

## Position Paper

### Public consultation on the Lamy Report: the future use of the UHF TV broadcasting band

2nd April 2015

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BITKOM represents more than 2,200 companies in the digital sector, including 1,400 direct members. With more than 700,000 employees, our members generate a domestic turnover of 140 billion Euros a year, exporting high-tech goods and services worth another 50 billion Euros. Comprising 1,000 small and medium-sized businesses as well as more than 200 start-ups and nearly all global players, BITKOM' members offer a wide range of software technologies, IT-services, and telecommunications or internet services. They produce hardware and consumer electronics or operate in the sectors of digital media and the network industry. 76 percent of the companies' headquarters are located in Germany with an additional amount of 10 percent in other countries of the EU and 9 percent in the USA as well as 5 percent in other regions. BITKOM supports an innovative economic policy by focussing the modernization of the education sector and a future-oriented network policy.

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#### Introduction

The chairman of the advisory group on future use of UHF spectrum for TV and wireless broadband of the European Commission, Mr Pascal Lamy has presented the results of the groups' work in August 2014. From January to April 2015 the European Commission holds a public consultation on the report. BITKOM is taking the opportunity to comment on this paper and outline further ideas.

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#### Respondents' profile

Please see above.

#### President

Prof Dieter Kempf

#### Confidentiality

Please consider BITKOM's contribution as public.

#### Management

Dr Bernhard Rohleder

#### The citizens' dimension

As an industry association, BITKOM is not in the position to address questions directed to the user.

BITKOM would like to express its concern about the representativeness of the results of this survey. Even though we highly appreciate the idea of evidence-based policy-making, the limited number of respondents will probably not reflect the view of the European society since most of the responses will be given by a biased community of stakeholders.

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### Potential repurposing of the 694-790 ('700') MHz band

*What long-term advantages and disadvantages do you see in using the 700 MHz band for wireless broadband services in the Union?*

The use of 700 MHz frequencies for Mobile Broadband (MBB) can help Europe to meet the targets of its Digital Agenda in terms of broadband availability. LTE-Advanced carrier aggregation can make use of this spectrum so to support the targets of 30Mbps or 50 Mbps (Germany), respectively.

The excellent propagation conditions in the 700 MHz band will allow for affordable high speed internet access over the vast majority of the EU landmass enabling and fostering new services like improved traffic safety and highly autonomous driving.

With the ECC Decision(15)01 on harmonised technical conditions for mobile/fixed communications networks (MFCN) in the band 694-790 MHz, CEPT has established a basis to allow Europe to benefit from the evolving global ecosystem around 3GPP band 28 which is supported even today in first devices available on the European market.

*What merits do you see in a coordinated EU approach for changing the use of the 700 MHz band in the Union from broadcasting to wireless broadband services?*

The current use of the 700 MHz band for High Power High Tower Digital Terrestrial Television (DTT) distribution necessitates massive border coordination. Continued use of the 700 MHz band for DTT in one country can adversely impact the use of the band for MBB in its neighbouring countries. Therefore, BITKOM recommends coordinated migration plans to clear the 700 MHz band from DTT as soon as possible in order to maximise the advantages of using the band for MBB. BITKOM is supporting the end of 2017 deadline for migration planning proposed by the EU Commission's Radio Spectrum Policy Group<sup>1</sup>.

*In your opinion what should a potential EU coordination cover? Should there be a common EU deadline for making the 700 MHz band available for use for wireless broadband services across the EU? Please provide justification of your answer on a common EU deadline including cost assessment. Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2020 +/- 2 years]?*

Several EU member states (Finland, Sweden, Germany) have announced availability of the 700 MHz band starting 2017, i.e. earlier than proposed by the Lamy report: BITKOM welcomes their fast path. The Digital Agenda for Europe sets a 2020 target for ubiquitous availability of 30 Mbps broadband connection where MBB can substantially contribute only if the 700 MHz band is made available before that deadline. Consequently, BITKOM sees any deadline for 700 MHz availability for MBB after 2020 being not in support of the Digital Agenda for Europe targets.

*Should there be measures at EU level mandating use of the latest, most spectrum-efficient technologies for DTT equipment (such as DVB-T2, HEVC etc.)?*

<sup>1</sup> see also [http://www.bitkom.org/de/themen/54882\\_81209.aspx](http://www.bitkom.org/de/themen/54882_81209.aspx)

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*Please specify which measures you would propose to mandate. Which date would you propose to mandate such spectrum-efficient technologies?*

BITKOM generally prefers market driven approaches. These can include incentives to quickly move to latest and most efficient technologies but should not mandate such a move.

### Ensuring regulatory certainty for current users of spectrum

*Should there be a common EU deadline for safeguarding primary use of the 470-694 MHz band for DTT and further use for wireless microphones and other wireless audio equipment? Please provide justification of your answer on a common EU deadline to safeguard existing uses. Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2030]?*

BITKOM recognizes the need of all users of UHF bands to have certainty over future conditions of use of those bands to be able to plan their investments. Such certainty, however, shall not prevent technology evolution in diverse market environments between different member states or regions within a member state. Hence BITKOM recommends to allow for certain flexibility for the future use of 470-694 MHz.

