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Strengthening the Internal Market for Mobile TV

Summary of the Impact Assessment

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EXECUTIVE SUMMARY

1. INTRODUCTION

This Impact Assessment describes the options considered by the Commission in preparation of its Communication on "***Strengthening the Internal Market for Mobile TV***". The main objective of the Communication is to support the introduction of the nascent market of mobile TV (M-TV) across the EU. The timing of the Communication was chosen in order to ensure that all conditions are in place for a successful take-up of the services in the EU.

Stakeholders have been extensively consulted. In particular, the Commission services facilitated the setting up of an industry umbrella group, the **European Mobile Broadcasting Council (EMBC)** which gathered the main industry players concerned, including broadcasters, manufacturers, content providers and telecom operators. The EMBC issued Recommendations on technology, spectrum and regulatory issues in March 2007.

2. MOBILE TV AS AN EU ISSUE

Mobile TV is a new convergent technology which brings together, in particular, two major EU industry sectors: **mobile communications and audiovisual**. It has a great potential for growth and jobs in the EU - not only for the two industry sectors primarily involved, but also for several related areas, such as the content and advertising industries.

M-TV is also expected to bring significant benefits to EU consumers, as it enables them to access TV programs in any place and at any time as well as to have access to rich, diverse and personalised audiovisual content. This will result in new ways of using and interacting with audiovisual content which could make Mobile TV a new lifestyle rather than just a new technology platform.

However, the introduction and take-up of M-TV services in the EU so far have been slow, and Europe risks losing its competitive edge in mobile services and missing a major opportunity for growth and innovation unless a sufficient degree of coordination is achieved across Europe. The key to a wide take-up of these innovative services in the EU lies in setting the right conditions that will enable players to reap the benefits of the EU Internal Market and, in particular the **economies of scale** needed.

This is why the Commission has identified the need for an **EU strategy in the field of M-TV** which addresses the main regulatory issues and will contribute to shaping the action of industry, national authorities and all stakeholders The objectives of the Communication and associated Impact assessment have to be seen in the context of the **i2010 Commission initiative**[1] and of the **EU regulatory framework for**

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1 i2010 / COM(2005) 229 (http://ec.europa.eu/information_society/eeurope/i2010/docs/communications/com_229_i2010_310505_fv_en.pdf).

electronic communications. The present Communication thus is key in promoting the take-up of new innovative services.

3. MOBILE TV TECHNOLOGIES

In plain terms, **"mobile television" refers to the transmission of audiovisual content to a mobile device**. Such a transmission can take different forms, from live TV to time-shifted or on-demand. Moreover, M-TV services can be transmitted over various networks including cellular/mobile communications, terrestrial broadcast, satellite, and Internet-based.

There is a **key distinction between unicast ("one to one") and broadcast ("one to many") mobile TV services**. Video on demand or time-shifted on demand transmissions are examples of unicasting, while traditional TV programmes are normally broadcast. Unicasting is today very common and most operators use the existing mobile communications cellular networks (2.5 or 3G/UMTS) to deliver TV content to mobile devices.

Broadcast mobile TV is still in its early days. The main technology used for pilots and commercial launches of digital broadcast terrestrial mobile television in Europe is: **DVB-H** (Digital Video Broadcast transmission to Handheld terminals) based on DVB-T standards. Other technologies include **T-DMB** (Terrestrial Digital Multimedia Broadcasting, based on T-DAB standards), and **MediaFLO** (Media Forward Link Only). There are also **Hybrid satellite/terrestrial systems**, such as **DVB-SH** operating in satellite bands.

DVB-H is currently the standard most widely used in the EU with trials and/or commercial offerings in 15 Member states. DVB-H is the only standard ensuring backwards compatibility with DVB-T, the standard used for digital terrestrial television in the EU.

4. SCOPE OF APPLICATION

The Communication and the associated IA addresses issues belonging to the regulatory framework for e-Communications, such as technology and standards, authorisation regimes and spectrum policy, and focuses on **broadcast terrestrial mobile TV** only.

Issues related to content are not covered because they are already addressed by a series of specific policy and legislative initiatives in the context of EU audiovisual policy. Notably, the proposal for a new Audiovisual Media Service Directive will also apply to audiovisual content delivered over mobile platforms.

