



## Contracting Authority: European Commission

### @LIS II Programme

### Grant Application Form

**Budget line(s): BGUE-B2008-19-090100**

Reference: DCI-ALA / 2008 / 169-068

Name of applicant:	CLARA	
Title of the action:	Extending and Strengthening RedCLARA as e-Infrastructure for Collaborative Research and Support to Development (ALICE2)	
Location(s) of the action:	<i>Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela</i>	
<b>Total eligible cost of the action (A)</b>	<b>Amount requested from the Contracting Authority (B)</b>	<b>% of total eligible cost of action (B/Ax100)</b>
€ 18,000,000	€ 12,000,000	66.666667 %
Total duration of the action:	<i>45 months</i>	

Dossier No	
(for official use only)	

<b>Contact details for the purpose of this action:</b>	
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**Any change in the addresses, phone numbers, fax numbers and in particular e-mail, must be notified in writing to the Contracting Authority. The Contracting Authority will not be held responsible in case it cannot contact an applicant.**

### **NOTICE**

All personal data (such as names, addresses, CVs, etc.) mentioned in your application form will be processed in accordance with Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. Your replies to the questions in this form are necessary in order to assess your grant application and they will be processed solely for that purpose by the department responsible for the Community grant programme concerned. On request, you may be sent personal data and correct or complete them. For any question relating to these data, please contact the Commission department to which the form must be returned. Beneficiaries may lodge a complaint against the processing of their personal data with the European Data Protection Supervisor at any time (Official Journal L 8, 12.1.2001)].

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## **PART A. CONCEPT NOTE**

### **I. EXTENDING AND STRENGTHENING REDCLARA AS E-INFRASTRUCTURE FOR COLLABORATIVE RESEARCH AND SUPPORT TO DEVELOPMENT (ALICE2)**

Within the framework of the @LIS programme, DANTE jointly proposed with 4 European NRENs and 18 Latin American NRENs to build a Latin American Research Network, thus facilitating cooperation in Science, Technology and Education between Europe and Latin America, as well as providing a tool to contribute towards bridging the Digital Divide. The resulting Project, that was successfully managed by DANTE, was the ALICE Project.

The ALICE Project has successfully established the first Latin American Research and Education Network, RedCLARA. As of April 2008, RedCLARA interconnects the National Research and Education Networks (NRENs) of 12 Latin American countries and offers direct connectivity to the European GÉANT2 and the American Internet2 networks, with a Sao Paulo-Miami link paid by the NSF's IRNC Programme.

A major achievement of the ALICE Project has been the formation of CLARA, the Latin American Cooperation of Advanced Networks (Cooperación Latino Americana de Redes Avanzadas), a non profit organization whose members are the NRENs of Latin America, and which is in charge of the management, development and operation of RedCLARA as well as the coordination of Latin America's research networking activities. After the funding for ALICE came to an end in March 2008, CLARA has been able to completely take over the operation of RedCLARA, the management of contracts and all the necessary administrative tasks to carry out a seamless handover of responsibilities from DANTE.

ALICE2 has been proposed to continue and further develop the data communications infrastructure provided by RedCLARA and RedCLARA's direct connection to the European GEANT2 network by focusing on the creation of long-term partnerships that ensure the establishment of a high-end upgradeable infrastructure with low maintenance costs. This approach will simplify the sustainability of RedCLARA by providing lower maintenance costs and hence providing a financial framework where it can be sustained by the CLARA membership, a major objective of the project.

The inclusion of Latin American countries still not connected: Bolivia, Costa Rica, Cuba, Honduras, Nicaragua and Paraguay, will be another major objective of the project. Furthermore, several dissemination and training activities are proposed to ensure that RedCLARA reaches the researchers, especially in areas of impact for the region which are related to the Millenium Development Goals, such as Health, Disaster Prevention, Pollution, Agriculture, Education and others.

Finally, the project aims at strengthening human resources in the region in order to improve the technical, managerial and usage skills, both of NREN staff and of final users, so that a larger group of well trained personnel manages more stable and efficient NRENs and better trained users make the best use of the proposed e-Infrastructure.

ALICE2 will be managed by its Latin American partners and will be coordinated by CLARA. CLARA will have full commercial responsibility for the activity, while DANTE will provide management and technical support in the overall project management and more specifically in the area of connectivity procurement.

ALICE2 will also be partnered by the organisations responsible for four of the European NRENs, namely GARR (Italy), FCCN (Portugal), RedIRIS (Spain) and RENATER (France), acting on behalf of the pan-European GÉANT community.

#### **1. Relevance of the Action**

ALICE has successfully established the first Latin American Research and Education Network, RedCLARA. RedCLARA interconnects the National Research and Education Networks (NRENs) of the following 12 Latin American beneficiaries: Argentina, Brazil, Chile, Colombia, Ecuador, El

Salvador, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela. RedCLARA offers direct connectivity to the European GEANT2 and the American Internet2 networks.

