

EUMEDCONNECT –The research and education network for the Mediterranean

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The EUMEDCONNECT project has created the first research and education network for the Mediterranean region. As of March 2005, nine of the twelve project partners are successfully connected and benefiting from a high capacity Internet network dedicated to users of the research and academic community. This new infrastructure will fight the digital divide that exists between the Mediterranean region and Europe, and increase academic collaboration between the regions. It is available for use by non-commercial applications including other EUMEDIS projects.

EUMEDCONNECT has a direct link to GÉANT2, the pan-European multi-gigabit research and education network. The Mediterranean partners are now able to communicate and collaborate with colleagues throughout Europe and beyond. Indeed, with GÉANT2's connections to other world regions such as North America, Latin America, Asia and the Middle East, Mediterranean researchers can now operate on a truly global scale.

The EUMEDCONNECT project is currently funded until June 2006 with 10M Euro from the European Commission's EUMEDIS Programme, which aims to promote the Information Society in the region. This funding represents 80% of the total cost, with the remainder provided by the project partners. Work is currently ongoing with the partners and with the European Commission to continue their funding support beyond this date.



Project Partners

The EUMEDCONNECT project is co-ordinated by DANTE, a not-for-profit organisation registered in the UK. Supporting DANTE in the project are the National Research and Education Networks (NRENs) of four European countries. These are France (RENATER), Greece (GRNET), Italy (Consortium GARR) and Spain (RedIRIS). All are experienced in establishing national networks and with working in the region. In addition, the European Commission not only provides project financing but valuable political support and encouragement.

The Mediterranean NREN partners involved in EUMEDCONNECT are Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, the Palestinian Authority, Syria, Tunisia and Turkey.



The EUMEDCONNECT Network Topology

The diagram above shows the current network topology. The first phase of implementation saw the establishment of links to Morocco, Algeria, Tunisia and Cyprus. Existing GÉANT links to Israel, Cyprus and Turkey are connected to the EUMEDCONNECT network. The most recent phase of development has seen the connection of Egypt and Syria to the network and a connection to Jordan is being implemented. Points of Presence have been established in Sicily at Catania, and in Cyprus at Nicosia. A recent upgrade to the Madrid-Algeria connection to 155 Mbps demonstrates that user demand for the network is increasing all the time.



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Challenge and Success

The project has provided cohesion to regional research networking, and has acted as a focus for the strengthening of political and working relationships amongst the project partners. With the support of the Mediterranean partners and their governments, DANTE and the NRENs have been able to overcome local difficulties such as poor infrastructure or monopoly providers. Meeting these regional challenges makes the creation of the network all the more rewarding.

The successful approach established by EUMEDCONNECT is already being applied to a number of projects in other world regions. The ALICE, SEEREN and TEIN2 projects have all used the EUMEDCONNECT template.

Applications

Research networking has benefits that extend far beyond the academic community. The provision of good quality, high capacity telecoms infrastructure can benefit European/Mediterranean collaborative projects in such fields as e-health, e-learning and e-culture.

Regional e-health projects similar to the T@lmed project in Latin America, can use the network to remotely diagnose patients and prescribe treatments, despite being located hundreds, or even thousands of kilometres apart.

Plans also currently exist for the connection of Egypt's Alexandria Library to the network, allowing the region's rich cultural history to be shared online to a global audience.

E-Culture projects such as Opera Oberta (<http://opera-oberta.liceubarcelona.com>) will utilise the high capacity and international connections that EUMEDCONNECT delivers. The project uses videoconferencing to stream operatic performances and accompanying course instruction to students. The high-bandwidth visual and audio needs of the project are met by the network.

EUMEDCONNECT has also been selected to be used for the first EU/MED grid computing project planned to start in late 2005. In addition the network will be used by the SWIMED Project. SWIMED (Sustainable Water management In MEDiterranean coastal aquifers) is a joint initiative by regional and European environmental researchers to study sustainable water management techniques. It will develop modelling tools to aid analysis and predict future trends.

Use of the EUMEDCONNECT network is restricted to non-commercial applications. EUMEDIS pilot projects are encouraged to take advantage, and reduce their costs of using commercial Internet services. Any projects interested in connecting to the network should contact their National Research and Education Network for further information on connection procedures and terms. There are no additional charges for use of EUMEDCONNECT. Contact details are available at www.eumedconnect.net

“ This achievement is really going to make a difference for us ”
Mr Redouane Merrouch, CNRST, Morocco



This observatory in Algeria is connected. It is part of CRAAG, a Centre for research in Astronomy, Astrophysics and Geophysics.

“ EUMEDCONNECT is providing a real boost to Tunisia's research and education sector. It helps level the playing field in the global research race ”
Mme Malika Zenati, RFR, Tunisia

Visit the Website
Further information on the project can be found at www.eumedconnect.net
Here you can find the latest news and developments and links to all project partner sites.

Juniper Networks donated the IP router equipment forming the core of the EUMEDCONNECT network. Technical workshops and training for project partners has also been offered by Juniper.