Audiovisual services provided over mobile communication networks, such as 3G/UMTS mobile communications, **are also outside the scope of application** of the Communication and associated I.A. because the use of these networks does not raise new policy issues in terms of technology, spectrum and authorisation regimes.

5. EU MARKET STATE OF PLAY

Today, the broadcast M-TV market is still in a very early stage of development with four Member States having already started commercial operations: Italy, Germany, Finland and the UK. However, we experience some momentum in the introduction of services. 2006 was a key year in terms of pilots and announcements. 2007 is expected to become the year of commercial launches, with nationwide launches planned in Germany, France and Spain. **2008 is for industry a target date** for M-TV services due to important sports events such as the European Football Championship and the Olympic Games that will provide an important test for these new services.

Table 1 - M-TV state of play in EU-27

Technology	Member states in which technology is in use	
	Trials	**Commercial launch**
DVB-H	AT, BE, CZ, DE, ES, FR, HU, IE, LT, LU, NL, PT, SE, SI, UK	**IT, FI**
DMB/DAB-IP	FR , IE, NL, UK	**DE, UK**
MediaFLO	FR, UK	

5.1. Problems identified

The Commission services have **identified three main areas** which are important for the successful introduction of M-TV to the EU: 1) technology and standards, 2) the regulatory environment, in particular authorisation regimes, and 3) spectrum availability and harmonisation. The **Internal Market dimension** is relevant in all domains.

5.1.1. Technology

The EU landscape today is characterised by the presence of several M-TV transmission standards. **The problem we face is potential market fragmentation arising from the multitude of technical options for mobile TV.** Similar issues have been raised in the past in relation to interoperability of mobile communications, interactive television and High Definition TV (HDTV) interoperability, and were addressed in different ways, ranging from harmonisation of standards (GSM, UMTS) to promotion of industry agreements (the "HD ready" label).

A fragmented European market is likely to result in loss of economies of scale, slower service take-up and more expensive equipment. In the case of new technologies such as M-TV, reaching a critical mass in a reasonable time is crucial for take-up and deployment.

Technology - The key question addressed by the IA is: what needs to be done to ensure that the economies of scale (Internal market) are reached as soon as possible so that EU industry and consumers can benefit from the introduction of M-TV services?

5.1.2. Authorisation regimes

National approaches to the authorisation of M-TV services vary considerably. This was confirmed in a fact finding exercise launched by Commission services in 2006.

In many Member States, M-TV is subject to the general regime applying to broadcasting. In some others, there are no specific rules or the regulatory framework for these new services is still being debated. This situation generates a high degree of **regulatory uncertainty** and in some cases a **legal vacuum** which affects negatively M-TV operators.

Licensing regimes must make sense in terms of the Internal market, and the aim should be to strive for a **level playing field** allowing the various actors to compete on similar conditions. Some degree of consistency in regulatory approaches across the EU is needed in order to clarify applicable regulation and create a regulatory environment conducive to investment and innovation.

Authorisation regimes - The key question addressed in the IA is: what needs to be done in order to ensure that M-TV services can benefit from a supportive regulatory environment across the EU?

5.1.3. Spectrum

A key factor influencing the successful deployment of mobile TV is **timely access to radio spectrum**. A key challenge is to ensure that the required types of radio spectrum resources can be made available without delay in all regions of Europe. In order to achieve this goal, there is a need to: 1) identify critical spectrum resources without delay; 2) assess any need for harmonisation, or coordination, on European level, amongst others to enable economies of scale; 3) anticipate the future demand for these identified spectrum resources, in quantitative and qualitative terms, as well as to match these with the evolution of national and European spectrum availability.

At this stage, **two main spectrum bands have been identified as relevant for M-TV and as requiring consideration at EU level**: the so called L band and the UHF spectrum.

A critical factor for availability of UHF spectrum is **switch-off** of analogue terrestrial TV transmission in this part of the spectrum. The EU deadline of 2012 for the switch-off of analogue terrestrial TV broadcasting, which was endorsed by the Council and the European Parliament, is likely to be met by the majority of Member States. A **Commission Communication on the Digital Dividend**, planned for Q4 2007, will set out the Commission strategy for the use of the spectrum resulting from the switch-off, and will address in particular the UHF Band.

