



Brussels, 30 January 2007
DG INFSO/B4

Final

**MANDATE TO CEPT
ON TECHNICAL CONSIDERATIONS
REGARDING HARMONISATION OPTIONS FOR THE DIGITAL DIVIDEND**

This mandate is issued to the CEPT without prejudice to the one-month right of scrutiny by the European Parliament, pursuant to Council Decision 1999/468/EC of 28 June 1999 (OJ L 184, 17.7.1999, p.23) on comitology procedure. This one-month period starts on 31 January 2007.

1. PURPOSE

This mandate intends to launch **an initial step** to explore the **technical feasibility** of relevant potential uses of the future digital dividend, to identify any major **coexistence limitations** of these potential uses due to interference issues, and to assess possible **spectrum management strategies** to address those issues.

The results of this mandate should constitute a **technical input to the EU policy process** aiming at maximising the value of the digital dividend from an overall societal and economic viewpoint, hopefully leading to a coordination of approaches on EU level. This mandate should also complement, on technical level, the ongoing policy discussions in the Radio Spectrum Policy Group in the context of the preparation of the RSPG Opinion on the EU spectrum policy implications of the digital dividend¹ (currently undergoing public consultation) as well as the recently adopted RSPG Opinion on multimedia services in particular in the broadcasting frequency bands².

¹ Details available at:
http://rspg.groups.eu.int/doc/documents/opinions/public_consult_rspg06_150_draft_opinion_digital_dividend.pdf

² RSPG Opinion adopted on 25th October 2006 and available at:
http://rspg.groups.eu.int/doc/documents/opinions/rspg06_143_final_rspg_opinion_multimedia_services.pdf

2. JUSTIFICATION

Pursuant to Article 4 of the Radio Spectrum Decision³, the Commission may issue mandates to the CEPT for the development of technical implementing measures with a view to ensuring harmonised conditions for the availability and efficient use of radio spectrum. Such mandates shall set the task to be performed and the timetable therefor.

In 2005, the Commission has adopted two Communications to the European Parliament and the Council which are both referring to the importance of the future digital dividend from an EU perspective. The first one on “*accelerating the transition from analogue to digital broadcasting*”⁴ sets out the Community policy objectives for the transition. It identifies spectrum gains as one of the major advantage of the switchover, in particular the “*additional spectrum capacity released by the switch-off of analogue terrestrial television*” and the fact that “*it will be important to not constrain unduly the re-use of these bands for new and innovative services*”. The other Communication⁵, on “*EU spectrum policy priorities for the digital switchover in the context of the ITU Regional Radiocommunication Conference 2006 (RRC-06)*”, proposes a set of actions and activities to be performed at EU level in order to optimise the opportunity, and the value, of the dividend.

After the finalisation of the RRC-06 planning exercise, this mandate addresses primarily the action list included in the second Communication.

3. MAIN EU POLICY OBJECTIVES

The optimisation of the use of the digital dividend at EU level will contribute to several important EU policy objectives, namely:

- Increase spectrum availability to promote new services fostering growth and innovation, thereby supporting the objectives of the i2010 initiative⁶, launched in relation to the Lisbon agenda;
- Ensure more flexibility in managing the scarce spectrum resource, so as to achieve a more efficient use of it;
- Strengthen the Internal Market dimension for potential mass market services and equipment which will operate in the released frequencies.

³ Decision 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community, OJ L 108 of 24.4.2002, p.1.

⁴ COM(2005) 204

⁵ COM(2005) 461

⁶ COM(2005) 229.

4. SPECIFIC OBJECTIVES

With this Mandate, the European Commission wishes to obtain relevant technical information in preparation for an EU-level policy proposal on how to achieve a suitable **coordination**, and **consistency of approaches**, regarding the digital dividend, in view of maximising its overall value, and in particular to be able to satisfy a future demand for **pan-European services**⁷.

