

***TV White Space: real standards, real  
applications?*****15 November 2011  
Brussels, Belgium****About the workshop**

The **Interdisciplinary institute for Broadband Technology (IBBT, Belgium)** and the **Massachusetts Institute of Technology (MIT, USA)** invite you to the fourth edition of their Joint Workshop on **Cognitive Radio Standardization & Markets**, taking place at the premises of the **European Science Foundation (COST Office)** in Brussels on 15 November (<http://events.ibbt.be/en/crsm2011/>). This edition of CRSM is **supported by COST TERRA** ([www.cost-terra.org](http://www.cost-terra.org)) and collocated with the fourth meeting of the TERRA action. The workshop, the most important non-technical event on Cognitive Radio in Europe, confronts the latest global insights regarding standardization, regulation and market issues for Cognitive Radio.

This year, the focus on the workshop is on the introduction of **White Space devices in the TV Bands**, a subject which has not only been given considerable attention from the research domain, but is currently being regulated in a number of countries and studied closely by many administrations. As an important test case for the feasibility and viability of opportunistic spectrum access in licensed frequency bands, it remains to be seen whether the trials currently set up in the United States and the United Kingdom, and the standards being developed in bodies such as IEEE and ETSI, will lead to actual commercial implementations.

With TV White Spaces now going beyond the research labs, this edition of CRSM aims to analyse **what the real chances are for commercial development of TVWS applications, and what are the most recent evolutions in standardization, regulation and commercial deployment**. Moreover, as the lower frequency bands where TVWS will be introduced offer propagation characteristics that make them particularly suited to carry services over large distances, the workshop aims to take a global viewpoint this year and dedicate specific attention to the **potential of CR technologies for emerging markets**.

With this aim, a set of distinguished speakers will join academics, regulators and business strategists to discuss the TVWS state of the art. Participation to the workshop is **free of charge**, but **attendance will be limited** in order to encourage active discussion between participants. Therefore, it is important to register promptly. To register, please visit the event's website (<http://events.ibbt.be/en/crsm2011/>). The COST Office is located at Avenue Louise 149 in Brussels, and is easily accessible by car and public transport.

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## Agenda

**11h00 Registration**

**11h30 Session 1 – Introduction and keynotes**

**Welcome by the Conference Chairs**

Dr. Pieter Ballon, Mr. Simon Delaere (IBBT-SMIT, Belgium) & Dr. William Lehr (MIT, USA)

**Towards future wireless architectures: shared spectrum, shared infrastructure**

Dr. William Lehr (MIT, USA)

**Deployment of TV White Space Devices: a survey among European regulators**

Thomas Weber (European Communications Office, Denmark)

**12h50 Lunch break**

**13h30 Session 2 – Standards for White Space**

**The 802.22 standard: development, regulation, commercial application**

John Sydor, Gérald Chouinard (CRC Canada, IEEE 802.22 vice-chair)

**TV White Space in ETSI RRS: towards a Harmonised Standard?**

Philippe Delahaye (NEC, Rapporteur on System Requirements for Operation in UHF TV Band White Spaces, ETSI RRS - TBC)

**14h45 Session 3 – TVWS applications in emerging markets**

**Opportunities of CR and TVWS in emerging versus developed markets**

Thomas Casey, Dr. Heikki Hammainen (Aalto University, Finland) & Dr. Sridhar Varadharajan (Sasken Technologies, India)

**TVWS potential and activities in South Africa**

Dr. Ntsibane Ntlatlapa (CSIR Meraka Institute, South Africa)

**16h00 Coffee break**

**16h15 Session 4 – Business issues**

**A perspective on TVWS Business Opportunities**

Amparo Canaveras (MIT, USA)

**Launching a geo-location database for TVWS devices in the US**

Peter Stanforth (Spectrum Bridge, USA – TBC)

**Business model configurations for a CR cooperation manager**

Matthias Barrie (IBBT-SMIT, Belgium) & Ryo Sawai (Sony, Japan)

**18h00 Workshop conclusions**

Workshop Chairs

**18h10 Reception**