

# ALICE

## America Latina Interconectada Con Europa

### Abstract:

@LIS programme ([http://europa.eu.int/comm/europeaid/projects/alis/index\\_en.htm](http://europa.eu.int/comm/europeaid/projects/alis/index_en.htm)) was launched by EC in December 2001 to extend the benefits of the Information Society to all citizens of Latin America and to bridge the digital divide. To achieve these objectives, @LIS has opened the political and regulatory dialogue between Europe and Latin America and will fund a range of infrastructure application projects and technical support programmes. As its principal infrastructure project, @LIS will support the ALICE project which will carry out the recommendations brought forward by the CAESAR study (March-August 2002).

The ALICE project will develop an IP research network infrastructure within the Latin American region and towards Europe.

### Objectives:

ALICE is aiming to achieve the following objectives:

- To create and consolidate a regional Latin American research network infrastructure which interconnects the research and education networks in Latin America;
- To operate and manage the Latin American research network infrastructure from Latin America;
- To directly interconnect the Latin American research network with the pan-European research network, GEANT;
- To operate and manage the interconnection between the Latin American research network infrastructure and GEANT jointly from Europe and Latin America;
- To closely cooperate between EU-NRENs, LA-Partners and DANTE on all matters concerning ALICE.
- To provide the necessary infrastructure for the @LIS demonstration projects as well as for researchers and students involved in collaborative research between the two regions.

### Technical Approach:

Connectivity has been tendered using negotiated procedures to give maximum scope for negotiation with supplier and flexibility in determining the scale and topology of the infrastructure. It is foreseen that the Latin American network will consist of one or two major rings inter-linking the more advanced NRENs in the region. All other NRENs in Latin America will have access links to the rings. The regional network will be built based on dedicated high capacity elements between the Points of Presence (PoPs) based in the Latin American countries and will use advanced traffic routing equipment to allow for high speed Internet access. Wherever possible, the Latin American network will be built using fibre optical cable to achieve highest performance levels.

### Applications

End-users in the Latin American and European research communities will benefit from this new data communications infrastructure and their work will profit from the possibilities of rapid information exchange. The project foresees to closely co-operate with the user communities in Latin America and Europe. During a preparatory meeting of the project, user groups working in research areas such as Astronomy, Radio Astronomy, Bio-diversity, the El Niño Effect, Virtual Libraries and Distance Learning have been singled out as the areas with most common research interest between the two regions. Through the collaboration with user groups the project will be able to demonstrate the wider usefulness for society in general.

**CAESAR Results:**

The CAESAR study has shown that, for most Latin American countries, there are well established research network infrastructures. This is the case for Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Mexico, Panama, Paraguay, Uruguay and Venezuela. In addition, in most of those countries that do not currently have a national research infrastructure, there are active plans for its development. It is very significant that there is considerable Latin American interest in co-operating with one another, and with Europe, to organise a co-ordinated approach to the establishment of connectivity between the two world regions. As part of the CAESAR project, an extremely successful workshop was held in Toledo, Spain, between the project participants and twelve Latin American research networks. As a consequence of this initiative the Latin America networks are developing a co-operative model called CLARA (Co-operacion Latino-Americana de Redes Avanzadas).

**Expected Results**

The project will improve the infrastructure available to participating LA-Partners for international research networking within Latin America and between Europe and Latin America, with the aim of fostering greater collaboration and cohesion between the regions. In addition it will provide a cost effective platform for the @LIS demonstration projects.

There will be a strong component of knowledge transfer considering both the managerial and technical aspects of the project

The tender for the network connectivity has been conducted during summer 2003 and its results will specify the topology of the ALICE network. First service of the ALICE network is expected for early 2004.

**Participants**

ALICE is co-ordinated by DANTE and partnered in Europe by RENATER, GARR, FCCN and RedIRIS, the NRENs of France, Italy, Portugal and Spain respectively and in Latin America by: RETINA (Argentina), BolNet (Bolivia), RNP (Brazil), REUNA (Chile), Universidad de Cauca (Colombia), CRnet (Costa Rica), RedUniv (Cuba), REICyT (Ecuador), RAICES (El Salvador), RAGIE (Guatemala), UNITEC (Honduras), CUDI (Mexico), UNA (Nicaragua), RedCyT (Panama), ARANDU (Paraguay), RAP (Peru), RAU (Uruguay) and REACCIUN (Venezuela).

Project name:  
ALICE

Contract no.:  
ALA/2003/061/696

Project type:  
grant application

Start date: 02/06/2003

Duration: 36 months

Total budget: € 12,500,000

Funding from the EC: € 10,000,000

Total effort in person-months: 208

Website: <http://archive.dante.net/alice/>

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Project participants:

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BolNet BO  
RedUniv CU  
CUDI MX  
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RAICES SV  
RedCyT PA  
REACCIUN VE  
DANTE UK  
RENATER FR  
GARR IT  
FCCN PT  
RedIRIS ES

Keywords:  
ALICE, @LIS, National Research and Education Networks

Collaboration with other EC funded projects:

EUMEDCONNECT  
COMREN  
@LIS Pilot Projects  
GEANT  
SERENATE  
TEIN 2

**IST - Research Networking - Networks for Research – International Co-operation**