



EW07 – CR-CN Panel

04.04.07 – Paris

Dr. Didier Bourse (Motorola Labs, FR)

Dr. Peter Stuckmann (European Commission, BE)

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EW07 – CR-CN Panel

EW07 – Panel Organization

11:00 – 12:30

Welcome

Self-Introduction from Chair and Panelists

Panel Introduction

Panelists Presentations (10 mns per Panelist)

Open Discussion and Q/As



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Panel Introduction

- ✓ **Cognitive Radio, Cognitive Networks, Cognitive Radio Systems...** These technologies have the potential to revolutionize wireless communications just as the PC revolutionized computing. According to IEEE, the **Cognitive Radio** is a radio transmitter/receiver that is designed to intelligently detect whether a particular segment of the radio **spectrum** is currently in use and to jump into (or out of) the temporarily-unused spectrum very rapidly without interfering with the transmissions of other users. **Cognitive network** generally addresses the future network being able to sense the radio environment (sensing the radio context, service context, location context and user context), automatic reasoning (interpreting the radio environment), **self**-actuating (reacting to the changes), self-tuning (tuning the radio and implementation parameters) and self-healing (fault management). The involved functional entities will **distribute** themselves over the radio subsystem, O&M subsystem and switching subsystem of the future telecommunication network. One of the primary goals is to increase the **spectrum efficiency** and decrease the **CAPEX** and **OPEX**. This panel will address the **opportunities** and **challenges** for the introduction of cognitive systems in the **commercial** and **military** domains. Different perspectives will be brought from the Panelists from the **research, business, product, standardization** and **regulatory** sides.