

# APWPT comments

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## *APWPT's Comments to the RSPG Opinion RSPG 09-272*

### *"Radio Spectrum Policy Group Opinion on the Digital Dividend"*

APWPT, the Association of the Professional Wireless Production Technology ([www.apwpt.org](http://www.apwpt.org)), directly and indirectly represents far over 25,000 members of the Programme Making & Special Event ("PMSE") community in Europe and beyond. APWPT hereby respectfully submits its comments in the above-mentioned consultation. As described in more detail in the Annex, the PMSE community safeguards thousands of jobs in the sectors of TV, radio and theatre production, etc in Europe. Live events, such as political and business conventions, conferences, operation of places of worship, concert tours, musicals, movie production, life shows in the EU would be unthinkable without wireless production devices. Although the APWPT agrees that the solution for the PMSE users should be found on the national level, we take the opportunity to highlight once more the immense impact of such a proposal on the PMSE community and the cultural and social life of every citizen of the European Union. The RSPG plays an important role in this context: the APWPT believes that any RSPG opinion to allocate new IMT services in the band 790 – 862 MHz needs to be directly linked to a sustainable harmonised EU solution to prevent creating new borders or regulatory obstacles within EU for the exchange of information and the cultural life.

Prior to commenting on specific issues in the PMSE Opinion, the APWPT wants to ensure that the RSPG is fully aware of PMSE being a crucial industry branch in Europe. Any changes in the usable spectrum will have a tremendous impact on the daily lives of all EU citizens. Moreover PMSE equipment is an essential factor in creating and enabling social and cultural life – and furthers social cohesion within European Union.

To illustrate this, there are more than 6 million of these devices in use in Western Europe (PAMA Study 2008). During the past ten years the number of wireless production tools increased by more than 10% every year. This trend is going to continue.

The reasons for this increase in the use of wireless production tools are:

- The increase of cultural and social events in European Union where wireless equipment is used;
- The reliability of the audio quality requirements and easy handling the PMSE users demand;
- The flexibility in the use, allowing changes in the arrangement of a conference or a presentation until the very start of the event that cable-based solutions cannot warrant, and
- The effect of rationalisation: there is no time required to lay out cables for a production as no one is willing to pay for this.

Wireless Production tools operate to more than 90% in the UHF Frequency range - a very high number in the range of 790 – 862 MHz. In Germany nearly all 600.000 PWMS (Professional Wireless Microphone Systems) are using the upper part of the UHF- TV-band. This band has been identified as Digital Dividend and shall be used for new IMT services in the near future. The impact of this decision will thus be significant.

In order not to jeopardize wireless production technologies with all its associated economic, cultural and social facets and benefits it is essential to:

- Identify an alternative spectrum of the same quality as the current spectrum,
- Determine an acceptable transition period (five years as a minimum) for PMSE users to transfer their systems from the existing frequencies of operation to the new ones,  
Please note that some potential frequency bands may need new developed equipment, this equipment is not ready to market.
- Clarify the financial situation and provide planning certainty for investment plans of public financed institutions and theatres, as well as for private organisations (investment plans in different sectors may differ from 3 – 10, 20 years).

Therefore, we kindly ask the RSPG to investigate the implications of any change in the UHF band on the PMSE industry in more detail. The APWPT stands ready to continue this debate and to assist in this issue.

The APWPT members strongly believe that any decision on the EU level that will restrict or set up new obstacles for the use of PMSE equipment will have an immense impact on the cultural and social life of every citizen of the European Union. For instance, large concert and theatre tours will no longer be possible. TV and radio production within the EU will suffer.

## *Specific Comments on the “Radio Spectrum Policy Group Opinion on the Digital Dividend”*

The APWPT comments on the RSPG Opinion as follows:

### **to 1. Introduction**

In the introduction and in other parts of the PSPG Opinion, the RSPG states that its goal is to “reap the full benefits of the digital dividend in Europe.” This statement implies that there will actually be more spectrum available after the digital switchover. While it is correct that up to four digital TV channels occupy the same amount of spectrum compared to one analogue TV channel, there are various examples in Europe that there will actually be *less* spectrum that European governments and regulators can dispose of for PMSE users.

Recent examples:

- France is developing a TV-channel plan with more than 11 layers. GE-06 developed a TV-channel plan of only 8 layers, whereby layer 8 is the estimated digital dividend.  
[Report of the French Parliamentary Committee, 23 July 2008: 11 DVB-T networks + 2 DVB-H networks]
- Austria’s regulatory body BMVIT has provided an input paper to ECC TG4 showing on the example of ‘Bregenzer Festspiele’ (an open door opera / musical event) that after the switchover less TV channels are available in Austria for the needed PMSE equipment.  
[Doc. ECC TG4(08)205]

>> Therefore, at least as far as the PMSE community is concerned, it is impossible to state that there will be more spectrum available throughout Europe. The opposite may be true, even if one disregards the steadily growing numbers of PMSE equipment in Europe. Consequently, the RSPG should only endorse solutions on the national level that provide sufficient spectrum to the PMSE community to continue to operate seamlessly and without interference.