The ALICE project has been successful in creating CLARA, the first regional Latin American research networking organisation, modelled loosely after its European counterparts, TERENA and DANTE. CLARA today is a working organisation with a Chief Executive Officer, a Chief Financial Officer, a Network Engineering and Planning Team, a Network Operations Centre, a project management team and a PR team.

The benefits of procuring and managing the network at a regional level are tangible, and they are appreciated by the Latin American partners as something that would not have happened without ALICE. Nevertheless, CLARA has not yet reached a state of self sustainability and this is due to several factors, mostly external ones:

- Most NRENs are extremely young and have a long way to go before they become stable organizations; in many cases their coverage is limited to the Capital City and much work remains to be done before they can extend their national networks to all major cities in their countries and hence include all potentially important institutions.
- National Science and Technology policies in Latin America have not yet embraced e-Infrastructures, and even if eLAC has declared this type of infrastructures as a priority, mainly due to CLARA's work, their inclusion in national agendas has yet to happen.
- Research Groups are scarce and unevenly distributed in Latin America. The formation of research groups that take advantage of the network to create continent-wide Virtual Research Labs is a must, but it is an activity that will take time and effort, and several years will be required before this happens at a large scale. These groups are expected to be a major support for NREN activities both in their countries and regionally.
- The cost of telecommunications is a major problem in the region. We have seen important changes during the ALICE project and are confident that the project has contributed to that change, but prices in the region are much dearer than those in Europe. Significant changes will only take place once the current trend towards deregulation is well established.

While Latin American partners strongly wish for RedCLARA to continue, currently no formal processes have been started within Latin America to provide intra-regional funding to cover the infrastructure costs. The EU-LAC Summit of the Information Society held in Lisbon in April 2006 and the EU-LAC Summit of the Heads of State held in Vienna in May 2006 have emphatically backed the continuation of the ALICE project and have certainly pushed in the right direction, but much still remains to be done at political level so that Governments embrace e-Infrastructure policies and invest permanently in them.

Latin America needs the support of the European Commission in order to transform RedCLARA into a self sustainable organisation, and this can be done by investing in CLARA-owned infrastructure that could also generate synergies with the NRENs by sharing with them the optic fibre infrastructures that go across each country, and which can extend towards the NRENs the same advantages of upgrading flexibility and low maintenance costs that CLARA itself needs in order to guarantee that its costs remain at an acceptable level.

This investment, together with government lobbying activities, the formation of a large well-trained group of technicians and managers and the fostering of communities of researchers and educators, will form the basis for sustainability that will guarantee a long lasting success for this European initiative responsible for a major breakthrough in the way Latin America uses knowledge resources to promote development.

## **2. Description of the action and its effectiveness**

The project will improve the infrastructure available for participating LA-Partners by creating a high-end network based on optical technology and its own infrastructure that will dramatically change the current cost structure of RedCLARA by generating a lower maintenance cost network which will also generate synergies with the National NRENs by sharing with them the fibre optic infrastructures crossing each country, which can be used by the NRENs to build or extend flexible, low maintenance cost NREN Backbone Networks. The new infrastructure will facilitate the development of joint research projects between Europe and Latin America by providing an e-Infrastructure similar to GEANT2 and hence fostering greater collaboration and cohesion between the regions.

The project aims at including in the network at least 3 additional countries in Latin America, thus expanding the coverage to 15 countries and at the same time promoting the strengthening of all the LA-NRENs by training their management and technical personnel, providing support for the implementation of their national networks and increasing awareness of their users by fostering the creation of regional user communities and providing services specially tailored for them. It is expected that this will increase the number of research projects involving researchers from all of Latin America, especially in those areas related to the Millenium Development Goals.

The new cost structure produced by the owned infrastructure strategy and the managerial methodology introduced by the project will create the basis for a sustainable CLARA organization. The strengthening of the NRENs and the support for the development of national e-Infrastructure policies will add to this end by creating a strong set of partners that provide long term financial support for CLARA's activities.

The technical skills of the NRENs will be improved through bi-annual seminars conducted during the CLARA Technical Meetings, where topics are selected by the Technical Representatives of the NRENs and the training is provided by the more advanced LA-NRENs, the EU-NRENs as well as contributors from all over Latin America, thus following the path established by the ALICE Project. An e-Learning System will support this activity by providing permanent training throughout the year in order to ensure that learning material is re-used and that the NRENs can train new personnel at any time during the year.

The project will work on improving the managerial skills of the NREN Managers by providing training and support in order to improve their business plans and procedures. In particular the project will push for the introduction of CRM (Customer Resource Management) techniques to keep the NREN Managers in contact with their communities in a systematic way and to adopt Product Life Cycle methodologies for the services that they provide to their communities, as well as for the services provided by CLARA to its stakeholders.