### Flexibility of use of sub-700 MHz (470-694 MHz) spectrum

*[The Lamy Report recommends a "flexibility option" in the band 470-694 MHz. This means that broadcasting use would always have priority in this band, yet specific channels or locations not used for terrestrial broadcasting or wireless audio applications (PMSE) could become available for downlink-only wireless broadband applications depending on national circumstances.]*

*Do you support flexible downlink-only use of the 470-694 MHz band also for wireless broadband services, which safeguards primary use of this band for DTT according to national circumstances?*

BITKOM recommends to further investigate Supplemental Downlink (SDL) as a possible means to build additional MBB capacity within the frequency range 470-694 MHz coexisting with DTT distribution. Part of that additional capacity can be used to carry broadcast content to mobile devices. With the help of eMBMS (evolved Multimedia Broadcast Multicast Service) as the broadcast technology in LTE/LTE-Advanced, linear content can be efficiently distributed to mobile devices within additional SDL capacity creating a win-win-situation for broadcast and MBB.

*What scenarios and conditions should be studied to allow flexible downlink-only use in the 470-694 MHz band? In particular, should these include primacy for the provision of audiovisual services to mass audiences?*

BITKOM generally prefers market driven approaches. Business models need to be found where Mobile Networks Operators (MNOs) based on their existing assets can make attractive commercial offers to broadcast content providers to distribute their content over the mobile networks. The high economic value of currently underutilised UHF spectrum in the 470-694 MHz range suggests that there should be ways to find economically attractive solutions for the stakeholders involved.

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### **Harmonisation of use of sub-700 MHz (470-694 MHz) spectrum in the long-term, the European approach and the International Telecommunication Union (ITU) context.**

*Do you see merits in a common EU position on the UHF band for World Radiocommunication Conference 2015?*

BITKOM supports any common EU position in favour of making the 700 MHz band available in a harmonised way soon for MBB under agenda item (AI) 1.2 of WRC-15.

BITKOM would welcome a common EU position in favour of a co-primary allocation of 470-694 MHz to the mobile service under AI 1.1 of WRC-15 to support flexibility in the use of that band.

*Do you see merits in a common EU position on the UHF band for future World Radiocommunication Conferences?*

If consensus on a common EU position towards a co-primary allocation of 470-694 MHz to the mobile service cannot be reached for WRC-15, BITKOM proposes to pursue this for the next WRC (WRC-19).

*What should be the EU position with regard to the 470-694 MHz band for World Radiocommunication Conference 2015?*

BITKOM believes that AI 1.1 of the WRC-15 (consideration of additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT)) offers a good opportunity for making available more globally harmonised spectrum for IMT in cooperation with other ITU regions. Co-primary allocation of the 470-694 MHz band to the mobile service gives Europe the flexibility it needs to decide further down the road as to how the band will be used in future.

*What should be the EU position with regard to the 470-694 MHz band for World Radiocommunication Conferences beyond 2015?*

BITKOM understands that the use of DVB-T/T2 will have priority in the 470–694 MHz frequency band in many European countries until 2030. However, there are numerous EU member states where the 470–694 MHz frequency band is not intensively used by DVB-T/T2, neither at the moment nor over the coming years. Thus reserving this spectrum for DVB-T/T2 exclusively no longer makes sense in these countries. In this case, making it possible for the applicable EU member states to migrate early on (if applicable, in part) is very appropriate in the sense of the "Digital Single European Market". The RSPG should therefore provide assistance with corresponding technical investigations and potential (partial) migration scenarios that analyse in more detail the coexistence of the mobile service and DVB-T/T2 (e. g. convergence of mobile communication/DVB-T/T2 or SDL/eMBMS).

*What measures would be needed at national and/or EU and/or ITU level to safeguard flexible downlink-only use in the 470-694 MHz band?*

BITKOM recommends to further technically study ways of coexistence of DTT and SDL within the band 470-694 MHz considering the large variety in DTT use (in terms of % household and in terms of the number of offered channels) and DTT use cases (e.g. roof-top vs. portable indoor). Furthermore, BITKOM sees a need to look into possible business models on how to share the economic bene-

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fits of a more intense use of the 470-694 MHz band between stakeholders. Also the regulatory frameworks need to be studied in terms of how they can best support media delivery to consumers in 470-694 MHz.

### **Market review of the state-of-play of broadcasting and wireless broadband services**

*Should there be a common EU deadline for conducting a review exercise regarding market developments?*

With the rapid change in technology and in media consumption patterns, BITKOM sees a need to revisit the means on how media can be delivered most efficiently to the European audiences.

*Which date would you propose for such a deadline [The Lamy report proposes a deadline of 2025]?* BITKOM recommends a review significantly earlier than 2025 due to the rapid changes in technology and in media consumption patterns. Bearing roughly 5 years as a review cycle in mind, a next review should be targeted latest for 2020.

*What objectives, scope and method should such a review exercise pursue?*

BITKOM proposes to look at all media distribution paths and their respective shares not only for linear media consumption, but also for non-linear offerings. Any review shall identify potential in better addressing consumer needs with better resource efficiency in terms of spectrum utilisation and cost. BITKOM sees substantial potential and economic value in providing ways to use the band 470-694 more intensely.

### **Other comments**

*Do you have further comments related to the Lamy Report?*

BITKOM has no further comments.

*Do you have further comments regarding relevant issues in the context of the future use of the UHF band (470-790 MHz)?*

BITKOM has no further comments.