

Next generation Optical networks for Broadband European Leadership

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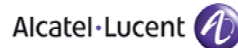
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Please send any comments and suggestions about this newsletter to the Nobel 2 Project Coordinator (giuseppe.ferraris@telecomitalia.it)





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1. WHAT NOBEL PROJECT IS

The main goal of the IST Integrated Project NOBEL phase 2 is the progress of optical transport networks for a pervasive introduction of broadband services in Europe; Leveraging on the results of the precursor project NOBEL, it is specifically devoted to:

- demonstration of the network concepts developed in NOBEL (phase 1) in integrated test beds and local experiments with special emphasis on end-to-end applications;
- detailed elaboration of NOBEL (phase 1) network concepts and further development of new network concepts coping with recently emerged opportunities such as the fixed-mobile convergence and the introduction of IPv6.

NOBEL 2 is a prosecution of the project NOBEL(phase 1) ended in February 2006 that in two years of work has achieved many important results: definition of evolving network scenarios, study, design and implementation of prototypes of Control Plane emulators and simulators with advanced ASON/GMPLS functionalities, techno-economic studies.

For more details please visit the project NOBEL phase 2 web site at:

<http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main>

2. NOBEL PARTNERS

The NOBEL consortium has been constituted by a group of telecommunications operators, industrial companies and research centers offering wide expertise and technical excellence in the area of optical systems and networks. NOBEL partners can be classified into three main categories: Network Operators, Equipment Manufacturers, Research Centers and Universities

Nobel 2 involves Partners from the following European Countries: Italy, Germany, France, UK, Sweden, The Netherlands, Spain, Poland, Belgium, Greece, Norway, Hungary.

Details on the Consortium can be found at:

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_1





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3. NOBEL 2 OBJECTIVES AND ORGANIZATION

The Integrated Project proposal NOBEL phase 2 aims at reaching a common understanding on the evolutionary guidelines for intelligent and flexible optical transport network for a widespread adoption of broadband services. Particular attention is paid to the metropolitan/regional networks as they represent the link between the broadband access and the long-haul segments of Network Operator transport networks.

Starting from a common definition of high-level network evolutionary architectures and solutions, the presence in the Consortium of Partners (both Operators and Manufactures) particularly active in Standardisation Bodies and Fora (e.g. ITU SG13, ITU SG15, OIF, IETF, etc.) should fuel standards and recommendations for a widespread adoption of those network solutions. The active participation in Standardisation Bodies and Fora at the same time will feedback to the Project other emerging views.

To reach these goals the Project is structured into one management Work Package (WP0) and five technical Work Packages (WP1-WP5).

- WP0 - Project Management and other Horizontal activities
- WP1 - Architectures and experiments of future integrated broadband networks
- WP2 - Service-focused network engineering and evaluation
- WP3 - Burst/Packet networks for extended long term scenarios
- WP4 - Network Management and Control/Protocols
- WP5 - Technology Assessment and Experiments

More details on project organization can be found at:

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_2

For the implementation plan, the Gantt chart of the project and for a graphical representation of the relationships between Work Packages please visit:

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_3



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4. COOPERATION

Collaborations with IST MUPBED and with the second phase of the Network of Excellence E-Photon/ONE and IP MUSE are established. It is based on deliverable exchange and common workshops. The cooperation has extended the objectives of NOBEL phase 2 in terms of network architectures and solutions for seamless end-to-end management and QoS, in order to build a shared view of the future European end-to-end broadband networks. More details at:

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_10



<http://www.e-photon-one.org>



<http://www.ist-mupbed.org/>



<http://www.ist-muse.org/>

5. PUBLIC DELIVERABLES

In the first year of the project (March 2006-February 2007) the following public deliverables has been produced and made available to the community on the Nobel 2 web site: http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_4_3

- D0.1 Project presentation
- D1.1 Architectural vision of network evolution
- D2.1 Preliminary report on multilayer traffic engineering and resilience mechanisms
- D4.1 Requirements of control and management concepts in multi-layer and multi-domain GMPLS networks
- D5.1 Description of state of the art and breakdown of work for NOBEL phase 2



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6. PROJECT MEETINGS

- Kick-off Plenary meeting in Turin, March 28-29, 2006, hosted by Telecom Italia
- WP5 meeting in Munich, May 22-23, 2006, hosted by Siemens
- WP1 and WP4 meeting in Stockholm, June 13-14 2006, hosted by Acreo
- Plenary meeting in Marcoussis, November 21-23, 2006, hosted by Alcatel CIT
- WP2 resilience meeting in Nuremberg, February 12-13, 2007 hosted by Lucent Technologies Network Systems GmbH
- Plenary meeting in Lannion, May 10-11, 2007, hosted by France Telecom R&D.
- Next WP2 meeting is scheduled for September 10-12, 2007 and it will take place in Budapest, hosted by Budapest University
- Next Plenary meeting will take place in Turin on November 6-8, 2007, it will be the final project meeting and it will be hosted by Telecom Italia

7. PUBLICATIONS

Some of the most relevant results achieved by the Nobel 2 project up to now are proposed for publications on magazines or to be presented at conferences. Titles, abstracts and authors of the papers can be found following the links

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_4_2

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_4_4

8. HIGHLIGHT ON CONFERENCES WORKSHOPS AND EXHIBITIONS

A selection of events relevant for Nobel 2 research topics can be found at

http://www.ist-nobel.org/Nobel2/servlet/Nobel2.Main?seccio=3_1_7

The closer events are:

PNC 2007, July 15- 22 2007, Salt Lake City, Utah, U.S.A.

<http://www.jcis.org/track/pnc/callforpaper.asp>

ECOC 2007, September 16-20, 2007, Berlin, Germany

http://www.vde.com/Conferences_en/ECOC+2007/

DRCN 2007, 7-10 October 2007 La Rochelle, France <http://www.drcn2007.org/>

BROADBAND WF EUROPE 2007, 8-11 October 2007, Berlin, Germany

<http://www.iec.org/events/2007/bbwf/>