# Workshop on the Concept of Cognitive PMSE Systems

**Initial Results of the C-PMSE Project** 

# December 7, 2011 DLR, Berlin, Germany

### **AGENDA**

09:30 - 10:00

**REGISTRATION** 

10:00 - 10:15

WELCOME

Andreas Wilzeck, Uwe Beutnagel-Buchner Project Office

10:15 - 10:45

**INVITED SPEECH** 

**Overview of Cognitive Radio Systems** *Prof. Rüdiger Kays, TU Dortmund* 

10:45 - 11:00

Overview and status of the project

Andreas Wilzeck, Uwe Beutnagel-Buchner

11:00 - 11:30

The C-PMSE system concept

Axel Schmidt, Sennheiser electronic Radu Circa, Robert Bosch

11:30 - 11:50

**COFFEE BREAK** 

11:50 - 12:10

**Measurement report - Messe Berlin** 

Sven Dortmund, Universität Bochum

12:10 - 12:30

Radio frequency management and Cognitive Engine

Leonid Tomaschpolski, Universität Hannover

12:30 - 13:30

**LUNCH BUFFET** 

13:30 - 14:00

Signal detection, sensing network & scanning receiver, smart antennas

Johannes Brendel, Uni. Erlangen-Nürnberg Rafael Rummel, eesy-id

14:00 - 14:30

**INVITED SPEECH** 

Overview of the EU-project QoSMOS

Michael Fitch, BT Group QoSMOS Project Coordinator

14:30 - 14:50

Technology and business potentials and conditions for market introduction

Norbert Hilbich, Sennheiser electronic

14:50 - 15:10

**COFFEE BREAK** 

15:10 - 16:00 PANEL & DISCUSSION

**Introduction speech:** 

Frank Ernst, beyerdynamic

Panel:

Michael Mahler, Robert Bosch Norbert Hilbich, Sennheiser electronic and others ...

### **ABOUT THE C-PMSE PROJECT**

PMSE stands for **Programme Making and Special Events** and covers Services Ancillary for Programme-Making (SAP), Services Ancillary for Broadcasting (SAB), Electronic News Gathering (ENG) and Outside Broadcasting (OB).

Typical **PMSE components** are video cameras, microphones, in-ear monitors, conference systems, intercom devices as well as data links (e.g. for remote control).

The C-PMSE project is running from April 2011 until May 2013 and is focussing on **Professional Wireless Microphone Systems (PWMS)**, which cover all wireless equipment used at the front end of professional audio productions.

The **goal of the project** is the design, development, verification and research on a **cognitive PMSE system** which provides **cooperative coexistence** with other C-PMSE systems and white space devices.

**Basic requirements** are automation of the frequency utilization within the assigned frequency spectrum, securing a coordinated coexistence of different users in the same frequency range, and efficient frequency utilization.

The objectives of the project are:

- 1) R&D on the cognitive system and procedures for PMSE by development of system components such as antennas, scan receiver, scan controller, cognitive engine, data base, etc., measurement- and test procedures as well as channel-, interference- and coexisting models as reference for the standardization and regulation activities.
- **2) Setting up a field trial platform** for cognitive PMSE applications at the fair grounds of Messe Berlin, technical and economical proof of concept of the cognitive procedures for PMSE and realizing an open and modular R&D platform for future research.
- **3) Supporting frequency regulation and standardization** by setting up a forum to discuss and prioritise necessary actions concerning cognitive PMSE on national, European and worldwide level as well as active collaboration with ITU, ETSI, CEPT and Bundesnetzagentur by disseminating the project results and the preparatory work of the Special Task Force ETSI STF 386.

### **PROJECT PARTNERS**





















## **REGISTRATION**

Please register online at: http://cpmse.research-project.de Registration fee: 50 € (+ 7% VAT)

### **VENUE**

### **DLR**

Dircksenstr. 35 10179 Berlin

Room Nr. 6.31., 6th floor

From **Airport Berlin-Tegel** or **Berlin Main Station** take the bus "TXL" until stop "S+U Alexanderplatz Bhf/ Memhardstraße" (40 min. or 20 min.). Opposite of the bus stop follow "Diercksenstrasse" for 150m (2 min.).

