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## TDF comments on the Draft RSPG Opinion on Strategic Challenges facing Europe in addressing the Growing Spectrum Demand for Wireless Broadband

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# **TDF comments on the Draft RSPG Opinion on Strategic Challenges facing Europe in addressing the Growing Spectrum Demand for Wireless Broadband (WBB)**

## **Executive summary**

TDF welcomes the opportunity given by the RSPG to provide comments on the draft opinion.

We are globally appreciative of the comprehensive and clear analysis work of the task force on a very complex subject, and as a stakeholder we provide additional views on:

- the trends in consumer behavior and demand, especially the growing consumption of linear audiovisual services despite the growth of nonlinear, requiring cost efficient delivery systems .
- the convergence of services which emphasizes the advantage of Hybrid Broadband networks.

More importantly, we respectfully bring to the attention of the RSPG the necessity:

- to prepare, for the sake of clarifying the 700 MHz issues, a very detailed transition plan to introduce advanced and future proof technology DVB-T2/HEVC, a realistic calendar and an impact assessment before any decision can be taken at the political level, where it belongs because of the wide reach and societal benefits of the DTT.
- to review the annex 1 and 2 to take into account the calendar issue on the 700 MHz and to remove the prospective use of the rest of the UHF as a candidate for WBB, as this is not compatible with the responses to RSPG questionnaire on future DTT spectrum needs.

By integrating our proposals and taking into account the strategic objective of a strong and future proof DTT platform, we believe the RSPG opinion will increase the likelihood for a European consensus and therefore the feasibility of WBB roll out throughout Europe. The objective of the RSPG for WBB would still be exceeded by more than 33% in the medium term, which is a substantial achievement at a time when recent predictions of mobile data traffic have been recently revised downward by a factor of 2<sup>1</sup>.

## **Introduction**

TDF is operating a multi-format and multi-support (terrestrial, satellite, telecom) platform for managing and distributing audio, video and data content to all types of receivers. Present in 9 European countries, and being an active player of the digital transition challenges counting among our customers some of the leading broadcasters and mobile network operators in Europe, TDF welcomes the opportunity given by the RSPG to provide comments on the draft opinion.

## **1- Comment on trends in consumer behavior and demand**

It is noteworthy that despite the growth of non-linear services, demand for linear video services is still very strong, about 4 hours per day, and increasing in many countries. These linear services are currently best addressed through broadcast systems, which are based predominantly on DTT.

Therefore the need for cost efficient systems for linear services delivery remains clear for the foreseeable future.

These delivery systems will need to evolve to accommodate new audiovisual formats, such as HD and UHD formats in a spectrum efficient way, therefore the introduction of new technologies such as DVB-T2 and HEVC will be required.

## **2- Comments on the impact of the Convergence of Services**

We understand by Convergence of Services the fact that a similar or comparable service becomes available on various platforms; usually through a common terminal.

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<sup>1</sup> See for instance <http://www.analysismason.com/About-Us/News/Insight/Cisco-mobile-data-forecasts-Feb2013/>

To achieve this convergence of services, we note that complementarity of networks is a widespread tendency –for instance the DTT platform becomes interactive using Hybrid Broadband TV technology and combined with a common, widely available (2 Mbps) ADSL link.

Some of the issues raised in the document seem to refer to a possible convergence of networks (“topologies” etc).

We understand that the concept of Convergence of networks still requires a lot of R&D work among the stakeholders as is not yet fully articulated, nor operationally demonstrated.

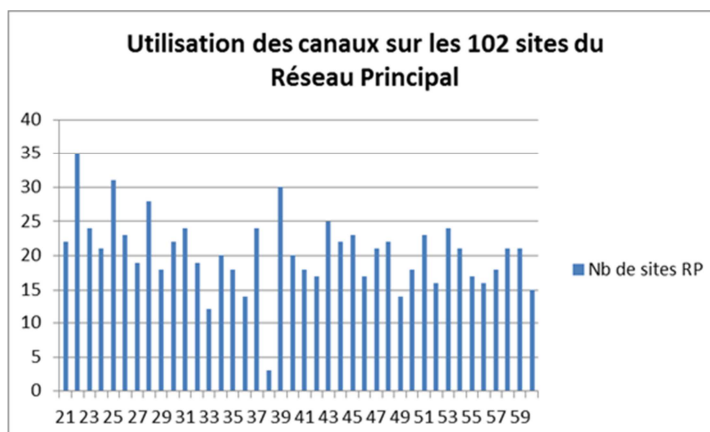
It therefore seems quite premature to base policy decision on an undefined concept.

