Working Party 5A Seminar on Cognitive Radio Systems and the use of White Spaces:

Objectives and Outline

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Geneva, 18 November 2013

Objectives

The purpose of the seminar is to provide a technical view of the use of Cognitive Radio Systems (CRS) in Radiocommunications, in the light of the results of WRC-12 agenda item 1.19, including Resolution ITU-R 58 and Recommendation 76 (WRC-12).

The seminar includes a summary of the work on CRS being conducted in ITU-R and other organizations, as well as presentations on a number of current important topics related to CRS and the use of White Spaces.

It is expected that this seminar will permit an open discussion of issues and ideas and is not intended for the presentation of proposals to Working Party 5A (WP 5A).

Seminar Outline

Session 1: Ongoing Studies

Session 2: General issues and opportunities

Session 3: Specific projects

Session 1: Ongoing Studies

P1-1   Philippe Aubineau (ITU Radiocommunication Bureau), "Activities on Cognitive Radio Systems and White Spaces in ITU-R"

P1-2   Markus Mueck, Chairman of ETSI RRS TC (Intel), "A technical view on ETSI activities on cognitive radio"

P1-3   Dr. Artūras Medeišis (Chairman of COST-TERRA), and Dr. Oliver Holland (Vice-Chairman of COST Action IC0905 TERRA (King's College London, UK)), "Cognitive Radio is dead… Long live Cognitive Radio!"

P1-4   Dr. Keith Nolan (Wireless Innovation Forum (CTVR / The Telecommunications Research Centre, Ireland)), "Technical challenges, opportunities for CRS, and the Wireless Innovation Forum top ten most wanted wireless innovations"

Questions and Answers

Session 2:
General issues and opportunities

P2-1   Wassim Chourbaji (Qualcomm Inc.), "ASA: a new framework to unlock more licensed spectrum for mobile broadband"

P2-2   Dr. Feng Zhiyong (Beijing University of Post and Telecommunications), "Cognitive TD-LET System Operating in TV White Space in China: Challenges, Solutions and Testbed"

P2-3   Homare Murakami (WhiteSpace Alliance, NICT (Japan)), "Cognitive Radio based Spectrum Sharing in the Television Broadcast Bands"

P2-4   Dominique Nussbaum (Eurécom, on behalf of Monaco Telecom), "SPECTRA: Spectrum and energy efficiency in 4G and beyond communication systems"

Questions and Answers

Session 3: Specific projects

P3-1   Dr. Marja Matinmikko (VTT, Finland), "Finnish Trial Program Activities"

P3-2   Andreas Georgakopoulos (WINGS ICT Solutions, Greece), "A Cognitive Radio Experimentation on the Validation of Control Channels for the Management of D2D Constructs"

P3-3   Dr. Olivier Van Der Aa (Neul Ltd.), "Singapore White Space Pilot Project"

P3-4   Prof. Animesh Kumar (Indian Institute of Technology Bombay, India), "Mesh-Network for Rural Broadband Coverage Using TV White Spaces in India"

Questions and Answers

| 18:30 – 19:00 |
| Closing Session |

References

Report ITU-R SM.2152 "Definitions of Software Defined Radio (SDR) and Cognitive Radio System (CRS)"

Report ITU-R M.2117-1 "Software defined radio in the land mobile, amateur and amateur satellite services"

Report ITU-R M.2225 "Introduction to cognitive radio systems in the land mobile service"

Report ITU-R M.2242 "Cognitive radio systems specific for IMT systems"

Question ITU-R 230-3/5 "Software defined radios"

Question ITU-R 241-2/5 "Cognitive radio systems in the mobile service"

Question ITU-R 235/1 "Spectrum monitoring evolution"

Resolution ITU-R 58 "Studies on the implementation and use of cognitive radio systems"

Recommendation 76 (WRC-12) "Deployment and use of cognitive radio systems"

Annex 26 to **Document 5A/306**: "Working document towards a preliminary draft new report ITU-R [LMS.CRS2]"

SDR and CRS Seminar held by ITU-R WP 5A on 4 February 2008: http://www.itu.int/oth/R0A06000047/en
Doc. 5A/INFO/4 (2008) Presentations, speaker biographies and audio feeds - Seminar on software defined radio and cognitive radio systems (Geneva, 4 February 2008)
Doc. 5A/INFO/3 (2008) Summary highlights of the Seminar on software defined radio and cognitive radio systems - Geneva, 4 February 2008

Upcoming: Workshop on Spectrum Management related issues (Geneva, 20 January 2014).