The support provided by the project to the user communities will be crucial in creating project development and collaborative management methodologies for those communities, thus producing an increase in collaboration between those communities as well as with their peers in Europe.

### **3. Sustainability of the action**

The ALICE project was not able to produce a sustainable organization, even though tremendous advances were made in that direction. Nevertheless, the factors mentioned in paragraph 1.6: a) The relative immaturity of most NRENs and their difficulties in supporting themselves; a) The lack of e-Infrastructure policies in LA countries; c) The scarcity and dispersion of research groups; and d) The high cost of telecommunications infrastructure; have lead to an unstable situation where CLARA has grown as a solid and well recognized organization but with weak partners and high infrastructure costs that are impossible to sustain in the long run.

In order to overcome these difficulties and to meet the Sustainability Objective, ALICE2 will address these 4 areas by:

- (a) Strengthening CLARA's Management Team and Strategies. The restructuring will be carried out in accordance with the recommendations of the ALICE Evaluation Report and the Consultancy carried out through the IADB Project.
- (b) Generating a high level of Governance of CLARA that ensures permanent support by involving all stakeholders: the NRENs, the Researchers and the Private and Government Sectors. This will be done by preparing a New Inclusive Membership Model and generating new Governance bodies to involve them in CLARA'S activities and decision-making processes.
- (c) Pursuing a Long Term Telecommunications Infrastructure Service Strategy (IRUs). The maintenance cost of RedCLARA goes mainly to pay for telecommunications services, which are extremely expensive in the LA Region. Thus, any sustainability strategy requires a reduction of this main item of the budget, in order to reduce the importance of this financial burden for the partners. These costs are especially high in the case of less developed countries and hence it is crucial to develop a strategy that addresses this problem.
- (d) Strengthening the NRENs. A major result of ALICE was the creation of 9 NRENs. Those NRENs are in the process of improving their internal organization, training their users,

convincing their national governments of the importance of having an e-infrastructure policy and of creating their own processes and internal structures, as well as helping the creation and support of Research Community User Groups (WP6).

- (e) Working on influencing National e-Infrastructure Policies (WP7). In most countries where e-infrastructure is blooming, the government has made a clear political decision in favour of developing e-Infrastructures for Science, Research, Education and Innovation. It is necessary to build consensus on the importance of such policies for the development of quality science, education and innovation. The project will work on creating such policies by joining forces with the EU InfoSoc activities, eLAC, REGULATEL, OAS (Organization of American States) and other organizations. The sustainability of the NRENs and CLARA depends on this.

## II. CHECKLIST FOR CONCEPT NOTE

<PUBLICATION REFERENCE + TITLE OF THE CALL + BUDGET LINE>

<b>ADMINISTRATIVE DATA</b>	
<b>Name of the Applicant</b>	CLARA
<b>EuropeAid ID number</b>	
<b>Nationality<sup>1</sup>/Country<sup>2</sup> and date of registration</b>	Uruguay 23/12/2003
<b>Legal Entity File number<sup>3</sup></b>	6000157284
<b>Legal status<sup>4</sup></b>	Not for Profit Private Organization
<b>Partner 1</b>	Name/EuropeAid ID number: CEDIA Nationality/Country of registration: Ecuador Legal status: Not for Profit Organization
<b>Partner 2</b>	Name/EuropeAid ID number: CUDI Nationality/Country of registration: Mexico Legal status: Not for Profit Organization

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<sup>1</sup> For individuals

<sup>2</sup> For organisations

<sup>3</sup> If the applicant has already signed a contract with the European Commission

<sup>4</sup> E.g. non profit making, governmental body, international organisation...



<b>Partner 3</b>	Name/EuropeAid ID number: CENIT Nationality/Country of registration: Venezuela Legal status: Public Not for Profit
<b>Partner 4</b>	Name/EuropeAid ID number: CNC/UNA Nationality/Country of registration: Paraguay Legal status: Public Not for Profit
<b>Partner 5</b>	Name/EuropeAid ID number: Innova-T Nationality/Country of registration: Argentina Legal status: Private Not for Profit
<b>Partner 6</b>	Name/EuropeAid ID number: RAAP Nationality/Country of registration: Peru Legal status: Private Not for Profit
<b>Partner 7</b>	Name/EuropeAid ID number: RAGIE Nationality/Country of registration: Guatemala Legal status: Private Not for Profit
<b>Partner 8</b>	Name/EuropeAid ID number: RAICES Nationality/Country of registration: El Salvador Legal status: Private Not for Profit

