

EC Contract for TEN-34 Breakthrough in European Networking

22 May 1996

The European Commission has awarded a 12 MECU contract under the Fourth Framework Programme to the TEN-34 Consortium, a grouping of European national university networks with major European telecoms operators as Associated Partners. Under the contract the first Europe-wide high speed (34 Mbps) computer network for the research community will be implemented. This will match the capacities now being enjoyed by the North American research community, and will provide the first comprehensive international interconnections at high bandwidth.

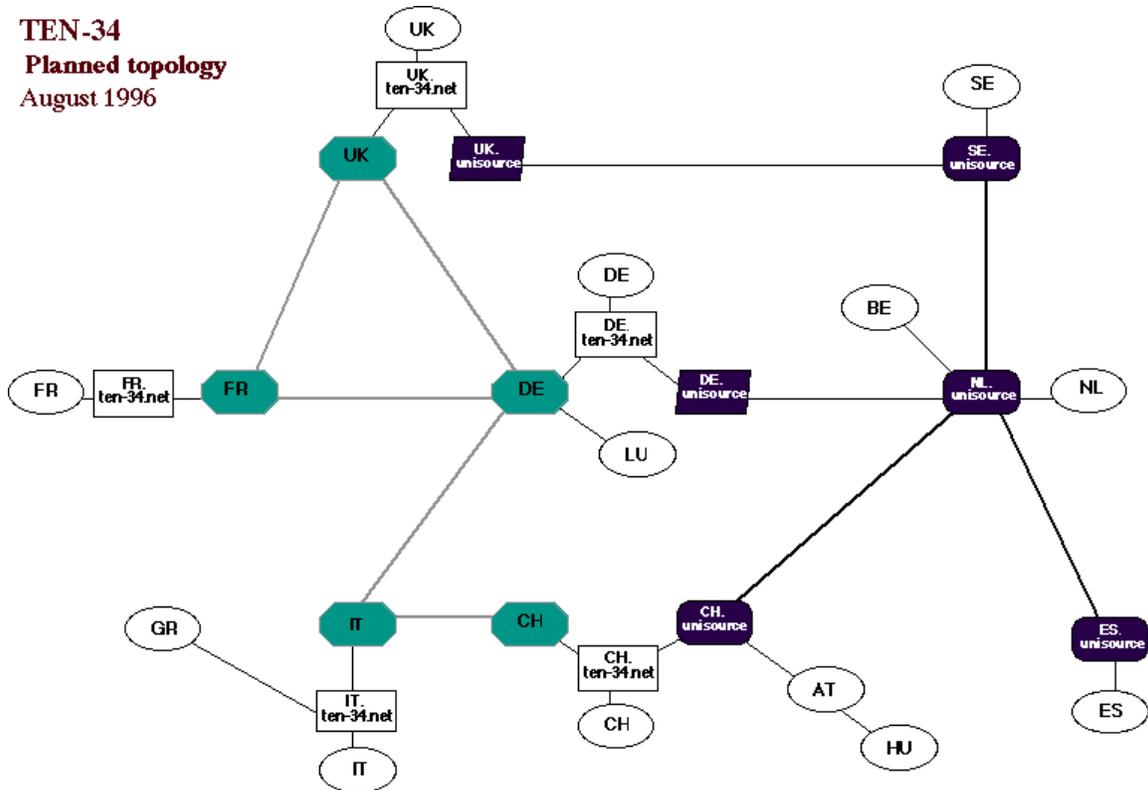
A number of national university networks, e.g. SuperJANET in the UK, already have a high speed national network infrastructure, which enables researchers to use sophisticated multimedia applications over the network. On an international level these connections are not yet in place. Now the funds and the organisational structure are available to complement national high speed networks with a European interconnect facility.

"The project is a significant achievement for co-operation not only between the European national research networks who have worked closely together over the last year, but also achieves a new level of collaboration between them and major European telecoms operators", said David Hartley, chairman of the TEN-34 Steering Group.

In March 1995 eighteen national research networks, which interconnect universities and research organisations at a national level, submitted the TEN-34 proposal in response to the combined Telematics for Research/ESPRIT Call for Proposals. TEN-34 stands for: **Trans-European Network Interconnect at 34 Mbps.**

The preliminary plan for the facility is as follows: telecom operators including France Telecom, BT, Deutsche Telekom and Telecom Italia will provide data-transmission services based on ATM Virtual Paths as between France, the UK, Germany and Italy offering 34 Mbps aggregated access capacity. Unisource will set up a managed 34 Mbps service between the Unisource home countries (Sweden, Netherlands, Switzerland, Spain). Countries outside the two groups will join either of the two subnetworks, which will be interconnected at at least two points in Europe. The National Research Networks in the TEN-34 Consortium plan to provide an integrated pan-European Networking Service offering IP.

TEN-34
Planned topology
 August 1996



In addition TEN-34 have agreed with the JAMES Consortium (consisting of the European telecoms operators) on the use of an ATM test network required for validating ATM based services (the second element of the TEN-34 proposal). This will enable the experience of the research community to contribute to the development of new multi-service technologies in a pan-European context, bringing them sooner to full service status.

Full Partners from the following countries in the Consortium have signed the contract: Austria, France, Germany, Greece, Italy, Luxembourg, the Netherlands, NORDUnet (on behalf of Denmark, Finland, Norway and Sweden), Portugal, Spain, Switzerland, the UK and DANTE as Coordinating Partner. A complete overview of the involvement of all partners is also available.

TEN-34: List of Participants

Full Partners / Contractors

UK	DANTE (Coordinating Partner)
Austria	ACOnet
Switzerland	SWITCH
Germany	DFN
France	RENATER
Greece	GSRT
Italy	INFN
Luxembourg	RESTENA
Netherlands	SURFnet

Portugal	FCCN
Denmark }	
Finland }	} NORDUnet
Sweden }	
Norway }	
Spain	RedIRIS
UK	UKERNA

Expected Future Contractors

Belgium	BELNET
Ireland	HEAnet

Additional Partners

Czech Republic	CESnet
Hungary	Hungarnet

Telecom Operators

UBN Belgium
BT Worldwide (Belgium)
Deutsche Telekom
France Telecom
Telecom Italia

Telecoms Operators expected to join

Austrian PTT
Belgacom
Entreprise des P & T (Luxembourg)
OTE
Portugal Telecom

DANTE submitted a detailed proposal for the Technical Annex of the contract. The TEN-34 proposal provides for refinement of the Technical Specification during the first few months of the Project. An important part of this work will be the definition of an objective set of acceptance criteria which will ensure that the new service will offer acceptable Quality of Service and value for money. There will also be the opportunity for other National Research Networks and Telecoms Operators to join in before the first implementation starts.

DANTE is a not-for-profit company with research association status in Cambridge which is owned and was set up by a number of national research networks (UKERNA being one of them) to organise and manage advanced network services for the research community at a European level.