FP7 216715 NEWCOM++
WPS3 – Disseminations Days and Industry Liaison
DS3.2 - Second Dissemination Day Report

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***** The original contractual date of this deliverable was T0+24. But since the event was held on June 18, 2010, in conjunction with the Future Network and Mobile Summit (FuNeMS) 2010 in Florence, the Project officer authorized NEWCOM++ to delay the issuance of this deliverable to T0+30.

Abstract:
This is the second report of work package DS.3 of NEWCOM++. This objective of this work package is to disseminate and transfer the vision and research results to European industry including network operators, service providers, equipment manufacturers, chip and technology developers and other organizations interested in wireless communications. NEWCOM++ intends to organize 3 Dissemination Days, one at the end of each year of the network of excellence. The first Dissemination Day was held on March 31 as a part of the NEWCOM++ Event which took place in Barcelona on March 30 – April 1, 2009. The second Dissemination Day was held in Florence on June 18, 2010, in conjunction with Future Network and Mobile Summit 2010 (FuNeMS 2010). This report summarizes the organization, the program and the highlights of the Second-Year Dissemination Day.

Keyword list: Dissemination, Technology transfer, Industry liaison

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SECTION 1 – INTRODUCTION

The second Dissemination Day of NEWCOM++ was held in Florence on June 18, 2010, in conjunction with Future Network and Mobile Summit 2010 (FuNeMS 2010). The collocation with FuNeMS 2010 of the NEWCOM++ Event, which was strongly suggested by the European Commission, intended to increase interaction with other FP7 projects. The full event was organized over 4 days from June 15 to June 18, and the Dissemination Day was held on the last day.

In this report, we first present in the next section the program of the First Dissemination Day. Then, in Section 3, we summarize the organization and the highlights of the event, and in Section 4, we give some short conclusions.

SECTION 2 – DISSEMINATION DAY PROGRAM

PROGRAM

The program of the Second Dissemination Day of NEWCOM++ was composed of presentations by the Research Work Package (WP) Leaders in the morning, and demos and poster presentations in the afternoon. In their presentations, the WP Leaders highlighted the research results coming from their WPs that may be of interest to industry in the short and medium terms and particularly focused on those that are not covered by the demos and posters in the afternoon. The afternoon program features 9 demos and 17 posters covering a large variety of hot topics in wireless communications and networking.

Morning Program (9:00 – 13:30)

PART 1 (9:00 – 11:00)

Welcome Addresses
Sergio Benedetto, NEWCOM++ Scientific Director, Politecnico di Torino, Italy
Hikmet Sari, Program Chair of the Dissemination Day, SUPELEC, France

WPR.1 – Modeling, Calibration and Validation of Multi-dispersive Multi-Link Channels
Bernard Fleury, Aalborg University, Denmark

WPR.2 – Feedback and Resolution of the Channel State
Raymond Knopp, Eurecom Institute, France

WPR.3 – Adaptive Coding/Modulation for the Wireless Channel
Andreas Polydoros, University of Athens, Greece
(Presentation by Hanna Bogucka, because Andreas Polydoros was unavailable)

WPR.4 – Iterative Receivers for Wireless Communications
Erdal Arikan, Bilkent University, Turkey
(Presentation by Pierre Duhamel, because Erdal Arikan was unavailable)

WPR.5 – Coding for Multi-Hop Wireless Networks
Michael Heindlmaier, Technical University of Munich, Germany

WPR.6 – Relaying and Cooperation in Networks
Luc Vandendorpe, Université Catholique de Louvain, Belgium

WPR.7 – Joint Source and Channel Coding/Decoding
Christine Guillemot, CNRS, France

COFFEE BREAK (11:00 – 11:30)

PART 2 (11:30 – 13:15)

WPR.8 – Scheduling and Adaptive Radio Resource Assignment
Roberto Verdone, University of Bologna, Italy