<b>Partner 9</b>	Name/EuropeAid ID number: RAU Nationality/Country of registration: Uruguay Legal status: Private Not for Profit
<b>Partner 10</b>	Name/EuropeAid ID number: REDCYT Nationality/Country of registration: Panama Legal status: Private Not for Profit
<b>Partner 11</b>	Name/EuropeAid ID number: RENATA Nationality/Country of registration: Colombia Legal status: Private Not for Profit
<b>Partner 12</b>	Name/EuropeAid ID number: REUNA Nationality/Country of registration: Chile Legal status:
<b>Partner 13</b>	Name/EuropeAid ID number: RNP Nationality/Country of registration: Brazil Legal status: Private Not for Profit
<b>Partner 14</b>	Name/EuropeAid ID number: DANTE Nationality/Country of registration: United Kingdom Legal status: Private Not for Profit

<b>Partner 15</b>	Name/EuropeAid ID number: GARR Nationality/Country of registration: Italy Legal status: Private Not for Profit
<b>Partner 16</b>	Name/EuropeAid ID number: Renater Nationality/Country of registration: France Legal status: Private Not for Profit
<b>Partner 17</b>	Name/EuropeAid ID number: RedIRIS Nationality/Country of registration: Spain Legal status: Private Not for Profit
<b>Partner 18</b>	Name/EuropeAid ID number: FNCC Nationality/Country of registration: Portugal Legal status: Private Not for Profit

<b>BEFORE SENDING YOUR CONCEPT NOTE, PLEASE CHECK THAT EACH OF THE FOLLOWING COMPONENTS IS COMPLETE AND RESPECTS THE FOLLOWING CRITERIA :</b>	<b>To be filled in by the applicant</b>	
	<b>Yes</b>	<b>No</b>
<b>Title of the Proposal:</b>		
<b>1. The instructions for concept note, published for this call for proposals, have been followed</b>	√	
<b>2. The proposal is typed and is in English</b>	√	
<b>3. One original and 3 copies are included</b>	√	
<b>4. An electronic version of the concept note (CD-Rom) is enclosed</b>	√	
<b>5. The action will be implemented in an eligible country(ies)</b>	√	
<b>6. The duration of the action is equal to or lower than &lt;X months&gt; (the maximum allowed)</b>	N/A	
<b>7. The duration of the action is equal to or higher than &lt;X months&gt; (the minimum allowed)</b>	N/A	
<b>8. The requested contribution is equal to or higher than &lt;X EURO/other currency&gt; (the minimum allowed)</b>	N/A	
<b>9. The requested contribution is equal to or lower than &lt;X EURO/other currency&gt; (the maximum allowed)</b>	N/A	
<b>10. The requested contribution is equal to or higher than &lt;X %&gt;of the total eligible costs (minimum percentage required)</b>	N/A	
<b>11. The requested contribution is equal to or lower than &lt;X %&gt; of the total eligible costs (maximum percentage allowed)</b>	N/A	
<b>12. The Declaration by the applicant has been filled in and has been signed</b>	√	
<b>13. The present Checklist and the Declaration by the applicant are filled in and sent with the Concept Note</b>	√	

### III. DECLARATION BY THE APPLICANT FOR CONCEPT NOTE

The applicant, represented by the undersigned, being the authorised signatory of the applicant, including every partner, hereby declares that

- the applicant has the sources of financing and professional competence and qualifications specified in section 2 of the Guidelines for Applicants;
- the applicant undertakes to comply with the obligations foreseen in the partnership statement of the grant application form and with the principles of good partnership practice;
- the applicant is directly responsible for the preparation, management and implementation of the action with its partners and is not acting as an intermediary;
- the applicant and its partners are not in any of the situations excluding them from participating in contracts which are listed in Section 2.3.3 of the Practical Guide to contract procedures for EC external actions (available from the following Internet address: [http://ec.europa.eu/europeaid/work/procedures/index\\_en.htm](http://ec.europa.eu/europeaid/work/procedures/index_en.htm)). Furthermore, it is recognised and accepted that if we participate in spite of being in any of these situations, we may be excluded from other procedures in accordance with section 2.3.5 of the Practical Guide;
- if selected, the applicant is in a position to deliver immediately, upon request, the supporting documents stipulated under section 2.4 of the Guidelines for Applicants.;
- the applicant and each partner (if any) are eligible in accordance with the criteria set out under sections 2.1.1 and 2.1.2 of the Guidelines for Applicants;
- if recommended to be awarded a grant, the applicant accepts the contractual conditions as laid down in the Standard Contract annexed to the Guidelines for Applicants (annex F);
- the applicant and its partners are aware that, for the purposes of safeguarding the financial interests of the Communities, their personal data may be transferred to internal audit services, to the European Court of Auditors, to the Financial Irregularities Panel or to the European Anti-Fraud Office.