### **to 4.1 Range of services**

The introduction of new IMT services into the band 790 – 862 MHz needs to be linked directly to the solution for PMSE equipment.

Although the national frequency allocation tables are showing access to the UHF-TV-band 470 – 862 MHz for secondary PMSE users, access is in fact restricted by different national licensing schemes. Currently, one device able to operate in the band 790 – 862 MHz can access mostly all countries in Europe. The band 790 – 862 MHz is an “unofficial harmonised” band for PMSE. Any introduction of IMT services on the national level that proceeds without having a sustainable solution in place for the PMSE users throughout Europe will build up new borders within Europe and the EU.

This will have an immense effect on social and cultural cohesion of the EU. For instance, PMSE users will need to buy different equipment, depending on where they are operating in Europe. The coverage of trans-border events, such as the tour de France, concert tours and EU-wide TV, movie and radio production will become much more expensive and cumbersome.

#### **to 4.2 Availability of dividend spectrum**

As mentioned in our comments to 4.1 above the majority of PMSE equipment is using the unofficial harmonised band 790 – 862 MHz. Any change to this band needs a significant transition time allowing the PMSE community having proper investment plans for the culture productions in hand.

Example: We estimate a needed investment plan of more than 300.000 Euro for the City of Dresden (Germany) alone, just for moving their PMSE equipment of cultural productions (theatres, opera...) to new bands. Smaller private cultural productions have to add more than 150.000 Euro. In particular, small theatres or places of entertainment or worship cannot afford these amounts.

#### **to 4.3 Timeframes**

A proper transition time has to be set for PMSE equipment. The APWPT believes that as a minimum the RSPG should demand the following:

- Before the transitions period commences, the EU national governments and regulators need to agree on an EU harmonised plan and on identifying the future available frequency bands for PMSE that will allow a seamless operation of their services.
- PMSE users including public and private culture event productions need a proper investment plan. Investment plan driven by tax laws require a 5 – 7 year time period, while many productions like theatres are planning with a time period of more than 10 years.
- Additional equipment development time has to be added, if new bands are identified, which need new developments in software and hardware.
- If PMSE equipment is moved to new bands, their respective governments shall fully reimburse the PMSE industry for the equipment that may become unusable.

#### **To 4.5 Cost of clearing out the 800 MHz band**

We stated in our comments to 4.4 that the needed transition time to move existing PMSE users out of this band is particularly driven by proper investment plans. To deal with this issue, a detailed and enforceable cost recovery mechanism is a must. The APWPT observes that within the EU, PMSE falls into the national 'common use of spectrum', but there is a lack of data on the existing PMSE users, the

bands where they operate, and the cost implications if users are moved to other bands. In our comments to 4.2 we illustrate that for the City of Dresden alone the costs will be more than approximately 450.000 Euro. The German Upper House (Bundesrat) recently obtained a general commitment from the German Federal Government that it will pay for some of the costs for moving PMSE equipment (decision of June 12, 2009). A similar debate on the reimbursement is ongoing in the U.K. The PMSE should urge the national governments to expedite their work on finding solutions ensuring a full reimbursement of the PMSE users. These users, when making their equipment purchase, have relied on being able to use their equipment in the current bands. APWPT will be pleased to participate in this dialogue in a constructive manner.

Respectfully

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## **Annex:**

Additional information on the APWPT

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### **Who we are?**

APWPT is an international non-profit organisation, which is representing the needs of all user of the PMSE sector. Members of APWPT include PMSE organisations, users and manufacturers.

### **What do we do?**

The PMSE sector is critical to the production of content for live entertainment of all genres. This sector extensively utilises wireless equipment such as Wireless Microphones, Wireless In-Ear Monitor Systems, Wireless Talk Back Systems and Wireless Instrument Systems.

For over fifty years wireless products have been used in the entertainment industry. In the past thirty years there have been vast improvements in production value and safety levels as a result of advances in wireless technology.

### **How do we do it?**

The PMSE sector currently relies on the spectrum interleaved between existing TV broadcasts, to enable the use of Radio Microphones, In-Ear- Devices and other short-range wireless devices. This equipment is an essential component of the European Entertainment Industry. Due to their efficient use of spectrum, radio microphones (they do not cause harmful interference and engineers create very defined frequency plans) are hardly noticed.

### **Who benefits from our activities?**

On a daily basis this sector is responsible for the production of content that has received world-wide acclaim and continues to attract a global audience. A vast array of organisations are reliant on radio spectrum for the production of content for **Performing Arts, Broadcasting, News Gathering, Independent Film and TV Production, Corporate Events, Concerts, Night Venues, Sports Events, Churches...** In addition, other sectors that utilise the current UHF spectrum include the Health Service, Education, Local Government, Political Programming and Conferencing.

In addition these technologies play a vital role in helping to improve security and safety levels within the Entertainment Industry and other sectors. Their benefits include improving the management of electrical safety, the reduction of noise levels, the development of safety in communications and reducing trip hazards as well as providing an essential tool for the security orientated services.

Its wireless equipment and the spectrum it operates on are crucial to the European Entertainment Industry.