WPR.9 – Joint RRM and Flexible Use of Radio Spectrum
Jordi Perez Romero, Universitat Politècnica de Catalunya, Spain

WPR.10 – Network Theory
Iordanis Koutsopoulos, Center for Research and Technology Hellas, Greece

WPR.11 – Opportunistic Networks
Sergio Palazzo, University of Catania, Italy

WPR.A – Security in Wireless Networks
Merouane Debbah, SUPELEC, France

WPR.B – Localization and Positioning Techniques
Davide Dardari, CNIT- Pisa, Italy

WPR.C – Flexible Radio Platforms
Dominique Noguet, CEA - LETI, France

LUNCH (13:15 – 14:30)

Afternoon Program (14:30 – 16:30)

1. Demos

D01. Software Defined Radio for All
S. Azarian, L. Cardoso, L. Rose, M. Debbah (CNRS/SUPELEC), and P. Jallon (CEA-LETI)

D02. The Software Simulation and Data Library (SSL) and the UWB-Related Database
A. Kliks (PUT), D. Dardari, R. Narcisi, A. Zanella (CNIT), and F. Sottile (ISMB)

D03. OpenAirInterface Platform
F. Kaltenberger and R. Knopp (CNRS/EURECOM)

D04. Robust Reception of H.264 SVC with Reduced Side Information, and Comparison with H.264 AVC
L. Hidd-Fonteles and P. Duhamel (CNRS)

D05. Testbed for IR-UWB Based Ranging and Positioning: Experimental Performance and Comparison to CRLBs
A. Mallat, P. Gérard, F. Keshmiri, C. Oestges, C. Craeye, D. Flandre, and L. Vandendorpe (UCL)

D06. Evaluation of Tracking Algorithms using the WPRB Database Measurements
F. Sottile et al. (ISMB, CNIT, Chalmers, CTTC,..)

D07. Blind Standard Identification with Bandwidth Shape and GI Recognition using USRP Platforms and SDR4all Tools
H. Wang, W. Jouini, A. Nafkha, J. Palicot, P. Leray, C.Moy, L. S. Cardoso, M. Debbah (CNRS/SUPELEC)

D08. MAGALI Platform Demonstration
F. Clermidy (CEA-LETI)

D09. Execution Time Monitoring and Analysis with ALOE SDR Middleware
I. Gómez and A. Gelonch (UPC)

2. Poster Presentations

P01. Robust MSE-Based Transceiver Optimization in Downlink Cognitive Radio Network
X. Gong (RWTH Aachen)

P02. KauNet Triggers: A Mechanism to Emulate Opportunistic Networks
P. Hurtig**,** A. Brunstrom, J. Garcia (Chalmers/KAU)**,** and T. Pérennou (CNRS/ENSICA)

P03. On the Degrees of Freedom in the Multi-Antenna Block Fading Wiretap Channels
M. Kobayashi, S. Yang, P. Piantanida (CNRS/SUPELEC), and S. Shamai (Technion)

P04. Iterative MIMO-OFDM Channel Estimation Control Algorithm
D. Zhang (RWTH Aachen)

P05. Security Evaluation Framework for 6LoWPAN Networks
C. Pastrone, D. Mazzocchi, M. Spirito, O. Terzo (ISMB), A. Abou Al Kalam, K. Salih (CNRS), A. Atzeni (CNIT), and S. Lindskog (KAU/Chalmers)

P06. Bounds on the Capacity of the Relay Channel with Noncausal State Information at Source
A. Zaidi, L. Vandendorpe (UCL), P. Piantanida (CNRS/SUPELEC), and S. Shamai (Technion)

P07. Test-Bed Implementation for Evaluating and Deploying Heterogeneous Opportunistic WSNs
F. Mirko, M. Spirito (ISMB), J. M. Soares, R. M. Rocha (IST-TUL), and W. Zhang (CNIT)