UHF spectrum (470-862 MHz) is the spectrum preferred by most operators, due to its technical characteristics. However, use of this spectrum is constrained by the various national policies regarding the digital dividend and by a lack of EU coordination. The Commission's services have asked the Member states to identify a **sub-band for mobile TV** within the digital dividend.

The **L-band** (1452-1492 MHz) can constitute a fall-back solution in several markets where there is no other spectrum band available. The use of this band is currently limited to certain technologies. The Commission has made proposals to open up the use of this band in order to accommodate a wider range of technologies[2].

Spectrum – The key question addressed by the IA is: what needs to be done in order to ensure that adequate spectrum for M-TV is made available across the EU?

6. POLICY OPTIONS

With reference to each of the three main policy areas identified (technology authorisation regimes and spectrum) the I.A. identifies and assesses three main policy options, as summarised in the table below.

Table 2 : Policy options

	Issue/Policy area	**Technology**	**Authorisation regimes**	**Spectrum**
Policy Options	**Policy Option 1**	Making one standard mandatory across EU	One EU-wide authorisation	EU Harmonised allocation
	Policy Option 2	Encouraging Industry agreement on a common standard, with a common standard being made mandatory in the absence of agreement	Non binding framework	"Soft law" measures
	Policy Option 3	Maintain current situation	Do nothing (i.e. take no specific action)	Do nothing (i.e. take no specific action)

7. CONCLUSIONS

The main conclusions deriving from a detailed evaluation of each option are summarised below.

Technology

In order to respond to the technology challenge, a **common standard across the EU** would have advantages in terms of economies of scale, rapid take-up of M-TV, cheaper terminals and EU competitiveness. In reaching this objective, an industry agreement on a common standard, backed up by the possibility of legislative action to make a standard mandatory (*Option 2*) would appear to be more proportionate to taking now an administrative decision on a specific standard (*Option 1*). A process involving industry would better adapt to technology change and is likely to reduce "migration costs" – i.e. the cost for industry players which have already invested in

2 Radio Spectrum Committee (2006): Commission mandate on the L band (http://ec.europa.eu/information_society/policy/radio_spectrum/docs/current/mandates/EC%20Mandate%20to%20CEPT%20on%20L_Band%20Oct%202006.pdf).

different standards or in multi-standard. Moreover, it would reduce administrative burdens for the EU and national authorities.

This could also be accompanied by support and promotion actions by the Commission and by elements of co-regulation if needed, such as the publication of a standard in the List of Standards. The Commission would regularly monitor progress made by industry in this respect and assess whether the progress towards a common standard is satisfactory.

Authorisation regimes

Concerning **authorisation regimes**, a pan-European authorisation for M-TV (*Option 1*), would be theoretically the best option to ensure a level playing field across the EU. However, at present there is no legal mechanism to put in place such a pan-European authorisation system. The Commission proposals published for consultation in the context of the current Review of the e-Communications regulatory framework included, *inter alia*, provisions for authorising services at EU level. However, if approved, such proposals would enter into force too late to be applicable to M-TV. At this point in time, it would appear that *Option 2* whereby the Commission would set in place, through "soft law", non-binding measures, a legal framework for the authorisation of M-TV services, is best suited to attaining the objective of a level playing field and legal certainty for M-TV services in Europe.

Spectrum

An EU harmonised approach to the **identification and allocation of spectrum bands for M-TV** (*Option 1*) would have the advantage of providing EU-wide certainty as to spectrum availability for these services and hence offering the potential of tapping into a large market from the outset. This in turn would greatly strengthen the business case for M-TV as spectrum is a critical factor.

Where harmonisation is possible, action at EU level would appear to be the best solution, as it has been considered in the case of the L-Band. Where harmonisation may not be possible, at least during the initial phase, as in the case of the UHF band, then "soft law" measures (*Option 2*), would be used in order to encourage the Member states to take action in a coordinated manner, if and when possibilities in the UHF band open up. A *combination of Option 1 and 2*, depending on the spectrum bands, would therefore appear to best serve the objective of ensuring that suitable spectrum is made available across Europe for M-TV services.

In each case, the aim has been to find the least burdensome approach to achieving the desired objectives.