Signed on behalf of the applicant

<b>Name</b>	<b>Florencio I. Utreras</b>
<b>Signature</b>	
<b>Position</b>	<b>Executive Director</b>
<b>Date</b>	<b>October 22, 2008</b>

## IV. ASSESSMENT GRID FOR CONCEPT NOTE

(FOR THE USE OF THE CONTRACTING AUTHORITY ONLY)

	YES	NO
1. The submission deadline has been respected		
2. The Concept Note satisfies all the criteria mentioned in the Checklist (Section II of the Concept Note).		
The administrative verification has been conducted by: Date:		
<b><u>DECISION 1:</u> The Committee has decided to recommend the Concept Note for Evaluation after having passed the Administrative check.</b>		
<b><u>DECISION 2:</u> The Committee has approved the Concept Note and asked pre-selected applicant to submit a full proposal after having pre-selected the best Concept Notes.</b>		
The evaluation of the Concept Note has been conducted by: Date:		

## PART B. FULL APPLICATION FORM

### I. THE ACTION

#### 1. DESCRIPTION

##### 1.1. Title

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**Extending and Strengthening RedCLARA as e-Infrastructure for Collaborative Research and Support to Development (ALICE2)**

##### 1.2. Location(s)

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The project will be located in the countries eligible to benefit from the @LIS II "Alliance for the Information Society" Programme, i.e. countries of the European Union –EU- and of Latin America –LA-\*

\* **The @LISII partner countries in LA are:** *Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela*

##### 1.3. Cost of the action and amount requested from the Contracting Authority

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Total eligible cost of the action (A)	Amount requested from the Contracting Authority (B)	% of total eligible cost of action (B/Ax100)
€ 18,000,000	€ 12,000,000	66.666667 %

#### 1.4. Summary (max 1 page)

Total duration of the action	45 months
Objectives of the action	<p><u>General Objective.</u> Stimulate and support collaborative Research within Latin America and with Europe by strengthening the Latin American organization CLARA and the enabling network infrastructure RedCLARA, while fostering the creation and maintenance of research communities working in development related (MDG) as well as FP7 related issues.</p> <p><u>Specific Objectives:</u></p> <ol style="list-style-type: none"> <li>1. Extend and further develop RedCLARA</li> <li>2. Create user communities supporting MDG and FP7 oriented applications</li> <li>3. Develop a sustainability model for CLARA and RedCLARA</li> <li>4. Ensure Regional inclusion</li> <li>5. Empower NREN and Research Communities by providing Training to technicians, managers and communities of researchers</li> </ol>
Partner(s)	<p>LA: Argentina, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Mexico, Panama, Paraguay, Peru, Uruguay and Venezuela</p> <p>Europe: France, Italy, Portugal and Spain</p>
Target group(s)	Educational organisations, Research organisations/Researchers, Students
Final beneficiaries	University and Higher Education as well as the Research community at large
Estimated results	<ol style="list-style-type: none"> <li>1. A high-end upgradeable infrastructure with low maintenance costs, RedCLARA2, which will become the infrastructure of choice for collaboration in research and education within LA and with Europe.</li> <li>2. A set of user communities (researchers, educators, students) working together in solving MDG related issues and participating in ALFA &amp; FP7 calls</li> <li>3. A strong, well managed, participative, sustainable organisation with a clear funding model.</li> <li>4. A network with wide coverage in the Latin American Region with strong ties to the Caribbean.</li> <li>5. A large group of technicians, managers and community leaders empowered to collaborate with their European counterparts and take advantage of funding opportunities.</li> </ol>
Main activities	<ol style="list-style-type: none"> <li>1. To plan, design and deploy an optical RedCLARA network by procuring long-term Irrevocable Rights of Use (IRUs) of services, including Fibre Optic Strands, Wavelengths and Capacity.</li> <li>2. To develop a methodology for service deployment and management in CLARA</li> <li>3. To identify user communities working on MDG related issues, especially R&amp;E communities in health, and FP7 research priorities</li> <li>4. To implement a set of services aimed at facilitating the work of user communities</li> <li>5. To strengthen CLARA's Management Team and create a new, long term funding model</li> <li>6. To develop strong ties to REGULATEL, e-LAC and other regional bodies to influence national policies</li> <li>7. To invite the ALICE beneficiaries Bolivia, Cuba, Costa Rica, Honduras, Nicaragua and Paraguay to participate in ALICE2.</li> <li>8. To develop a RedCLARA Strategy based on terrestrial fibre optic infrastructure that generates synergies with the NRENs</li> <li>9. To provide advanced training to experienced technical users and network administrators as well as to managers and user community leaders.</li> </ol>



## 1.5. Objectives (max 1 page)

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### 1.5.1. General Objective

ALICE2 aims at consolidating the results of the ALICE Project by creating a long lasting, state of the art infrastructure for the Research and Education community of Latin America as well as increasing the impact of RedCLARA in the Latin American region and strengthening the organization of the LA-NRENS: CLARA.