P08. Analysis of Local Quasi-Stationarity Regions in an Urban Macrocell Scenario
A. Ispas (RWTH Aachen)

P09. Practical QAM Adaptation with Diversity and Ambiguous CSI under Energy Constraints
H. Bogucka (PUT) and A. Conti (CNIT-Ferrara)

P10. Crystallized Rate Regions for Multicarrier and Multiple Antenna Systems
A. Kliks, P. Sroka (PUT), and M. Debbah (CNRS/SUPELEC)

P11. ViCe-WICom: The Software Simulation, Data Library (SSL) and the WPR.B Database (WPR.B-DB)
A. Kliks (PUT), D. Dardari, R. Narcisi, A Zanella (CNIT), and F. Sottile (ISMB)

P12. Resource Allocation in OFDMA Underlay Cognitive Radio Systems Based on Ant Colony Optimization
R. Andreotti, I. Stupia, F. Giannetti, V. Lottici (CNIT-Pisa), and L. Vandendorpe (UCL)

P13. Empirical Study of Energy Detection-Based Spectrum Sensing for Different Radio Technologies
M. López-Benítez, F. Casadevall (UPC), and C. Martella (CNIT-Bologna)

P14. AMC Design Based on Effective SNR Mapping Techniques for Multi-Carrier Systems
I. Dagres, A. Zalonis, A. Polydoros (IASA), I. Stupia, F. Giannetti, V. Lottici (CNIT), and A. Kliks (PUT)

P15. ASIP Design and Low-Power Optimization for Flexible Turbo Decoding
P. Reddy, F. Clermidy (CEA-LETI), R. Alkhayat, and A. Baghdadi (CNRS-Telecom Bretagne)

P16. ASIP-based Flexible Soft-Input Soft-Output List Sphere Decoding
M. Troglia Gamba, G. Masera (CNIT-Polito), and A. Baghdadi (CNRS-Telecom Bretagne)

P17. Common Operator Approach for Flexible Radio Design
M. Naoues, D. Noguet (CEA-LETI), Y. Louet, Ch. Moy, and J. Palicot (CNRS/SUPELEC)

SECTION 3 – ORGANIZATION AND HIGHLIGHTS OF THE EVENT

In terms of the call for proposals and the program, the Second-Year Dissemination Day was very similar to the First-Year Dissemination Day, which was held in Barcelona on 31 March 2009. But the collocation of the event with FuNeMS 2010 led to an organization, which was quite different from the previous edition. There was no specific registration for the NEWCOM++ Event,

which included a workshop and tutorials in addition to the Dissemination Day. Attendees had to register to the FuNeMS 2010 and pay full registration. However, NEWCOM++ managed to waive the registration fees for those attending the Dissemination Day only. The lunch of these attendees was directly billed to N++. Publicity of the Dissemination Day was made through the FuNeMS 2010 website. Unlike the previous edition, no specific brochures were distributed.

The NEWCOM++ Dissemination Day and FuNeMS 2010 were expected to reciprocally benefit of the co-location, but it is difficult to give any figures concerning participation. We can point out however that attendance was quite moderate, because most FuNeMS attendees left the event before Friday afternoon. The fact that NEWCOM++ event organization has been constrained by FuNeMS organization apparently did not provide good effects on NEWCOM++ event and it is not clear how the effort of NEWCOM++ to organize tutorials and sessions within FuNeMS has been paid back in terms of attendance and services to attendants.

SECTION 4 - CONCLUSIONS

With 9 demos and 17 posters, the Second Dissemination Day of NEWCOM++ had an extensive and an interesting program. Organization of the event in conjunction with FuNeMS was supposed to increase attendance. But unfortunately, attendance was quite low particularly in the afternoon due to the fact that most people had left Florence.

One lesson we have learned is that to attract people such events should not be organized on a Friday. The third N++ dissemination day is scheduled to take place in March 2011, and to this end, the European Commission has given an agreement to extend the network to the end of March 2011.