



UMTS Forum

UMTS Forum response to European Commission Consultation Document 'Transforming the digital dividend opportunity into social benefits and economic growth in Europe'

The UMTS Forum is pleased to provide its comments to the consultation document issued by the European Commission on the 10 July 2009.

The UMTS Forum is an international, cross-sector industry body comprising operators, manufacturers, regulators, application developers, research organisations and IT industry players. Its main objectives are to promote a common vision of the development of 3G/UMTS (including HSPA and its evolutions part of HSPA+ as well its TDD variants) and of its Long Term Evolution (LTE), to ensure the worldwide commercial success of these technologies and to provide practical support to industry, administrations and policy makers.

The UMTS Forum supports all the initiatives provided by the EU towards an EU roadmap for the benefits of a common way forward on the digital dividend. Therefore, the UMTS Forum invites the European Commission to consider the information provided below in answer to its consultation document in the context of the proposed elements for the roadmap.

Improving consumers' experience by ensuring high quality standards for terrestrial digital television receivers in Europe

The UMTS Forum welcomes the proposal by the commission to improve the quality of TV receivers. Adequate TV receivers, in terms of supported coding schemes and general resistance to interference will be required in order to ensure that citizen benefit from the current allocation of most of the digital dividend to broadcasting networks.

In addition, the UMTS Forum would like to underline that it is most important for future TV receiver to filter out signals from the 790-862MHz band. The roll-out of new mobile broadband services in the 800MHz band would be greatly facilitated by adequate channel interference protection of TV receivers operating below 790MHz. Therefore, the UMTS Forum strongly recommends the European Commission to mandate the corresponding adjacent band rejection capability in all TV receivers sold in Europe in the future. Given the average renewal time frame for set-top boxes and TV sets of 5 to 8 years mentioned in the commission document, such as mandate should be enforced as soon as possible, especially, given the straightforward implementation for DTV receivers' manufacturers. It should be also mentioned that future DTV receivers should carefully consider green issues by respecting energy consumptions and as a result more efficient receivers that satisfy the European citizens with minimum hazardous factors.



Increasing the size of the digital dividend through further spectrum efficiency gains

The UMTS Forum believes that mobile broadband is a key service for the European citizens. Furthermore, the UMTS Forum supports harmonized spectrum arrangements for mobile broadband, as it ensures the timely availability of low cost equipment, thanks to economy of scale. Present 72 MHz of spectrum from UHF should be first efficiently used and all necessary techniques to develop the spectral efficiencies of all services should be exploited. Then, considering the wider availability of the digital dividend spectrum for mobiles in other regions, Europe in the longer terms should consider and study how to extend the CEPT band below 790MHz for a possible increase of the amount of the spectrum dedicated to mobile services. As such, the UMTS Forum welcomes the proposal to study the possibility to increase the size of the digital dividend and proposes to set the long term goal of obtaining a further harmonized band in Europe below 790MHz, i.e. a so-called digital dividend 2.0. The UMTS Forum believes that some spectrum efficiency gains can readily be obtained by applying better coding and SFN deployment to broadcasting networks.

The UMTS Forum also approves the proposal to support the research into "frequency agile" mobile communications systems. These systems could potentially offer great potential and further research is required on this topic. The UMTS Forum sees frequency agile systems as a potential complementary solution to the preferred option of freeing harmonized spectrum throughout Europe.

Making the 800 MHz band available for low/medium power electronic communications networks, under harmonised technical conditions, following the principle of technology and service neutrality.

The UMTS Forum strongly supports the proposal to make the 800MHz band available throughout Europe for electronic communication networks, under harmonized technical conditions. However, the UMTS Forum stresses that it is critical for the commission to mandate the adoption of the CEPT preferred harmonized band plan (i.e. 2x30MHz FDD band plan) in order to fully benefit from the allocation of this band to electronic communication networks.

Common spectrum bands and commonly agreed band plans are essential requirements for mobile communications to achieve sufficient economies of scale for affordable user equipments, to facilitate global roaming, and to avoid radio interference. These are all important elements of the mobile ecosystem, especially, when the ecosystem is planned for regional or global usage. From a technical point of view, a common approach for spectrum bands and a commonly agreed band plan are the preferred way to avoid deterioration of quality due to radio spectrum interference even in cases of coexistence of different technologies within the same commonly agreed band plan.

