

Deutsche Telekom/T-Mobile Comments on the EC Consultation Document “Transforming the digital dividend opportunity into social benefits and economic growth in Europe”

Deutsche Telekom / T-Mobile (DT/T-Mobile) appreciate the opportunity to submit comments on the EC Consultation Document “Transforming the digital dividend opportunity into social benefits and economic growth in Europe”. We think making the digital dividend available to mobile broadband services in the whole of Europe is currently one of the most important activities in the area of spectrum policy and that this will influence a number of other policy areas.

0 SUMMARY

DT/T-Mobile are convinced that allocating a smaller part of the digital dividend (e.g. 790-862 MHz) to the mobile service would positively influence the economy and create an additional value of billions of Euros and thousands of new jobs in Europe.

However, in order to reach a greater economic impact the introduction of mobile broadband services needs to be harmonised all over Europe. Without harmonisation it could be necessary to leave large areas uncovered in the vicinity of the national borders in order to protect other services in neighbouring countries. DT/T-Mobile support the focus on the “preferred harmonised frequency arrangement” (FDD band plan developed by CEPT/ECC) only in the whole of Europe and opt against TDD or mixed FDD/TDD band plans.

In order to support efficient use of the scarce spectrum DT/T-Mobile fully support the principle that equipment should possess a minimum level of immunity against interference. However, the current standards for digital TV receivers are inadequate regarding the immunity requirements.

DT/T-Mobile welcome the initiative of the EC to terminate analogue broadcasting transmission by 2012 which is a prerequisite for releasing the digital dividend.

In the case of negotiation between EU Member States, the GE-06 plan should be dealt with in a flexible way. Administrations should be encouraged to exploit the full potential of possibilities through bilateral negotiations.

1 A UNIQUE OPPORTUNITY TO CONTRIBUTE TO ECONOMIC RECOVERY

DT/T-Mobile is of the opinion that the digital dividend (which is currently 300 to 350 MHz) is big enough for both services, Broadcasting and Mobile and offers room for development and innovation to both services. However, regarding the economical aspects, several studies have shown that the mobile service creates a significant higher economical output than the broadcasting service. Allocating a smaller part of the digital dividend (e.g. 790-862 MHz) to the mobile service would positively influence the economy and create an additional value of billions of Euros and thousands of new jobs in Europe.

Thus DT/T-Mobile is of the opinion that the digital dividend could help to overcome the current economic crisis. Europe can't afford to miss this opportunity.

The amount of spectrum allocation for mobile services should allow meeting the most important needs of EU member states, especially the requirements for broadband in rural areas. DT/T-Mobile proposes not to assign less than 2x30 MHz for such purposes. This would contribute increasing overall Europe broadband penetration rate and better indoor coverage.

However, the maximum economical benefit will only be achieved if the allocation is as harmonised as possible in the whole of Europe. Harmonisation is the most important success factor of the digital

dividend in Europe. Without harmonisation it could be necessary to leave huge areas uncovered in the vicinity of the national borders in order to protect other services in neighbouring countries. Only a harmonised, separated sub-band for the mobile service will ensure efficient and interference free use of the digital dividend.

Regarding the Economic Recovery Plan which sets a target of 100% broadband coverage between 2010 and 2013, it is necessary to take the economical and technical feasibility of this ambitious goal into account.

2 WHAT HAS BEEN ACHIEVED SO FAR?

DT/T-Mobile appreciate the long-standing work of the EC which provided the basis for the release of the digital dividend. We also appreciate the work of CEPT/ECC which provided the technical basis for the regulatory framework of the DD.

The introduction of more flexibility is welcome as long as reliable and interference free communication is not endangered and the overall efficiency of the spectrum use is not reduced. As regards public mobile services, the introduction of more flexibility must not be at the expense of harmonisation, which is the most important prerequisite for economies of scale and an economical success.

DT/T-Mobile suggest that the EC should encourage Member States for further (local) consultations regarding the optimal distribution of the digital dividend so that societies can achieve maximum possible benefits from the transition process, especially in countries, where terrestrial TV digitization is at an early stage.

3 A COMMON WAY FORWARD: TOWARDS AN EU ROADMAP

A clear European roadmap would be very helpful in order to align activities of the member states and to avoid uncoordinated activities which would lead to a fragmented, inefficient situation in Europe. The first priority should be on making the sub-band 790-862 MHz available for mobile broadband services on a harmonised European basis. Moreover the roadmap should be as mandatory as possible. Regarding the final date for the release of the digital dividend a certain degree of flexibility may be necessary for the Member States in order to adapt to national situations. Nevertheless a maximum time period for the release of the digital dividend should be implemented.

In particular the technical issues need to be harmonised as much as possible in order to ensure technical compatibility and efficient use of spectrum. Therefore DT/T-Mobile support the focus on the "preferred harmonised frequency arrangement" (FDD band plan developed by CEPT/ECC) only. DT/T-Mobile opt against TDD or mixed FDD/TDD band plans as these would decrease the possible positive implications of such spectrum use.

The decision to make part of the digital dividend available to non-broadcasting services is a political decision. Therefore we welcome the involvement of all three European institutions as this will create sufficient political weight to achieve real European harmonisation. However, a deeper involvement of industry at an early stage would also be desirable.

4 PROPOSED ELEMENTS FOR A ROADMAP

4.1 Standards for terrestrial digital television receivers in Europe

Compression standards

MPEG-2 compression technology is already outdated. Therefore DT/T-Mobile support the proposal to ensure availability of a compression standard on all DTT receivers sold after 1 January 2012 which is at least as efficient as the H264/MPEG-4 AVC standard.

DT/T-Mobile believe that such decision opens the door for increasing the size of the DD, and eventually allocation of greater size of DD for mobile broadband services.

