

Ericsson response to public consultation on

Draft RSPG Opinion #5: The Introduction of Multimedia Services in particular in the frequency bands allocated to the broadcasting services.

Ericsson welcomes the opportunity to respond to this consultation and wishes to express the following views and concerns.

Ericsson understands that the concept of WAPECS is still disputed and burdened by the many uncertainties and discrepancies, which may jeopardize favourable developments of multimedia services in relation to the digital dividend in the range 470 – 862 MHz; accordingly, it might be beneficial to consider disconnecting the two issues in future discussions of new multimedia services.

The definition of multimedia services adopted for the Opinion, “the coming together of the traditional broadcasting (point-to-area-coverage) and communication services (one-to-one) in a mobile environment”, does in Ericsson’s view not clearly describe the services envisaged to be included in the concept but points to a personalization of service that is not available in broadcasting services. Ericsson would like to stress that the personalization of this new multimedia service is increasingly required by the consumers, which would certainly sustain the requirement for an element of interactivity. With this understanding the broadcasting service, in its purest form, is excluded from the concept, but might however; in a very much reduced format remain as a separate service. Ericsson understands that new behaviours of media consumers suggests a diversification of the consumption, e.g. between the elderly and rising generations or even an individual consumers may have different behaviours at different times and situations, which again supports the need for a new multimedia service. Therefore, and in addition to interactivity features, the mobility aspect is a key market requirement that is increasingly important for multimedia services. It is expected that the mobile elements of the new multimedia service would afford consumers the foundation for the personalization through its ability of making available an infinite number of content channels providing for the necessary cultural diversity and media pluralism at the choice of the consumers.

The new multimedia service should accordingly be able of also providing individual and personalized unicasting¹ television services. The unicast services have already become exceptionally successful in some of the existing mobile networks, and are also available through internet, and as such; the additional

¹ Unicasting is a broadcasting peer-to-peer service using a dedicated transport channel between the multimedia client and the server

need for spectrum in other bands to obtain extra capacity has been pronounced for these mass-market unicasting services over mobile networks. Some improvements will be achieved through enhancements through the implementation of the MBMS (Multimedia Broadcast Multicast Service) allowing mobile networks to carry content more efficiently. The MBMS services offer users to watch content on their mobile terminals providing general live broadcasting, re-broadcast of existing program channels or pre-recorded content, or alternatively content accessible from the network. The associated mobile terminal is used both as a television screen and a remote control.

Some services and technologies are dedicated to uni-directional content delivery (mobile broadcasting such as DVB-H, DMB, etc.) and needs to be complemented with return channels to satisfy the definition of the Opinion. Other services and technologies are inherently bi-directional and are flexible with respect to their application (mobile multimedia communications with broadcasting capabilities, e.g. IMT-2000/UMTS). Ericsson understands that the bi-directional properties of the new multimedia services together with mobility would necessary for its success and acceptance by the consumers.

Noticeable multimedia services can be provided by several different technologies in several different spectrum bands. It is Ericsson's view that the RSPG should not adopt an Opinion that prematurely exclude from implementation solutions that may be attractive to the consumer and beneficial to society.

The present RSPG Opinion should not create precedents with respect to spectrum use that may decrease the opportunity to create a favourable European spectrum use in the entire spectrum that becomes available for new use after the analogue television switch-off.

Ericsson strongly supports the harmonization of spectrum use and believes that this is beneficial to consumers, society and industry alike. It is deemed extremely important to have Europe-wide harmonization of the spectrum to support mobile multimedia networks since this key issue needs to be addressed in the same way across Europe. Common frequencies for mobile multimedia networks across all of Europe, improves indoor coverage, roaming, acquisition time, spectrum efficiency and also reduces costs, equipment and network deployment complexity, the number of transmit sites, cross border interference, etc. In addition a concerted European approach in this field would significantly influence positively the entire ITU-R Region 1 allocation process for mobile multimedia services.

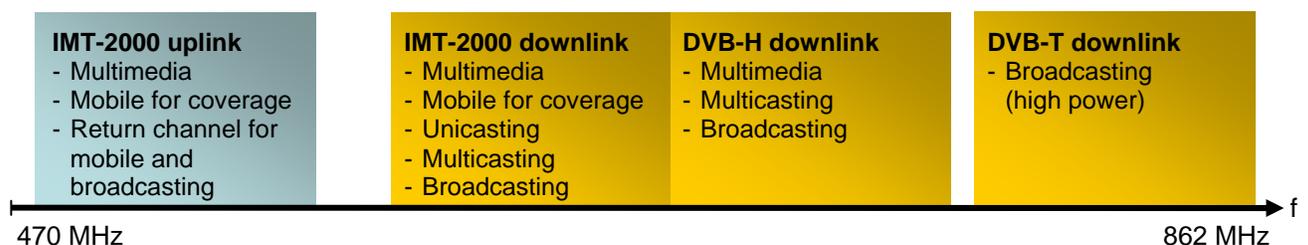
Ericsson understands that the current RSPG Opinion might overestimate the difficulties in gathering substantial and harmonized amount of spectrum for new mobile multimedia services in the range 470 – 862 MHz. With the recent clarity that the conclusion of the RRC-06 provides to countries, it is now exceedingly feasible through an agreed set of parameters and methods to without delay start

the planning of a harmonized pan-European spectrum arrangement allowing for new mobile multimedia services. Ericsson has already suggested to CEPT/ECC on how sharing could be made possible between stations of a mobile multimedia services and terrestrial distributed fixed television stations. This suggestion could be used as a baseline and further be elaborated on providing for a transitional arrangement where the gathering of a substantial and harmonized band for new mobile multimedia services could be realized through phased approach allowing countries a different and a timely introduction of the common harmonized pan-European frequency band for new multimedia services. This opportunity of establishing a common harmonized pan-European band could be useful to include as a part of a request to CEPT/ECC through a possible Mandate.

Ericsson supports the issuing of a Mandate to CEPT/ECC to:

- identify a common and harmonized uplink / return band of about 40 megahertz (5 x 8 megahertz) and also a common corresponding downlink band of about 40 megahertz (5 x 8 megahertz), preferably in the lowest part of the range 470 - 862 MHz;
- define the terms and goals of the relevant technical and interference studies necessary, and
- estimate the timeline for availability of such spectrum and draft an appropriate supporting ECC decision.

Ericsson understands that in some EU countries, in the range 470 – 862 MHz, it is anticipate that around 100 megahertz of spectrum might be made available for other usages, when analogue television is switched off, which suggests that there is a significant opportunity to implement new multimedia services without distorting the current use of spectrum. For convenience, a graph is provided below on how the digital divide could be considered to be distribution in a common and harmonized manner to minimize the distortion of spectrum use. This depicted suggestion is a very broad and generalized baseline proposal that would need further detailed elaborations and studies before drawn to a final conclusion.



A possible and unfavourable non-harmonized band, emanating from the digital dividend, for a new mobile multimedia service, could result in a requirement of applying a proportionally wide tuning range relevant to the terminal receivers. This could utterly eliminate the benefits of the favourable radio wave propagation properties in the range 470 – 862 MHz, compared to the limited sized and the higher frequency L-band.

Multiple mobile multimedia networks can also be supported within the L-band and despite the extended propagation range enjoyed in lower frequencies the L-band should be made available for mobile multimedia services, particularly in densely populated areas and other relevant situations.