To do this, ALICE2 will pursue the following main objective:

Stimulate and support collaborative Research within Latin America and with Europe by strengthening the Latin American organization CLARA and the enabling network infrastructure RedCLARA, connected to Europe's GEANT2, while fostering the creation and maintenance of research communities working in development related (MDG) as well as FP7 related issues.

### 1.5.2. Specific objectives

The ALICE2 project plans to start from the results of the ALICE Project and implement the recommendations of the evaluation reports, in order to strengthen CLARA and RedCLARA to ensure long term sustainability of Research and Education Networking in Latin America by:

1. Maintaining and further developing the network infrastructure of RedCLARA with the provision of a continuous, inclusive and persistent environment for electronic collaboration for research and education within Latin America, with the emphasis on supporting a higher education and research collaboration space between Latin America and Europe. This upgraded version of RedCLARA will be based on IRU (Irrevocable Right of Use) contracts for dark fibre and wavelengths, to ensure low ongoing costs.
2. Creating user communities to ensure the utilization of RedCLARA in applications related to the Millennium Development Goals, as well as fostering the collaboration within Latin America and with European Researchers in FP7 priorities and strengthen the collaboration with European facilities such as: ESO, Pierre Auger and TIGO Observatories among others.
3. Developing a funding model that provides long term stability and sustainability for Latin American regional research and education networking. This model will be based on a stronger CLARA organisation, a widely embraced cost distribution model and a solid financial management.
4. Consolidating the long term existing geographical coverage of RedCLARA, and seek to expand it to include the developing research and education communities of additional Latin American countries and to further contribute to the region's digital inclusion via its research and education communities. To do this, the project will seek to involve all LA countries in the Project and generate synergies with the NRENS by creating a terrestrial communications infrastructure that can also be locally used to build or extend the NRENS.
5. Empowering the NRENS and their user communities to become active players in the research and education networking community by providing training and tools for their technical, management and academic communities.

## 1.6. Relevance of the action (max 3 pages)

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ALICE has successfully established the first Latin American Research and Education Network, RedCLARA. RedCLARA interconnects the National Research and Education Networks (NRENs) of the following 12 Latin American beneficiaries: Argentina, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela. RedCLARA offers direct connectivity to the European GEANT2 and the American Internet2 networks.

The ALICE project has been successful in creating CLARA, the first regional Latin American research networking organisation, modelled after its European counterparts, TERENA and DANTE. CLARA today is a working organisation with a Chief Executive Officer, a Chief Financial Officer and Network Engineering and Planning Team, a Network Operations Centre, a project management team and a PR team.

The creation of CLARA has been crucial for the success of ALICE. Created in May 2003, it acquired legal status in December 2003. One year later, in November 2004, CLARA decided to create its own management structure, starting with the appointment of an Executive Director who took office in January 2005. Since then, CLARA, with the support of ALICE has been coordinating many of the actions of ALICE, specially those involving the work with the LA Partners, such as the promotion of the use of RedCLARA, the coordination of technical activities, and the promotion of the submission of proposals to FP7 Calls. More recently financial management, coordination of the NOC (Network Operations Centre) and the NEG (Network Engineering Group) and the tender and contracting of the links connecting Central America were funded directly by CLARA during the 2007-2008 period.

CLARA has been recognized by several other LA or LAC regional organizations and has been working together with them in the promotion of the benefits of ALICE and RedCLARA. In particular, CLARA's work has been instrumental in the regional recognition of the importance of Research and Education Networks in eLAC2007's Regional Plan as Goal N° 10 and in eLAC2010 recently approved in El Salvador. CLARA has also developed strong relationships with the Forum of Ministers of Science and Technology of the Americas, through its Executive Secretariat at OAS, and has been recognized as key to the development of Science and Technology at the Science and Technology Ministerial Summit in November 2004 in Lima. CLARA is also being part of the preparatory meetings for the next Summit to be held during 2008. CLARA is becoming fundamental in the creation of a regional policy on e-Infrastructure for Latin America.

The creation of CLARA is a major achievement of ALICE.

Another key result of ALICE is the creation of 9 NRENs, namely: RENATA in Colombia, CEDIA in Ecuador, RAICES in El Salvador, RAGIE in Guatemala, RHUTA in Honduras, RENIA in Nicaragua, REDCYT in Panama, ARANDU in Paraguay and RAAP in Peru. Even though only 6 of them are presently connected to RedCLARA, their internal organizations are working to become full members of CLARA and hence are maintaining the interest in this initiative inside the countries.