Moreover we welcome to set a mandatory date for the introduction of a minimum compression level as a clear message to the market.

DT/T-Mobile also believe that the use of digital dividend spectrum for HDTV services would negate the advantages of increased efficiency by advanced compression technology as this would be at the expense of program diversity. In many EU Member States HDTV content is distributed (and accessible countrywide) via satellite platforms as this is the most economical way.

Immunity Standards

DT/T-Mobile fully support the principle that receivers should possess a minimum level of immunity against interference from adjacent channels/frequencies. However, the current standards for digital TV receivers are inadequate regarding the immunity requirements. DT/T-Mobile is of the opinion that the EU should address this issue as a matter of urgency.

DT/T-Mobile would have great concerns if low cost receivers (e.g. USB stick receivers) receive protection.

4.2 Increasing the size of the digital dividend

Future broadcasting network deployment plans

Deployment of the most spectrum efficient technology should be as mandatory as possible. This does also apply for the receiving equipment. If it would be necessary to protect low cost receivers this would decrease the efficiency of spectrum use for adjacent radio services considerably.

“Frequency agile” mobile communications systems

DT/T-Mobile have concerns with relying on current cognitive technologies to detect and avoid other users. Cognitive devices are at a very early stage of development and rely on knowledge of the characteristics of the primary users of the radio spectrum in order to avoid causing them harmful interference. Therefore we think that such systems can currently not be used for the mobile mass market service. However, we support to study frequency agile systems with a view to intensify spectrum sharing in general.

4.3 Making the 800 MHz band available for electronic communications networks, under harmonised technical conditions

DT/T-Mobile agree that opening of the 790-862 MHz band for wireless broadband services is the most pragmatic way forward to optimise the impact of the digital dividend, especially in the Member States, where there are significant gaps between quality and accessibility of modern broadband infrastructure in the urban and rural areas. Introduction of broadband systems on the digital dividend spectrum can significantly help to reduce this gap and to fight against the ‘Digital Divide’.

European harmonisation is essential in this context. It would allow greater economies of scale and avoid fragmentation between Member States regarding the technical conditions of use. EU-wide harmonisation of a separate sub-band for the mobile service will minimise interference and allows more efficient spectrum use. This could however conflict with the service neutral approach which is intended to be applied in Europe. We would like to propose that the EC helps to remove any uncertainties involved with the application of the service neutral approach regarding the separation of a sub-band for the mobile service.

Moreover we would like to stress that in the case of negotiation between EU Member States, the GE-06 plan should be dealt with in a flexible way. Administrations should be encouraged to exploit the full potential of possibilities through bilateral negotiations. There are many cases where the allotments of the GE-06 Plan are not completely used in practise or intended to be used in a different way.

As to the final implementation date for the technical harmonisation measure, we understand that it may be too early to specify a concrete date now, but DT/T-Mobile is of the opinion that a maximum time period should be implemented. The EC should revisit this issue on an annual basis. We support that Member States show commitment to the digital dividend policy at international level by adhering to footnote 5.316 of the ITU Radio Regulations. Those Member States should apply for inclusion in footnote 5.316 at WRC-11.

4.4 Potential use of the "white spaces" as part of a possible extension of the digital dividend

DT/T-Mobile agree that spectrum use of digital broadcasting could be made more efficient by re-using the unused "white spaces" for other services. In order to give operators of broadcasting services more confidence we would support use by equipment which is auxiliary to broadcasting (e.g. wireless microphones and wireless production equipment).

From a regulatory point of view use of general authorisation (licence-exempt) should be avoided in the "white spaces" as it would make later re-planning of the band very difficult. It is extremely difficult to withdraw them from service once such devices have been deployed.

DT/T-Mobile is of the opinion that it would be extremely difficult if not impossible to use the "white spaces" for professional public mobile services.

4.5 Further development of wireless microphone applications and other secondary uses of the UHF spectrum

CEPT/ECC is already working to identify alternative spectrum resources for such applications (preparation for WRC-11/12 agenda item 1.5). DT/T-Mobile is of the opinion that the EC could play a helpful role in harmonising alternative bands in Europe. It should be clear that such equipment must not claim protection from primary radio services.

4.6 More effective cross-border coordination with non-EU countries

The EC should in particular support Central and Eastern European Member States wishing to implement mobile broadband services in the digital dividend spectrum in negotiations with neighbouring countries that intend to further operate aeronautical radio navigation service (ARNS) according to RR footnote 5.312.

4.7 Addressing future challenges

DT/T-Mobile welcome the idea to monitor external developments affecting the roadmap for the digital dividend and to establish a reporting to the European Parliament and Council on any need for a review of the roadmap at least once every two to three years. We are of the opinion that all stakeholders should be involved in this process.

5. URGENT ACTIONS

5.1 Accelerating analogue switch-off by 2012

DT/T-Mobile welcome the initiative of the EC to terminate analogue broadcasting transmission all over Europe by 2012. This is a prerequisite for releasing the digital dividend. Also broadcasters will benefit from an early digital switchover as it will reduce the operational expenditure (OPEX) which can compensate the necessary capital expenditure (CAPEX) for the switchover.

5.2 Opening of the 800 MHz band for electronic communications services by adopting harmonised technical conditions of use in Europe

DT/T-Mobile fully support a binding EC Decision on the technical harmonisation of the 790-862 MHz band in autumn 2009. The CEPT/ECC already developed proposals for technical harmonisation of the digital dividend.

However, DT/T-Mobile would strongly propose for the sake of European harmonisation and reaching economies of scale, that the EC Decision focus on the "preferred harmonised frequency arrangement" (FDD band plan developed by CEPT) only and not TDD or mixed FDD/TDD band plans.

Best Regards

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