### Introduction to Project WALTER

Sophia Antipolis - ETSI 06th October 2009





















Walter (Wireless Alliances for Testing Experiment and Research) is:

# Specifying, testing and improving interoperability of broadband radio devices

and for that

Develops an international broadband test bed, covering the needs, for research, industry and regulators



WALTER: Wireless Alliances for Testing Experiment and Research







Franck Le Gall - inno

Email: contact@walter-uwb.eu

Project website: <a href="http://www.walter-uwb.eu">http://www.walter-uwb.eu</a>

**Duration:** from 01.01.08 to 12.31.2009

**Total Cost:** € 3.2m

**EC Contribution**: €2.2*m* 

Contract Number: INFSO-ICT216312















- ✓ The WALTER project intends to specify and develop the technologies required to
  - allows the conformance testing of both products and applications against developing UWB standards,
  - the co-existence of UWB technology with other radio technologies and
  - finally, the emergence of new opportunities by supporting field research.



- Consolidation of test procedures in ETSI Harmonized Standards for broadband wireless devices in support of EU Directives.
- Assist development of UWB Harmonized Standards including mitigation techniques and coexistence mechanisms with potential radio victim services.
- Assist interoperability between UWB devices using multi vendors test events.



### Overall approach

DENTIFICATION OF REQUIREMENTS

Regulatory

Standardisation

Research

Worldwide federated testbeds addressing

- Short term needs of industry and regulators
- Long term needs of research communities.



TEST SPECIFICATIONS

Calibrations and measurement uncertainties

Interoperability

Testbeds architecture



#### WP3

• Identify broadband Wireless Technologies Requirements.

#### WP 4

• Develop test specifications and procedures

#### WP 5

Integrate and validate a Networked laboratory

#### WP 6

Release 3 operational testbeds for certification



- ✓ For Chip and equipment/system manufacturer or a service provider: Standardization/certification provides certainty which enables new markets and revenue streams.
- ✓ For Licensed wireless operator: Less or ideally no interference problems implies lower opex, Walter Test beds allow for conformance and interoperability certification.
- ✓ For End user: Increased trust and confidence based on certified products allowing better service delivery.



## Impact & outcomes

IMPACT & OUTCOMES.



Market take up of broadband radio technologies

Tools & Methods for validation of broadband radio devices

Contribution to coexistence & interoperability of broadband radio technologies



**WALTER** Specification of Regulatory Requirements

**WALTER** Specification of SDO Requirements

**WALTER** Specification of UWB Research Domain Requirements

WALTER Networked Laboratory.
Set of preliminary requirements
WALTER Networked Laboratory.
Operational configuration
WALTER Networked Laboratory.
Final and validation report for
Phase 1

**WALTER** report on test scenarios

**WALTER** report on limitations of test methods to include calibration and measurement uncertainties

**WALTER** test specifications (phase 1 & 2)

**WALTER** testbed architecture and specifications (Phase 1 & 2)

WALTER report on industryUWB solutions for testingWALTER report on UWB

interoperability plugtest

**WALTER** report on multi-vendor test bed evaluation

**WALTER** final report concerning the implementation of 3 testbeds



- Contact with WiMedia Alliance established since March 2008
- Shared interest confirmed at technical levels
- ✓ NDA signed in August 2008
- ✓ Shared Press Release published September 2008.
  - Easiest access to WiMedia Test specifications for WALTER members
  - Easiest access to WALTER regulatory tests and facilities for WiMedia members
- Co-organisation of test events
- Co-implementation of test procedures



#### WP 1 & 2

WP3 WP4 WP5 WP6

#### Phase 1:

Test procedure implementation for the current ETSI EN302065, UWB at 3,1 to 10,6 GHz

WP 3 > WP 4 > WP 5 > WP 6

#### Phase 2:

Test procedure for future ETSI EN including mitigation techniques (UWB at 60GHz)

Q4 - 2009

Q1 - 2009



- ✓ Frank Le Gall (inno) Coordinator
- ✓ Philippe Cousin (ETSI) Project Strategy and liaisons
- ✓ Alan Dearlove (CTL) Project Technical Director

contact@walter-uwb.eu

http://www.walter-uwb.eu