

U-Broad Project To Develop Advanced Access Technologies Over Copper

Project Aims to Quadruple Total Bandwidth Available to the End User
Using Legacy Copper

Metalink Ltd., a global provider and developer of high performance wireline and wireless broadband communication silicon solutions, has successfully launched the U-BROAD research project, under the sixth framework program of the European Commission in January 2004. The project's focus is on ultra high bit rate-over-copper technologies for broadband multi-service access, addressing the strategic objectives of 'Broadband For All' that were set by the EC.

U-BROAD aims to develop and integrate advanced access technologies for the delivery of 'true broadband' content over Ethernet based networks to the customer premises, while providing interfaces to both legacy and next generation core networks. U-BROAD's major challenge is to quadruple the total bandwidth currently available to the end user over copper.

Partially funded by the European Commission, the project, which is being carried out by a consortium specifically formed for this purpose, has been provided with a two-year budget of approximately 3.5 million euros. Consortium partners include:

- Metalink
- RAD
- France Telecom R&D (FTRD)
- Hellenic Telecommunication Organization (OTE)
- Telecommunication Systems Institute (TSI) at the Technical University of Crete
- Bar Ilan University
- Delft University of Technology

Each partner brings to the project extensive experience and knowledge in its respective areas of expertise in the realm of broadband access—over-legacy copper.

"This challenging project brings together all of the necessary set of competences that are required for driving broadband technology beyond what is currently state-of-the-art copper connectivity capacity," said Avi Nudler, Vice President of Business Development at Metalink. "It will enable operators to offer

legacy copper networks, with a flexible interface to their current and next generation core networks.”

“Reaching customers over existing copper lines with multi-service capabilities, including LAN, data and voice, is a real breakthrough,” stated Amir Karo, Director of Product Management at RAD Data Communications. “Such technology will allow incumbent, as well as competitive carriers, to offer high bandwidth access to existing legacy networks, such as SDH and ATM, as well as to the next generation Ethernet / MPLS based networks, without having to lay fiber optic cable to every customer.”

"This project provides an opportunity to study very high speed digital transmission over legacy copper for short distances," stated Pierre Paufique, head of 'Access Network solutions for the Consumer Market' laboratory inside France Telecom R&D. "We believe this project will help us to provide innovative solutions for future new services; we also hope it will open the path towards higher bandwidth for all access network users."

“The delivery of ‘true broadband’ multimedia content over existing copper infrastructure in the end-user premises, is simultaneously challenging and intriguing,” said Elena Tavlaki, Head of Research Programs Division at Hellenic Telecommunications Organization. “As operators with their legacy systems in place, time is needed in order to abandon all investments in these systems, and to move towards the full deployment of next generation networks. Breakthrough innovations that ‘bridge’ the gap between present and future access network technologies address an emerging market need, and pave the way toward commercial success.”

“The project’s ambitious goals can be met only through cooperation between the academic partners and industry, said Prof. G.S. Moschytz, Head of department of engineering, Bar-Ilan University. “New results in the theory of vector processing and coordinated transmission will enable better exploitation of the copper lines”.

“U-BROAD is a challenging focused R&D project with a strong forward-looking basic research component,” said Nikos Sidiropoulos, U-BROAD principal investigator at TSI. “Beyond the short- and mid-term project goal of boosting capacity over short distances, we also aim to develop the fundamental vectored transmission and scheduling technologies that will be key to sustain growth in the next five years.”

About Metalink

Metalink Ltd. is a global provider and developer of high performance wireline and wireless broadband communication silicon solutions for telecommunication, networking and home broadband equipment makers. Metalink's silicon solutions address key elements of the "broadband home" market through cost effective, very high-speed delivery of broadband applications over public and private home and enterprise networks. Metalink's wireline DSL products enable network operators to offer broadband services over ATM, TDM, and Ethernet-IP copper infrastructure. Leading OEMs and operators in Asia, North America and Europe have chosen to deploy Metalink's VDSL, SHDSL, and HDSLx products. Metalink's wireless solutions, MIMO-based *WLANPlus*, are designed to meet the ever-increasing demand for wireless LAN speed and reach, critical for home and office multi-media applications. Metalink, a fabless semiconductor company, is headquartered in Yakum, Israel and has offices in Seoul, Korea; Yokohama, Japan; Folsom, California and Atlanta, Georgia. Further information is available at www.metalinkBB.com

About RAD

Established in 1981, privately owned RAD Data Communications has achieved international recognition as a major manufacturer of high quality access equipment for data communications and telecommunications applications. These solutions serve the data and voice access requirements of service providers, incumbent and new carriers, and enterprise networks, by reducing infrastructure investment costs while boosting competitiveness and profitability. The company's installed base exceeds 8,000,000 units and includes more than 150 carriers and operators around the world. These customers are supported by 19 RAD offices and more than 200 distributors in 105 countries.

RAD is a member of the RAD Group of companies, a world leader in networking and internetworking product solutions.

www.rad.com

About France Telecom R&D

France Telecom R&D, the France Telecom Group's research and development center, drives innovation for all Group units in France and worldwide. The center anticipates technological revolutions and paradigm shifts in usage. The center focuses on innovation that provides customers with best-in-class communications solutions, paving the way for technologies that will become ubiquitous in the future. The performance of France Telecom R&D makes it Europe's leading telecom research and development center.

www.rd.francetelecom.fr/fr/medias/medias.php

About OTE

The Greek Telecommunications Organization (OTE) was established in 1949. It ranks amongst the top Groups of companies in Greece and the top ten telecommunications organizations in Europe. It extends its activities beyond the Greek frontiers into Southeastern European markets and the Middle East. OTE is the largest Greek Group, with numerous subsidiaries such as COSMOTE and OTEnet which show impressive performances. OTE aims to be a prominent participant in the technological, commercial, economic and social changes that are taking place on a global level. OTE is listed on the Athens Stock Exchange (ASE) and on the London and New York Stock Exchanges.

<http://www.ote.gr>

About Bar-Ilan

Bar-Ilan University is one of the six leading Israeli academic institutions. It has six faculties, and hosts more than 20,000 students in graduate and undergraduate programs. The department of Electrical and Computer Engineering is a new department headed by Prof. George Moschytz. There are 4 tracks of research and teaching: Signal processing and communications, electro-optics, microelectronics and computer engineering.

www.eng.biu.ac.il

About TSI

The Telecommunication Systems Institute (TSI) is a University Research Institute founded by the Greek Ministry of Education in 1995. TSI operates within the framework of the Technical University of Crete (TUC); however, it is an administratively independent and financially self-sustained entity. Among its main objectives is to promote graduate education, research and development in the broad areas of Telecommunications and Telecommunication Systems. TSI currently manages or participates in 13 research projects funded primarily by the EC of the EU, the Greek Secretariat for Research and Technology, and Industry.

www.tsinet.gr

About Delft University of Technology

Delft University of Technology is the largest of the three engineering universities in The Netherlands (founded 1842).

The Faculty of Electrical Engineering, Mathematics and Computer Science has a scientific staff of 400 fte, 600 MSc students, and 200 PhD students. It houses several research institutes, among which the micro-electronics institute DIMES and the recently founded Intelligent Systems Consortium (ISC). Its aim is to form a competence center on research in ICT, and in particular broadband communications.

<http://www.tudelft.nl>