To fulfil the above objective, the CEPT is requested to address more specifically:

- the technical advantages and the feasibility of a coordinated usage⁸ of (parts of) the digital dividend, and recommend the most suitable degree and format of harmonisation;
- the key characteristics of such coordinated frequency bands in order to offer the best basis to maximise their potential economic and societal value;
- the most appropriate strategy to support the objective of a European coordinated dividend, taking into account constraints existing at national level, constraints stemming from existing agreements with non EU countries, and the implications for the planning process at national level.

5. ORDER AND SCHEDULE

CEPT is mandated to carry out the technical activities intended to support the objectives and policies presented above and to study more specifically⁹:

- the practical coexistence between high and low power density networks in adjacent channels (i.e. co-existence of RPC-1 and RPC-2/3 configurations);
- the possibility of harmonising at EU level a sub-band for multimedia applications, minimising the impact on the GE-06 plan;
- the possibility of harmonising, or co-allocating, a sub-band for mobile communication applications (i.e. including uplinks), assuming zero or minimum impact on GE-06 and with a view of deployment of such services throughout the EU. The possible impact, if any, on the way to approach the WRC-07 and/or WRC-10 negotiations should be taken into account;
- to the extent that a "harmonisation" of a sub-band, as suggested above, can not be feasible:

⁷ Since future demand can not be fully predicted at the initial stage, it is proposed considering to reserve some spectrum for allocation at a later stage when the relevant demand at EU level becomes clearer.

⁸ "Coordinated usage" should not be limited to the classical EU spectrum harmonisation (use of a designated frequency band under identical conditions across Europe). Other (more flexible) forms of harmonisation may be considered, for example for use by frequency agile systems.

⁹ None of these items should be considered as an indication of a future policy direction at EU level. These items are solely to explore technical feasibility.

- whether a limited spectrum range could be identified within the UHF band, taking into account the technical practicality of equipment tuning over such a range;
- the need for specifying mechanisms to be implemented on systems which aim at actively selecting different frequencies within this range in different geographic areas (frequency agile systems);
- tentative scenarios for organising consistently the digital dividend in bands IV and V according to the findings resulting from the above, and in particular the potential for ensuring an appropriate consistency on EU level. In doing so, and without pre-empting the future EU and national policy decisions, it would be useful to establish a recommended roadmap for implementation, taking into account the transition period preceding switch-off of analogue broadcasting;
- the possibility for fitting new/future applications/services into non-harmonised spectrum of the digital dividend (such as the "white spots" between allotments).

The deliverable for this Mandate will be a set of three reports (A,B,C) and a technical roadmap showing the possible options for the digital dividend subject to the following delivery dates:

Delivery date	Deliverable
1 April 2007	<u>Report A</u> , on compatibility issues between "cellular / low-power transmitter" networks and "larger coverage / high power tower" type of networks. Key focus should be on the co-existence of RPC1 and RCP2/3 networks in bands IV and V and on the possibility of harmonising a sub-band of bands IV and V for multimedia applications, minimizing the impact on GE-06 plan.
15 July 2007	a) <u>Report B</u> , on the technical feasibility of harmonising a sub-band of bands IV and V for mobile applications (including uplinks), minimizing the impact on GE-06. b) <u>Technical roadmap</u> proposing relevant technical options and scenarios to optimise the digital dividend, including steps required during the transition period before analogue switch-off.
31 Oct. 2007	<u>Report C</u> , a preliminary assessment of the feasibility of fitting new/future applications/services into non-harmonised spectrum of the digital dividend (namely the so-called "white spots" between allotments)

In implementing this mandate, the CEPT shall, where relevant, take the utmost account of Community law applicable and support the principles of technological neutrality, non-discrimination and proportionality insofar as technically possible. In addition, the final result of the RSPG Opinion on the digital dividend (adoption planned on 24 February

2007) should be duly taken into account, in particular if it would affect some of the specific technical objectives of this mandate.

The Commission, with the assistance of the Radio Spectrum Committee pursuant to the Radio Spectrum decision, may consider to apply the results of this Mandate in the European Community, and to issue further mandates to CEPT on this matter.

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