

bmcoforum Spectrum Position for Mobile TV

March 2007

Background

The **bmcoforum** representing more than 86 industry organisations from the whole value chain of Mobile TV has considered and agreed this common spectrum policy in order to influence and lobby the ongoing spectrum considerations for mobile TV in Europe within CEPT, National Administrations and Governments as well as the European Commission. The **bmcoforum** understands Mobile TV as an audio-visual service which may provide two way multimedia communications to mobile handheld devices with broadcast downlinks and return links in frequency bands dedicated to telecommunication services.

It is appreciated that a variety of different broadcast and broadband bearer technologies for multimedia services with Mobile TV is being developed in Europe and limited commercial deployment of Mobile TV is taking place using already harmonised spectrum within 3G bands, in the 1.4 GHz band and in the UHF band. The activities within CEPT and the European Commission are, however, linked to the future use of the VHF/UHF/1.4 GHz bands and in particular the future use of the digital dividend.

To provide full commercial deployment of Mobile TV regulatory initiatives are needed to make spectrum available and put in place appropriate regulation on both national and European level. It is therefore important that **bmcoforum** spectrum policies and positions reflect and provide guidance for these activities.

Following the ITU planning for the VHF and UHF bands May-June 2006 (RRC-06) most stakeholders have discussed spectrum issues for DVB-T and Mobile TV and in particular how to use the spectrum dividend after the digital switch-over by 2012 at the latest.

The Radio Spectrum Policy Group (RSPG) has adopted an Opinion on Multimedia services in frequency bands allocated to the broadcasting service (25 Oct 2006) and the draft opinion on the future use of the Digital Dividend was finally adopted 18 February 2007 based on the results of the public consultation.

The European Commission has issued 2 Mandates to the CEPT

- a. on EU harmonisation of the band 1452-1479.5 GHz to allow flexible use of spectrum by mobile multimedia technologies;
- b. on technical considerations regarding harmonisation options for the digital dividend

The Mandate reports to be developed by the CEPT are intended to form the basis for further regulatory and legislative initiatives by the European Commission and the Radio Spectrum Committee in order to ensure spectrum availability for multimedia services including Mobile TV.

Furthermore the report developed by the European Mobile Broadcasting Council (EMBC) has provided substantial contributions from European industry to the European Commission with advice on spectrum management issues as well as technology and regulatory issues.

Considering that successful commercial Mobile TV systems have already been implemented in Europe within the UHF bands as well as the band 1452-1479.5 MHz the following high priority spectrum policies are important for the **bmcoforum**:

1. The UHF band is the prime focus for mobile broadcast applications in Europe.

Even if different types of video streaming are already taking place in the 3G bands and other delivery options such as satellite broadcasting are planned, the prime focus for Mobile TV broadcasting in Europe is the UHF band.

2. Mobile TV should have the same resource priority as conventional broadcasting on the basis of objective and transparent criteria.

Implementation of Mobile TV should not be delayed until after the digital switch-over and should have the same access to spectrum as any other TV platform.

3. Mobile TV is able to operate on the existing channels as planned at GE-06.

As it has been proven in the existing systems Mobile TV in VHF & UHF may operate within the framework of the GE-06 plan and does not necessarily need dedicated frequency bands or major re-planning activities. In order to use the 900 MHz GSM/IMT-2000 bands for uplinks in a multimedia service the UHF channels to be used for Mobile TV should be limited to channel 21-54.

4. bmcoforum agrees with consideration of a harmonised sub-band for multimedia services within the UHF band but this should not delay or obstruct the early deployment of Mobile TV based on the GE-06 Plan.

Even though harmonised sub-bands are not required to introduce Mobile TV, the deployment and operation of multimedia services including Mobile TV may benefit from a harmonised sub-band within the UHF band. The possibility to identify a harmonised sub-band within the UHF band should therefore be studied together with the advantages and disadvantages whilst not delaying or obstructing the early deployment in Europe based on the GE-06 plan.

5. National planning for Mobile TV and DVB-T is subject to national solutions.

The RRC-06 planning process was based on a choice by administrations of a national planning configuration (RPC1 or RPC2/3) and the detailed results of bi-lateral and multilateral frequency coordination prior to and during the conference had taken this into consideration. It is therefore basically a national issue to plan the implementation of Mobile TV and DVB-T networks in such a way that operational compatibility is achieved.

6. Mobile TV may be implemented in phases as UHF spectrum is made available.

The digital switch-over has already taken place in some European countries and is expected to be finalised not later than 2012 all over Europe. Regional or local availability of spectrum for Mobile TV such as for multi-city networks will anyway be implemented in countries where UHF spectrum is already or can be made available and this will enable a progressive roll-out and an earlier launch of mobile broadcasting before the switch-off of analogue TV-services.

7. The bmcoforum supports the statement of the RSPG opinion on Multimedia.

that 'consideration should be given by all Member states to making available a minimum amount of one national layer to allow the provision of mobile multimedia services in the short term, and a second one in the longer term, as requested by market conditions and permitted by analogue switch-off'.

This spectrum requirement even prior to the digital switch-over is necessary for the **bmcoforum** members to implement Mobile TV in accordance with the market requirements.

8. Flexible use of the Maastricht Arrangement should also provide for spectrum for Mobile TV in the 1452-1479.5 MHz band.

In order to allow for terrestrial Mobile TV technologies in the short and medium term spectrum should be made available within this band by providing a flexible use of the existing frequency resources for T-DAB in accordance with the Maastricht Arrangement. Time consuming re-planning of the Maastricht Plan should, however, be avoided and any bilateral frequency coordination should be subject to the existing Articles 4 and 5 of the Maastricht Arrangements.

9. Satellite services in the L-band should not prevent or delay terrestrial Mobile TV.

The proposal to expand the satellite service within the L-band from 1479.5-1492 MHz to 1467-1492 MHz in order to provide complementary terrestrial networks could be further investigated but should not prevent or delay terrestrial Mobile TV in 1452-1479.5MHz for which there is a market need.

10. Hybrid satellite/terrestrial services for Multimedia applications including Mobile TV in the 1.6 and 2 GHz bands could also be considered to complement terrestrial services launched within the UHF or the 1.4 GHz band.

The hybrid satellite/terrestrial multimedia services in these bands should, however, not prevent or delay spectrum access for Mobile TV within the UHF or the 1.4 GHz bands.