



BASE²

Broadband Access Satellite Enabled Education

TELE-EDUCATION TO REACH REMOTE REGIONS

BASE2 aims to provide end-to-end tele-education services through an integrated satellite and terrestrial wireless and wired broadband infrastructure. The project is performing pioneering work on network integration and on investigating the suitability of integrated satellite and wireless network technologies for tele-education use, such as video conferencing, webinars, webcasts and access to learning repositories. The project is deploying a network and service architecture and is evaluating it in the context of isolated learner communities who participate in tele-education programmes. The users come from agrarian and maritime communities in Greece and Cyprus.

BASE2 aims to cover real needs and considers the agricultural communities (farmers etc.) and the maritime communities (ship crew etc.) as two important sample groups for piloting satellite-based educational systems. Users representing those economic activities can greatly benefit from a wider deployment and use of satellite communications essentially due to usually large distances which separate them from broadband terrestrial telecom infrastructures.

THE BASE2 NETWORK

The final end-to-end system consists of satellite communication technologies and various terrestrial network infrastructures. This hybrid network is implemented in order to provide tele-education services to remote, distributed and isolated rural areas and vessels (maritime community).

A specific methodology was followed for the deployment of the network and service architecture. It involved identification of potential services that might be of interest to geographically isolated communities and evaluation of each identified service in the context of distance learning through active involvement of potential users. Subsequently, specific service scenarios were elicited and a hybrid network architecture based on satellite and wireless technologies was designed and implemented.

THE USER COMMUNITIES

User communities have been intensively taking advantage of the services provided by BASE2 familiarising themselves with edge technologies, having the opportunity to attend lessons prepared by experts and giving feedback about their experiences and additional needs. This feedback, the analysis of the learning efficiency and the lessons learned during the pilot phase will significantly contribute to the future improvement of services.

It is also expected that the tele-training of the initial 500 approximately users will establish a precedent and create a critical mass of remote agrarian and maritime users ready to use the new technologies in order to train themselves on various topics. Dissemination from this critical mass is to play a very active role in the wide spreading of e-learning to traditional layers of the Greek remote community, thus creating a positive side-effect to basic computer literacy in non-technologically privileged communities as well as providing high level professional training.



BASE²

Broadband Access Satellite Enabled
Education



LIST OF PARTNERS

- National Centre for Scientific Research "Demokritos", Greece
- Athens Information Technology, Greece
- Brunel University, UK
- FOKUS - Fraunhofer Gesellschaft zur Foerderung der angewandten Forschung e.V, Germany
- Universidad Politécnica de Madrid, Spain
- University of Cyprus, Cyprus
- General Confederation of Greek Agrarian Association, Greece
- Superfast Ferries, Greece
- Hellenic Aerospace Industry S.A, Greece

COORDINATOR

National Centre for Scientific Research (NSCR), "Demokritos"

Division of Applied Technologies
Terma Patriarchou Gregoriou
153 10 Agia Paraskevi
Athens
Greece
<http://www.base2-project.eu>

CONTACT

Dr. Constantin Makropoulos

Tel: +30 210 65 14 544

Fax: +30 210 65 16 582

E-mail: cmakr@dat.demokritos.gr

PROJECT INFORMATION

BASE2: Broadband Access Satellite Enabled Education
Specific Targeted Research Project
Contract no: SST4-CT-2005-516159
Starting date: 01/09/2005
Duration: 33 months
EU contribution: € 1.339.337
Estimated total cost: € 2.152.163

