

**Questionnaire related to the regulatory consideration of the protection of PMSE<sup>1</sup> in the UHF band in a context of WSD (White Space Device) use**

*Information to be provided in the cover of the questionnaire:*

<b>Responding company/organisation</b>	Federal Ministry for Transport, Innovation and Technology
<b>Country</b>	Austria
<b>Address/ e-mail address</b>	Ghegastrasse 1, A-1030 Vienna / josef.hotter@bmvit.gv.at
<b>Contact name</b>	Josef Hotter

**Contact details of a company will not be published outside the WGFM.**

**Correspondence Group on Cognitive Radio Systems (CG CRS), only answers in gray boxes will be used for analysis. Contact details may be used in case of inaccuracy or in case of specific questions.**

**Respondents are kindly invited to return the completed questionnaire  
before 16 September 2011  
to the European Communications Office (ECO)**

To: Thomas Weber  
preferably by e-mail: [thomas.weber@eco.cept.org](mailto:thomas.weber@eco.cept.org)  
or  
by fax: +45 33 89 63 30

Thank you for your cooperation.

---

<sup>1</sup> CEPT Report 32 describes PMSE applications  
(<http://www.eroocdb.dk/Docs/doc98/official/Word/CEPTREP032.DOC>).

## **Introduction:**

During the 71<sup>st</sup> meeting of WGFM, 31<sup>st</sup> January – 4<sup>th</sup> February 2011, it was decided to task CG CRS to work on regulatory consideration on the protection of PMSE on the basis of section D.1 of Chapter 11 of ECC Report 159.

(<http://www.erodocdb.dk/Docs/doc98/official/Word/ECCREP159.DOCX>).

This section D.1 states:

### ***D. Regulatory consideration on the protection of PMSE***

***D.1*** *The approaches to protect PMSE services from WSD<sup>2</sup> interference need to be identified in accordance with the regulatory regimes employed by different administrations. Specifically, there is a need for further investigation related to the development of a "package solution" that covers a number of tools from which individual countries can choose, such as registration of PMSE in the database and safe-harbour solution.*

## **Questionnaire:**

It is considered necessary, as a first step, to have a broader view on the various approaches from the CEPT administrations to ensure the use of PMSE in the 470-790 MHz band. To reach this objective, administrations and Industry are invited to answer the following questions.

---

<sup>2</sup> White Space Device.

**Section A for administrations:**

1. Before the TV switchover from analogue to digital in your country:

Do you, or did you, authorise the use of the 470-862 MHz band for PMSE applications?	Yes, we did.
Under which regime? (Individual authorisation? General authorisation? License exemption?)	Individual licensing.

2. After the TV switchover from analogue to digital in your country:

Do you, or will you, authorise the use of the 470-790 MHz band for PMSE applications?	Yes, we will do so.
Under which regime? (Individual authorisation? General authorisation? License exemption?)	Individual licensing. (or light licensing, if possible)

3. Do you envisage the introduction of white space devices in the 470-790 MHz band?

Yes / No	Yes, on basis of a harmonised European approach.
Could you explain your choice?	Only a implementation of a European harmonisation Decisions makes sense; National approaches should not be considered.

4. Do you currently study, or plan to do it in a short time frame, such introduction?

Yes / No	No.
----------	-----

5. If you answered “yes” to question 2 above, do you consider that specific mechanisms (e.g., registration in database(s); channels not used by digital TV reserved for PMSE, also called “safe harbour” in ECC Report 159; cognitive capabilities,...) have to be considered to ensure the protection of PMSE with respect to a potential introduction of WSD?

Yes / No	Yes.
If so, could you indicate which mechanisms do you foresee?	In a shared use approach, some kind of database and/or cognitive capability is necessary for a coexistence operation according to the protection criteria's of PMSE in some kind of operational cases . If necessary to guarantee the needed spectrum and protection to PMSE applications, especially in so called hot spots locations, it is feasible to create protection zones where operation of WSD's could be timely excluded.
For each of these mechanisms, could you give some details and potential advantage/drawback?	Included in the above statement.

- 5a. In case of registration of PMSE in databases: do you foresee to have sufficient information available, to register PMSE operation in a possible geolocation database?

Yes / No	Not with the actually collected data, but should be delivered by PMSE operators in future.
If so, which category / type of use of PMSE would be registered and how?	All categories which require interference free operation.

- 5b. In case of safe harbour:

How many channels would you foresee?	Depending on the possibilities according to utilised BC allotments in Austria according to the future demand for digital terrestrial TV to be determined later by the responsible National Regulatory Authority (RTR).
Would they be regional wide / nation wide?	Regional.

- 5c. Other mechanisms (e.g.: beacons, Cognitive-PMSE,...):

If so, please describe.	A cognitive capability is a necessary pre-condition to the introduction of WSD's. If so, also PMSE have to implement CR - Technologies into their equipments.
-------------------------	---

- 5d. Do you consider that any mechanism (e.g., data base, safe harbour, cognitive capabilities,...) have to be considered to ensure the protection of PMSE if no WSD are deployed in the 470-790 MHz band?

If so, please describe.	<ul style="list-style-type: none"> <li>If the PMSE would like to solve the arising gap between future increasing PMSE spectrum requirements and taking into</li> </ul>
-------------------------	--

	<p>account the required protection of their service, the implementation of cognitive capabilities seems to be the only option.</p> <ul style="list-style-type: none"><li>• Provide unutilised BC spectrum on a local basis to guarantee spectrum in so called hot spot locations.</li></ul>
--	---

**Section B for Industry and Users:**

1. Do you envisage requesting your Administration or CEPT the introduction of white space devices in the 470-790 MHz band?

Yes / No	No
If so, can you provide details? - date of introduction, - type of applications, - type of technology.	

2. Do you consider that specific mechanisms (e.g., registration in database(s), safe harbour, cognitive capabilities,...) have to be considered to ensure the protection of PMSE with respect to a potential introduction of WSD?

Yes / No	Yes
If so, could you indicate which mechanisms do you foresee?	Registration in databases.
For each of these mechanisms, could you give some details and potential advantage/drawback?	

- 3a. In case of registration of PMSE in databases:

Which category / type of use of PMSE should be registered and how?	<ul style="list-style-type: none"><li>• Wireless microphones</li><li>• Wireless Tour – Guide - Systems</li><li>• In ear monitoring</li></ul>
--	--

- 3b. In case of safe harbour:

How many channels would you foresee? Would they be regional wide / nation wide?	
--	--

- 3c. Other mechanisms (e.g.: beacons, Cognitive-PMSE,...):

If so, please describe.	
-------------------------	--

3d. Do you consider that any mechanism (e.g., data base, safe harbour, cognitive capabilities,...) have to be considered to ensure the protection of PMSE if no WSD are deployed in the 470-790 MHz band?

If so, please describe.	<a href="#">Yes, should be regulated in Austria as presently done by the National Regulatory Authority (RTR) and the Federal Ministry for Transport, Innovation and Technology (bmvit)</a>
-------------------------	--