The tangible benefits of procuring and managing the network at a regional level are appreciated by the LA Partners as something that would not have happened without ALICE. Nevertheless, CLARA has not yet achieved sustainability and this is due to several mostly external factors, namely:

- The NRENs are for most part extremely young and have a long way to go before they become stable organizations. This of course is particularly true in less developed countries of the region, where also the lack of a modern telecommunications infrastructure adds to the cost of the necessary telecommunications services, and hence makes it more difficult to fund a networking organization in the country.
- In many of the same cases the coverage of the NREN is limited to the national capital and much work remains to be done before it can be extended to include all major cities in the country and hence include all potentially important institutions. Again, the major obstacle here is the lack of an adequate telecommunications infrastructure, usually due to several factors, including regulatory issues and market size.
- National Science and Technology policies have not yet embraced e-Infrastructures, and although eLAC has declared this type of infrastructures to be a priority, mainly due to CLARA's work, its inclusion in national agendas has yet to happen.

- Research Groups are scarce and unevenly distributed in Latin America., The collaboration of research groups that take advantage of the network to create continent-wide Virtual Research Labs is a must, but this is an activity that will take time and effort, and several years will be required before this happens on a large scale. Such collaborations between research groups are expected to provide major support for research networking activities both nationally and regionally.
- The cost of telecommunications is a major problem in the region. We have seen important changes during the ALICE project and are certain that the project has contributed to that change, but prices in the region, even in the more developed countries are an order of magnitude larger than those in Europe and significant changes will only happen when the current deregulation trend is well established. Nevertheless, the reduction of costs to rates comparable with those in Europe will require additional actions such as establishing very long term contracts (Rights of Use) with low maintenance costs.

While the Latin American partners strongly wish for RedCLARA to continue, currently no formal processes have been started inside Latin America for a regional takeover of the infrastructure costs. The EU-LAC Summit of the Information Society in Lisbon in April 2006 and the EU-LAC Summits of the Heads of State in Vienna in May 2006, and more recently in Lima in May 2008, have emphatically backed the continuation of the RedCLARA Network and have certainly pushed in the right direction, but yet much remains to be done at the political level for Governments to embrace an e-Infrastructure policy and invest permanently in it.

Latin America needs the support of the European Commission in order to transform RedCLARA to a self sustainable initiative, and this can be done by investing in CLARA's ownership of telecommunications infrastructure in the form of Long Term Rights of Use (IRU) of dark fibre or Wavelengths, that could also generate synergies with the NRENs within each country traversed by this infrastructure. This type of network provides the flexibility for upgrading and the low cost of maintenance that CLARA needs to guarantee that costs for NRENs remain at an acceptable level. Several opportunities have begun to appear as new operators enter the telecommunications market, and there is certainly a window of opportunity to obtain advantageous contracts with these new operators coming from non-traditional sectors such as Electricity, Gas or Oil transportation systems across the continent.

This investment will be accompanied by government lobbying activities, which will be necessary, not only to ensure an appropriate e-Infrastructure policy in each country, but also to create a regulatory framework allowing the entry of newcomers by eliminating artificial barriers to the entry of new investors in the telecommunications industry.

As described earlier, the number of researchers in Latin America is low and the average investment in Science and Technology does not exceed 0.3% of GDP. In order for researchers to produce significant results related to some of the key issues in the region, such as: food production, energy production and distribution, disaster prevention and management, climate and weather forecasting, deforestation, etc; they will need to collaborate through the formation of Virtual Research Centres, that may unite the best minds of the region. This is a must. Until now RedCLARA has been used by a relatively few researchers, educators and students, due certainly to problems in internal (national) coverage, but also to lack of training and coordination of the research communities. New funding will make it possible to foster the development of communities of researchers and educators, which will form one of the bases for sustainability, and make a long lasting success of this European initiative that has produced a major breakthrough in the way Latin America uses its knowledge resources to promote development.

The sustainability of CLARA depends strongly on the sustainability of the NRENs. Their management skills are crucial to ensuring this goal. The NREN organizations must also grow as CLARA develops, in order to take advantage of internal and external opportunities, develop and train their communities, manage their funding and personnel, and in general become strong and self sustainable. There is thus the need for the formation of a large well-trained group of technicians and managers at the NREN level, who will develop the infrastructures in their countries and foster the usage of the network as well as providing support and training to their researchers and political authorities.

## **1.7. Description of the action and its effectiveness (max 14 pages)**

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To achieve the goals described in 1.5, the action must first of all ensure that the e-Infrastructure created by ALICE, RedCLARA, becomes sustainable by CLARA, since it provides for the needs of the large community of Universities and Research institutions in Latin America, as well as for the specific needs of the highly demanding leading research groups. To do this, the project must overcome the difficulties underlined in the preceding section in terms of high cost of telecommunications and the weakness and lack of coverage of new NRENs. The action plans to solve this problem by taking advantage of some opportunities being presented by the deployment of new terrestrial fibre optic paths by operators which are associated with Electricity, Gas or Oil terrestrial transportation systems. These new operators are willing to offer services in the modality of Irrevocable Right of Use (IRUs) of Optical Fibre Strands, or Optical Capacities (Wavelengths) which are the technical means to produce a scalable, long lasting network with low maintenance costs.

