

Description of the workshop

The purpose of WALTER Workshop is to present and discuss the current regulatory, standardization and research status of Ultra-WideBand technology with special focus on the definition of requirements, methodologies and tools for UWB measurements and testing.

The WALTER workshop has the following main objectives:

- Identify the main regulatory and standardization challenges for the adoption of UWB in Europe and the world. Support the identification and resolution of conflicting requirements.
- Identify the main challenges in the UWB testing and measurements. Describe how the current industrial and research activity could support the resolution of these challenges.
- Discuss the future developments like UWB at 60 GHz and innovative interference and mitigation techniques including Detect And Avoid (DAA).

Representatives from regulatory, industry and research organizations from Europe, East Asia and USA will be present at this workshop, bringing in their experiences and views in this area.

During the workshop, an initial version of the WALTER deliverables will be presented to the participants to support the workshop activity.

The WALTER deliverables will describe:

- the requirements from the current regulatory, standardization and research status and potential conflicts,
- a description of UWB testing scenarios and categories defined in the WALTER project.



**Wireless Alliance for Testing
Experiment and Research**

Walter UWB workshop

2nd and 3rd of July 2008
Ispra (Italy)



Walter Workshop Agenda

Ispira, 2 July 2008 - Room2, Building 36 b

09:00 - 09:30	Registration
09:30 - 10:30	<p>Presentation of WALTER project</p> <ul style="list-style-type: none"> • Opening speech by Alois Sieber Head of SERAC Unit, IPSC, JRC. 20 minutes. • WALTER Introduction (Philippe Cousin from ETSI). 10 minutes. • WALTER Project Structure and Management (Franck Le Galle from Inno AG). 10 minutes. • WALTER Technical View (Alan Dearlove from Copsy Communication). 10 minutes.
10:30 - 10:45	Break - Distribution of WALTER findings and questionnaire on "What are the main challenges in UWB?". This will also be available on the WALTER web site before the workshop.
10:45 - 12:15	<p>UWB Regulatory status</p> <ul style="list-style-type: none"> • European Regulatory Status on UWB (EC, DG INFSO, Spectrum Policy Unit). 30 minutes. • "Generic regulation for UWB applications in Europe". Presentation by Emmanuel Faussurier (ANFR). 20 minutes. • "UWB Detect and Avoid". Presentation by Siew Yoon Tan (OFCOM UK). 20 minutes. • "UWB Regulatory Status in East Asia (China, Japan, Korea)". Presentation by Xiaochen Chen (TMC). 20 minutes.
12:15 - 13:00	<p>Coordination with other UWB projects</p> <ul style="list-style-type: none"> • "PULSERS I/II and EUWB projects". Presentation by Sven Zeisberg (GWT TUD). 20 minutes. • "Photonic ADC technology for spectrum measurement and wireless coexistence in UCELLS project". Presentation of Roberto Llorente on UCELLS (University of Valencia). 20 minutes.
13:00 - 14:00	Lunch (offered by JRC)
14:00 - 15:30	<p>Standardization activity and status</p> <ul style="list-style-type: none"> • "Introduction to WiMedia". Presentation by Roberto Aiello by Staccato Communications. 30 minutes. • "ETSI activities and achievements". Presentation by Thomas Weber (German Office of Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen). 20 minutes. • "Interoperability and standardization challenges in UWB" by Sebastian Muller (ETSI). 20 minutes. • "WiMedia UWB technology. Introduction to the technology and certification". Presentation by Carlos Pérez Ruiz (AT4 Wireless). 20 minutes.
15:30 - 15:45	Coffee break
15:45 - 17:30	<p>Research Activity on UWB</p> <ul style="list-style-type: none"> • "Measuring the Interference Effects of UWB Signals on Satellite DTV and GPS Receivers". Presentation by Michael Cotton (NTIA - NIST, USA). 30 minutes. • "UWB flexible assets in radio, access, and network design". Presentation by Luca De Nardis (Universita' La Sapienza di Roma). 20 minutes. • "Ultra-Wideband Research at Centre for Wireless Communications (CWC)". Presentation by Alberto Rabbachin (University of Oulu, Finland). 20 minutes. • "System and antenna aspects for UWB propagation". Presentation by Jens Timmermann (Universität Karlsruhe). 20 minutes. • "Localization in UWB communication systems". Presentation by Monica Navarro (UPC - Universitat Politècnica de Catalunya and CTTC - Centre Tecnològic de Telecomunicacions de Catalunya). 20 minutes.
17:30 - 17:45	Collection of Questionnaire results.
17:45 - 18:15	Tour of JRC facilities (EMSL).
19:00	Social Dinner at restaurant (offered by JRC)

Walter Workshop Agenda

Ispira, 3 July 2008 - Room2, Building 36 b

09.30 - 10:00	Presentation on Challenges in UWB measurements and testing. 30 minutes.			
10:00 - 11:30	<p>The view from the test equipment vendors</p> <ul style="list-style-type: none"> • Presentation by Agilent. 30 minutes. • "R&S® AFQ100B - Tailored for UWB applications". Presentation by Sylvia Reitz (Rohde-Schwarz). 30 minutes. • "Creating UWB Signals using Arbitrary Waveform Generators". Presentation by Tektronix. 30 minutes. 			
11:30 - 11.45	Coffee Break			
11:45 - 12:00	Presentation of the Questionnaire results			
12:00 - 13:00	<p>Round Table on Requirements conflicts among Regulatory, Standards, Research (Chairman Gianmarco Baldini)</p> <ul style="list-style-type: none"> • Analysis of WALTER findings and deliverables • Discussion of potential conflicts • Discussion on integration of different standards and regulations across the world (USA, EU, China,...) 			
13:00 - 14:00	Lunch (offered by JRC)			
14:00 - 15:30	<p>The following round tables must be run in parallel</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • Round table on UWB Test Measurements challenges (Chairman AT4Wireless) • What are the main challenges ? • Analysis of WALTER findings and deliverables • Discussion of relevant questionnaire results • Limitations on vendor equipment and how to overcome them ? <p><i>Representatives of equipment vendors will participate to this round table. Demo provided by the equipment vendors.</i></p> </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • Round Table on future UWB developments like UWB at 60 GHz and DAA (Chairman Alan Dearlove) • Current status of the research on these topics • Current status of the standardization on these topics • Potential applications... • Cross-references of DAA with other project/activities (SDR/RRS/Coexistence/Spectrum Policy ?) </td> </tr> </table>		<ul style="list-style-type: none"> • Round table on UWB Test Measurements challenges (Chairman AT4Wireless) • What are the main challenges ? • Analysis of WALTER findings and deliverables • Discussion of relevant questionnaire results • Limitations on vendor equipment and how to overcome them ? <p><i>Representatives of equipment vendors will participate to this round table. Demo provided by the equipment vendors.</i></p>	<ul style="list-style-type: none"> • Round Table on future UWB developments like UWB at 60 GHz and DAA (Chairman Alan Dearlove) • Current status of the research on these topics • Current status of the standardization on these topics • Potential applications... • Cross-references of DAA with other project/activities (SDR/RRS/Coexistence/Spectrum Policy ?)
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15:30 - 16:00	Workshop Conclusions			

