 MHz band for broadcasting services in any of the Member States.

It should also be required from Member States that irrespective of the allocation method they choose (auction, beauty contest) they should apply objective, fair and transparent criteria in the allocation process, not excluding any operator per se. In these procedures new entrants, who have not been assigned frequencies in the past due to later entry, should be prioritized. Amongst others, winners should generally be required to commit to minimum standards, i.e. the provision of quality services and dedication to long-term investments. Spectrum hoarding should be avoided.

4. The RSPG recommends that any EU harmonisation of technical elements such as channelling arrangements and common and minimal (least restrictive) technical conditions be based on the outcome of the CEPT work in response to relevant EC mandates;

ECTA agrees with the recommendation to maintain the CEPT as the entity in charge of developing band plans and technical conditions for spectrum use. CEPT, with active participation of industry and administrations has proven for several years its capability to develop frameworks, which ensure an efficient use of spectrum.

5. The RSPG recommends that the EC encourages Member States to facilitate cross-border coordination agreements with the aim of enabling those administrations wishing to make available the 800 MHz band for ECN and ECS, other than broadcast transmission networks and services to do so, taking into account technical feasibility and the need for equitable access;

ECTA supports this recommendation. However, as requested by ECTA, the harmonisation of making available the 790-862 MHz band for wireless broadband services should facilitate future deployments by limiting the difficulties between any neighbouring European countries.

6. The RSPG recommends that the EC supports Member States in renegotiating aspects of the GE06 Plan if necessary with countries outside the EU to allow them to realise and make available the 800 MHz band part of their digital dividend;

The European Commission and the CEPT have a clear role to play in cross-border negotiations with non EU countries, in particular with accession countries and Russia, in order to renegotiate GE-06 as appropriate. It should be noted that GE-06 has not been developed in order to enable an equitable access between broadcasting and mobile at the border. The revision of trigger mechanisms to more balanced levels is necessary to prevent difficulties of deployment.

7. The RSPG recommends that the EC gives further consideration through a review process to the merits of facilitating EU-wide long term availability of the 800 MHz band for mobile and fixed broadband applications;

Measures aimed at facilitating the EU-wide availability of the 800 MHz band for wireless broadband services should be taken as soon as possible in order to prevent further delays compared to some other parts of the world. Moreover, a permanent review process could be counter-productive by creating uncertainty and providing an opportunity to question the currently emerging developments of wireless broadband services in the 800 MHz band.

ECTA suggests, however, that a new mandate is given to CEPT in order to analyze the technical conditions of using other digital dividend spectrum for telecommunications services, in particular the spectrum directly below 790 MHz.

8. The RSPG recommends that Member States, acting on a bi/multilateral basis should identify whether there are geographic clusters arising from commonalities between transitional activities and possible access to the 800 MHz band for electronic communications networks and services, noting the need to consider the requirements of countries adjacent to the cluster which may be affected. Such commonalities could facilitate a coordinated approach to timing in releasing their digital dividends and provide more economic and social benefits as a whole.

ECTA supports this recommendation as the second best option to mandatory harmonisation as long as it does not introduce uncertainty in the process of releasing the 790-862 MHz band for wireless broadband services. The geographic cluster approach should be facilitated should mandatory harmonisation not be achieved.

Competitive issues

It is foreseeable that, in many Member States, wireless broadband services will be provided in this prime spectrum. These services are much more frequency consuming than mobile voice services for instance, therefore there is a possibility that the 790-862 MHz band, or a subset thereof, may be allocated in a manner supporting only one or two networks in some countries. This leads to the creation of a monopoly or duopoly in the provision of very high speed wireless broadband services.

The scarcity of the digital dividend spectrum excludes the possibility of granting spectrum rights of use to many different very high speed wireless network operators in this prime spectrum, whilst the costs of networks of similar capability in a different band are multiple times higher.

Additional allocation beyond the 72 MHz sub-band from the digital dividend spectrum may occur only later if at all. Even in those countries where additional digital dividend spectrum is allocated at a later stage, first mover advantages are great.

There is clearly a large potential for a lack of effective competition in the provision of very high speed wireless broadband services that are likely to be developed in the digital dividend spectrum, which should be assessed and addressed from the outset.

ECTA suggests that the competitive challenge stemming from the allocation of the digital dividend spectrum is examined or at least highlighted by the RSPG in its final Opinion and solutions are recommended to be included in the European Commission's planned measure.

We have identified four methods through which a competitive failure can be prevented by Member States:

- Open access (national roaming and MVNO) requirements on non-discriminatory terms to be included in the licence conditions of all licensees or of at least one⁸ of the licensees, without restrictions on the identity of beneficiaries of such open access (e.g. not restricted to entities that already have rights of use over other spectrum);
- The digital dividend spectrum is allocated in small (ideally 5 MHz⁹) building blocks with a maximum spectrum cap for each entity/group, as well as a global spectrum cap per entity/group including 800 MHz, 900 MHz and 2.1 GHz spectrum;
- There is one, large capacity infrastructure built in the digital dividend spectrum that is open to all operators on non-discriminatory terms.
- Allocation of dedicated blocks of frequencies to new entrants (i.e. telecommunications operators which have not previously been assigned frequencies). This should be accompanied by pro-competitive measures such as roaming requirements by existing mobile operators, lighter coverage requirements compared to those imposed on early entrant mobile operators, facility sharing, etc).

⁸ The licence with open access conditions could conceivably be accompanied with a larger frequency allotment than the other licences.

⁹ For example, LTE FDD, LTE TDD and WiMAX will be able to function in 2x5 MHz blocks, and it should not be ruled out that this would be sufficient to satisfy the requirements of certain operators/certain geographies.

ECTA suggests that the RSPG recommends that Member States follow one or several of the identified solutions to prevent the creation of monopolistic or duopolistic markets in very high speed wireless broadband services. Addressing the competitive challenge from the beginning of the allocation process not only prevents the emergence of a serious market failure but creates certainty for all market players from the outset thereby maximizing the potential for investment and innovation.