Typically, "flexibility" to deploy mobile radio transmitters and receivers - both FDD and TDD - in an uncoordinated manner is understood to be "technology neutral" and hence it is supported by some policy makers. The aim of this "flexibility" to deploy FDD UL, DL and TDD in an uncoordinated way would be to provide a "technology neutral" plan. UMTS Forum is convinced that this kind of mixed "band plan neutral" approach would lead to total fragmentation of the market if put into force.



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It would not provide the necessary guidance to the mobile communications industry in terms of network design, equipment planning and manufacturing, and it would lead to delays in the availability of equipment and services.

“Mixed band plan neutrality” would not be able to provide sufficient economies of scale to produce cost-efficient equipment and, it would also increase the risk of radio interference, resulting in a consequent reduction in consumer benefits. When a country selects a band plan different from the harmonized band plan, the harmonized terminals may be excluded from this country due to radio interference. In such case, technology neutrality is forfeited and cost-effective equipment are no longer available. The reduction of the market would reduce consumer’s choice and variety of available terminals.

Another issue that needs clarification is the view that a clear and straightforward all-FDD or all-TDD band plan is not “technology neutral”. UMTS Forum is not able to agree with such a view. It is apparent that if a regulation would mandate that only the technology x is allowed to be operated in band y (like e.g. GSM in the 900 MHz band) then this would not be “technology neutral”. However, if band y would be regulated without specifying the technology (but maybe regulated with some other rules), the band would be open for use by any technology following the rules; this kind of regulation can be considered “technology neutral”. All future mobile technologies that want to be competitive in the market place will, and have to be able to, operate in both FDD and TDD modes. This is the case e.g. with the LTE and WiMAX standards.

A common band plan would therefore not exclude any technology nor limit the technology competition. The success of a band (or band plan) depends on the market size and general feasibility of the usage conditions. A common band plan would bring a number of benefits, such as:

- economies of scale for affordable user equipment,
- wider choice of service providers and brands of devices for consumers,
- minimized risk of radio interference,
- maximized total economic value of spectrum,
- and facilitated cross-border coordination.

Therefore, the UMTS Forum strongly supports the commission’s proposal and urges the commission to further adopt the CEPT harmonized FDD band plan.

UMTS Forum supports service neutrality under the harmonised technical conditions developed by the CEPT. Operation within the Block Edge Masks (BEM) developed by the CEPT is required in order to ensure interference-free network coexistence, and will also avoid restraining service neutrality.

Adopting a common position on the potential use of the "white spaces" as part of a possible extension of the digital dividend

The UMTS Forum welcomes the commission’s proposal to adopt a proactive approach to assess the potential use of “white spaces”. In particular, the UMTS Forum underlines that the CEPT is currently conducting studies on “white spaces” and recommends the commission to take the CEPT studies and forthcoming conclusions into account.



More effective cross-border coordination with non-EU countries

The UMTS Forum strongly supports the commission's proposal to assist member states in their negotiation with non-EU countries.

This is especially important with regards to making the 800MHz band available 800 MHz band available for mobile communication in all member states.

Extensive intra-EU discussions as well as negotiations with non-EU countries are necessary in order to adopt a common position at the forthcoming WRC-12. Hence, EU should lead a major role for this political issue in order to smooth cross-border coordination. This would also facilitate the commission's proposal to increase the size of the digital dividend.

ABOUT THE UMTS FORUM

Mobile broadband is changing the way the world communicates. The UMTS Forum helps all players in this dynamic new value chain understand and profit from the opportunities of 3G/UMTS networks and their Long Term Evolution (LTE).

The UMTS Forum participates actively in the work of the ITU, ETSI, 3GPP and CEPT as well as other technical and commercial organisations globally. It also contributes to the timely licensing and deployment of mobile broadband globally through regular dialogue with regulators and responses to public consultations. The UMTS Forum supports the interests of its membership with a range of studies, reports and other outputs. Principal focus areas include markets trends, mobile broadband services and applications, key growth markets, spectrum & regulation, technology & implementation. A strong promotional voice is maintained via a high-profile presence at conferences, seminars and workshops as well as regular briefings to the media, analysts and other stakeholders.

Membership of the UMTS Forum draws together everyone with an interest in mobile broadband, including network operators, regulators and the manufacturers of network infrastructure and terminal equipment.