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Brüssel

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T-Mobile response on the Radio Spectrum Policy Group Public Consultation on WAPECS

Dear Sirs,

T-Mobile welcomes the opportunity to present its position on the Radio Spectrum Policy Group Public Consultation on Wireless Access Platforms for Electronic Communications Services (RSPG05-87).

T-Mobile agrees that the increasing technology evolution as well as the development of telecommunication markets require changes in spectrum management which will improve the flexibility and access to the spectrum needed for innovations. The current public spectrum management regime, however, has a lot of merits especially regarding harmonisation of spectrum use and prevention of interference. T-Mobile would like to emphasize that any changes have to be evaluated carefully. The primary focus of a new concept for spectrum regulation must be to guarantee stable, fair and non-discriminatory conditions between all spectrum users. The new concept should include a stepwise approach and an appropriate transition period taking into account investments to-date, existing license conditions and diverging regulatory conditions.


In addition, by including measures to support the harmonisation of spectrum use in Europe, the concept can improve the internal market for manufacturers, network operators, service providers and consumers, and prevent fragmentation of technical, economic and living conditions within the EU.

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Regarding our response to the RSPG questionnaire , T-Mobile refers to the answers of the Deutsche Telekom group and GSM Europe. If you have any questions please do not hesitate to contact Karl-Heinz Laudan (Phone: +49 228 936 15230; Mail: karl-heinz.laudan-mobile.net).

Yours sincerely,

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Wolfgang Kopf

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Executive Summary:

T-Mobile believes the current public spectrum management regime has a number of merits especially with regard to harmonisation of spectrum use and prevention of interference. The current regime has supported the development of a fair and stable framework of competition, significant and long-term investments in network industries as well as the many benefits of economies of scale, roaming and interoperability in mobile markets. Furtheron, it already allows a degree of flexibility to meet the changing needs of users of radio spectrum. Current developments in technology and service convergence (broadcast/ telecoms or fixed/ mobile) may require a reduction in historic restrictions to offer additional flexibility and to increase the efficiency of spectrum use.

T-Mobile emphasises that in order to obtain a net-benefit with the changes intended with the new WAPECS concept, the benefits and drawbacks have to be carefully considered. The primary focus of WAPECS must be to guarantee stable, fair and non-discriminatory conditions between all spectrum users. The concept must include a stepwise approach and an appropriate transition period while taking investments, existing license conditions as well as diverging regulatory conditions (licensed, license exempt, unlicensed, fixed, mobile, broadcast) into account.

Finally, T-Mobile emphasises that WAPECS should include measures supporting the harmonisation of spectrum use in Europe. Harmonisation increases the prospects of the internal market for manufacturers, network operators, service providers and consumers and prevents fragmentation of technical, economic and living conditions (e.g. the digital divide). The concept must address technical issues (interference, standardisation) as well as property rights in relation to interoperability of systems and technology neutrality of allocations.

Regarding our response to the RSPG questionnaire, T-Mobile refers to the answers of the Deutsche Telekom group. Furthermore, T-Mobile would like to refer to the questionnaire response given by the European mobile operators group GSM Europe, which are fully supported by T-Mobile.

1. Introduction

T-Mobile is active in many European countries as an operator of cellular mobile networks using the GSM and the UMTS/IMT-2000 standard. In addition, T-Mobile is one of the leading WLAN hotspot operators in Europe. Furthermore, in many European countries, T-Mobile companies operate trunked radio connections and fixed links (point-to-point, point-to-multipoint) for their core networks. The T-Mobile group has invested billions of euros in licenses and infrastructure as well as in the development of mobile businesses in Western, Central and Eastern Europe.

Thus, T-Mobile has a great interest in the discussion of a new concept for spectrum management in Europe. The WAPECS concept on Wireless Access Platforms for Electronic Communications.

Services published by the RSPG and currently discussed in ITU-R, CEPT, and within the European Commission is such a concept. This concept intends to change the rules of international spectrum regulation in order to cope with technological trends and

increased convergence which require faster spectrum access and greater flexibility. T-Mobile strongly requests the recognition of the significant investments made by the cellular industry under past regulatory regimes. An appropriate transition period is imperative. During that period suitable conditions to increase the flexibility and value of spectrum resources must be developed. Therefore, T-Mobile would like to provide RSPG with the following remarks on the WAPECS concept. As already indicated, regarding our response to the RSPG questionnaire, T-Mobile refers to the answers of the Deutsche Telekom group. Furthermore, T-Mobile would like to refer to the questionnaire response given by the European mobile operators group GSM Europe, which are fully supported by T-Mobile.

2. General remarks on the WAPECS concept

T-Mobile would like to focus on some key aspects which must be taken into account for the changes in spectrum management proposed by the WAPECS concept.

In order to understand the concept of WAPECS and to discuss the advantages and disadvantages from a mobile operators view it is important to have a clear definition of the concept. A "possible working definition" of WAPECS provided by the Questionnaire reads as follows:

"Wireless access platforms for electronic communication services (WAPECS) are the platforms used for radio access to electronic communication services, regardless of the bands in which they operate (recognising the obligations on administrations under the ITU Radio Regulations), or the technology they use."

A clear definition of WAPECS is needed to ensure a precise and stable regulatory framework, which provides reliability and certainty for manufacturers, network operators and service providers. It is an important requirement for long-term and significant investments in electronic communication services.

After addressing platforms for radio access to electronic communication services in the definition, the WAPECS paper presents its vision on platforms and services in figure 1. Unfortunately in figure 1 already the paper confuses platforms and services with applications and technologies. This effects the target to develop a new regulatory model with technology and service neutrality as key factors for the future development of radio applications. From a mobile operators point of view it must be stated that a certain part of such applications are already possible within the current regulatory framework even if the limits of convergence of technologies and services are still to be defined. Furtheron, the intensive challenges for standardization and harmonisation activities have shown that ensuring high quality, interference-free radio services in neighbouring bands is not an easy task. New developments have to respect the physical conditions and limits in radio transmissions. Decreasing technological restrictions for radio applications therefore might lead to lower quality services or larger guard bands and thus decreased efficiency of spectrum use. The WAPECS concept should increase its focus on the technical conditions, especially interference implications of the introduction of technological neutrality.

Regarding the convergence of services it has to be taken into account that there are still differences between public and private services, and whether spectrum users provide commercial or non-commercial services. In addition, it has to be recognized that services can be based on licensed or unlicensed spectrum with a set of diverging operational conditions regarding coverage, quality of service, spectrum fees, etc.

But with convergence different applications use increasingly the same technologies and become harder and harder to differentiate.

Therefore, WAPECS should cover all applications. Its main objective should be to develop fair and non-discriminatory conditions for the competition of all spectrum users. In order to support a positive investment climate it has to take the huge and long-term investments of the many spectrum users as well as the development of relevant markets into account. An appropriate transition period and stepwise approach seem of outmost importance to ensure achieving the advantages of increased flexibility and faster availability of spectrum for innovative technologies. Such measures would help avoid the disadvantages of higher uncertainty for investments, decreased harmonisation and risk of inefficient fragmented spectrum use.