### 3- Comments on part VII Meeting Future Spectrum Demand for Wireless Broadband Services and Annex 1 and 2

We focus on the Annex 1 and 2 which we view as key elements of the Draft Opinion as they would serve as the documented basis for practical implementation of the RSPG recommendations.

The 694-790 MHz Band:

The 694-790 MHz Band is heavily used since the Digital Switch Over. For instance, in France it is clear that the use of channels in that band (channels 49 to 60) is as intensive as in other parts and any refarming will be extremely difficult.



Regardless of policy issues, it seems to us that for practical reasons the 694-790 MHz Band cannot be made available in the medium term because of the following steps to take into account:

- Time to take international decisions (WRC 15, CEPT studies)
- Time to conduct the cross border coordination (more than 3 years, with no upper limit, according to the RSPG draft report established in march)
- Time to disseminate the technologies DVB-T2/HEVC in the receivers (minimum five to seven years for first TV sets, once an obligation is set and effective, HEVC becoming available around 2015; secondary sets will take longer).
- Time to carry a switch over and frequency plans refarming on the transmission side (two to four years according to previous experience)
- Time to address the various legal issues, including licenses.

As an illustration, the French Audiovisual Regulatory Body (CSA) has recently set out a possible roadmap for the migration to DVB-T2/HEVC in France: full migration can only be envisaged after 2023/2025.

One could think that if staying on existing technologies (eg. DVB-T), a shorter timeframe would be possible. In our views, a scenario without technical migration would clearly not be optimal in terms of spectrum usage and future evolutions of DTT platform, a significant drawback which would not be offset by a clear gain in schedule: the cut in spectrum would in any case require extensive coordination discussions. In the case of the 800MHz band, those discussions took more than 5 years around France to reach all agreements even if the number

of transmitters concerned was lower and the 800 MHz Band was much less used. To that timing one must add the roll out of frequency plan adjustment on the transmission side.

This is why in our opinion the 700 MHz Band can not be made available on the medium term.

#### The 470-694 MHz Band:

We do not see at this stage how the rest of the UHF (470-694 MHz) could be made available, even in a very long time frame, when taking into account the answers to the RSPG questionnaire on the future spectrum needs of DTT.

The justification given in the documents is a possibility of long term convergence between mobile and broadcasting, a possibility which remains to be substantiated and demonstrated as stated in our section 2.

While the category “possible in very long time frame” applies only to the 470-694 MHz band, in our view this band is by no means different from that of other established services.

#### We therefore suggest to:

##### Modify the annex 1 as follows:

**470-694 MHz: change color to light blue, and indicate that potential for WBB is NO.**

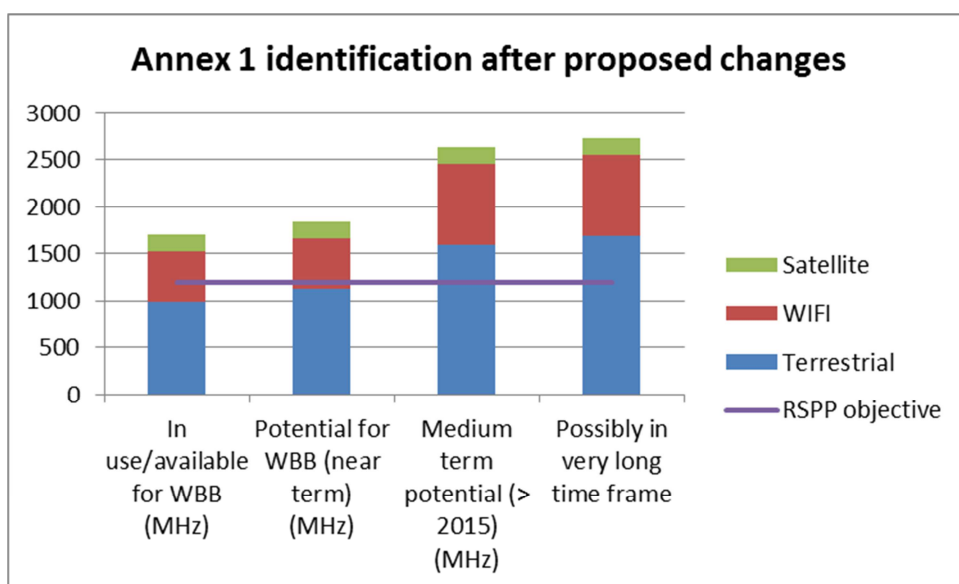
**694-790 MHz: change color to orange, possible only in very long time frame.**

**Modify the Annex 2 by deleting the part on 470-694 MHz.**

After our proposed changes, the summary of Annex 1 could be summarized as follows (same presentation as last table of Annex1 but in a cumulative way):

Broadband access	In use/available for WBB (MHz)	Potential for WBB (near term) (MHz)	Medium term potential (> 2015) (MHz)	Possibly in very long time frame
Terrestrial	990	1130	1600	1696
WIFI	538,5	538,5	858,5	858,5
Satellite	173	173	173	173

And the corresponding visual:



**It appears clearly that objectives of RSPP are still fully met and even exceeded by 33% in the medium term.**

This is quite an achievement, when taking into account that since the RSPP adoption:

- Estimates for mobile data traffic made by leading actors have been revised downward by a factor of 2,
- These estimates of traffic and growth rate are still thought to be overestimated by independent analysts,
- The share of mobile traffic offload on WIFI networks has strongly increased, and this tendency is likely to remain in the future.

## 4- Comments on part IX 700 MHz Frequency Band

Because the Digital Terrestrial TV (DTT) platform has universal impact, is modern, innovative, privacy respectful and a cornerstone of Europe's cultural industry and content regulation, a strong DTT platform serves the General Interest. We believe these points are essential to the success of the European Digital Agenda.

Therefore we agree with the conclusion on page 16 which emphasizes that political and economic elements need to be taken into account in addition to technical elements.

A first issue to be detailed is that of the schedule. We believe no principle decision can be taken in the absence of a robust and realistic global schedule that would integrate DTT migration to more efficient technologies such as DVB-T2/HEVC which would warrant that the platform is future proof.

Another point which must be taken into account is the answer to the RSPG questionnaire on DTT spectrum needs, which have demonstrated that most countries expect to launch new multiplexes in the short term, that 12% of the countries have requirements for more than 10 multiplexes and that the average requirement is 6 multiplexes, and more for countries with high DTT penetration. For instance, France is currently rolling out the 7<sup>th</sup> and 8<sup>th</sup> national networks until mid 2015, and has expressed long term requirements for seven to nine multiplexes. Until such time when a clear vision of the possible outcome of cross border coordination is known, it will not be possible for policy officers to clearly assess the impact of changes in spectrum for the consumers and the ecosystem.

Therefore, we suggest the following editorial changes to the draft opinion (on page 16):

- a) The Commission should take into account the timing issues described above **and produce prior to any decision a draft global and realistic schedule that integrates DTT migration to more efficient technologies i.e. DVB-T2/HEVC.**
- b) ...
- c) ...
- d) **The Commission should take into account the answers to the RSPG questionnaire on DTT spectrum needs and make sure that the results of any future coordination process necessary to reform DTT with more efficient technologies will fulfill them and would not endanger competition between broadcasting platforms by limiting DTT future developments.**

We also suggest the following changes to the recommendations of the draft Opinion (on page 24):

4. In developing this strategic policy....develop:

- a)...
- b) an EU-wide strategy to be discussed at the political level on the future use of the 700 MHz band. This strategy should consider elements such as duration of broadcasting licenses, **long term requirements for DTT spectrum as expressed in responses to the RSPG questionnaire, the impact on consumers**, the necessity to transition to new technologies, **the resulting costs for the different players**, the variety of digital terrestrial platforms in Member States and cross border frequency coordination issues. **A draft global and realistic schedule**



**taking account these issues should be produced with the help of member states to present the scenarios to decision makers.**

## **Conclusions**

By integrating our proposals and taking into account the strategic objective of a strong and future proof DTT platform, we believe the RSPG opinion will increase the likelihood for a European consensus and therefore the feasibility of WBB roll out throughout Europe. The objective of the RSPP for WBB would still be exceeded by more than 33% in the medium term, which is a substantial achievement at a time when recent predictions of mobile data traffic have been revised downward by a factor of 2.