Thus, the project will tender for those types of long term contracts whose yearly maintenance cost after the project is over will be dramatically lower than the alternative of buying transmission services from traditional telecommunications operators. We expect that the willingness of the new operators to offer these types of contract will open up the market and bring the traditional telecoms to compete and also participate in the tenders. This will not only produce benefits to CLARA, but will also change the telecommunications market in the region, introducing services that until now are only available in developed regions, like Europe.

The big advantage of deploying a network which is mainly terrestrial is to cross the countries by land routes. And since all companies deploying infrastructure need profitability, the infrastructures crossing a country follows the path between major cities, whenever possible. This helps to tackle the coverage problem of the NRENs, since along the same path of the RedCLARA Network, the NREN will be able to deploy its National Backbone and hence will improve its internal support and customer base, making it easier to achieve their own internal sustainability while promoting geographical inclusion.

The Project will also foster the development of Research Communities in the Region, in order to promote the creation of Virtual Regional Research Labs working on crucial problems for the region, such as: food production, energy production and distribution, disaster prevention and management, climate and weather forecasting, deforestation, epidemic diseases control, etc. The user communities will also cover more advanced research areas such as those related to FP7 priorities in Energy, Environment, Health & Life Sciences, Information Society, etc. To do this the project will identify those communities by leveraging the results of projects like WINDS or the IADB Funded "Strengthening CLARA as a National Public Good" which is prototyping the creation of 3 research communities. The project will also create a series of services oriented to those communities, including collaboration tools, virtual workshops and seminars, dissemination of funding opportunities and a proposal support marketplace to help them gain access to funding opportunities with emphasis on participating in European Calls such as ALFA and FP7.

The project will also focus on lobbying the regional and national bodies in order to include the concept of e-Infrastructure in the national Science & Technology policies. This will promote to a future contribution to the funding of the NRENs inside the countries, a key to NREN Sustainability. The Project will base its work on the results of the above mentioned IABD Project as well as the most recent OAS funded project "Fostering the Use of Advanced Networks in Science, Technology and Innovation" which will produce tools and methods to work with Governments on this issue.

Finally, the strength of the NRENs and the user groups will depend on the capabilities of their human resources. The project will focus on training activities for technicians, managers and community leaders in order to achieve the critical mass that will ensure the continuity of the NRENs, their services and their user communities. The Sustainability of CLARA and its Network will be a direct result of the Sustainability of the NRENs and the lower ongoing costs of RedCLARA, based on IRU contracts, one of the major objectives of this project.

## Outputs

1. *A high-end upgradeable infrastructure with low maintenance costs, RedCLARA2, which will become the infrastructure of choice for collaboration in research and education within LA and with Europe.*

The RedCLARA network, produced by the ALICE project, is formed by 6 main nodes, 5 installed with ALICE funding (Argentina, Brasil, Chile, Panama and Mexico) and one in Miami installed and funded by CLARA to aggregate traffic from Central America. The main nodes are connected to each other using commercial bandwidth providers at speeds not exceeding 155 Mbps, a very low speed compared to GEANT in Europe, where most links are multiples of 10 Gbps (64 times 155 Mbps). Access links are even more limited, and several countries, including Guatemala, El Salvador and, until recently, Colombia and Ecuador have an upper limit of 10 Mbps (normal speeds in European countries are 1000 times that). Thus, the present network needs a significant upgrade in order to become a major actor in Latin American academic life. At present several countries who would like to use RedCLARA for all its Internet traffic (Advanced and Commodity), cannot do so, because of these bandwidth limitations.

These limitations have a cause, which is the current price of bandwidth in the Region, an order of magnitude more expensive than in Europe, even for the more advanced countries. The explanation of such high pricing has roots in the regulatory frameworks of many countries, but also in the size of the markets, the buying power of the LA consumer and deficiencies of infrastructure.

Certainly, the issue of prices in the telecommunications market will not be solved by this project, but opportunities are appearing that we intend to take advantage of : a) some companies not traditionally related to the telecommunications industry are starting to be interested in leveraging their own infrastructure to enter that business : this is the case of Electric, Gas and Oil transportation companies, which can deploy fibre optic cables along their facilities ; b) large infrastructure interconnection projects, such as the Puebla Panama Plan in Central America, are deploying fibre optic cables as they develop electrical interconnection agreements ; c) some small companies have entered the telecommunications market and are willing to seek strategic alliances with the academic sector, which is perceived as a market driver for demand in telecommunications; d) submarine cable companies are landing in countries where they were not previously allowed to, producing pressure on prices in those countries.

To take advantage of this situation, we intend to tender for Rights of Use (IRUs) or Lease to Buy contracts of Fibre Pairs across national borders, aiming at building a fibre path from Mexico to Panama across Guatemala, Honduras, El Salvador, Nicaragua and Costa Rica. Then, the path will follow through Panamá, Colombia, Ecuador, Peru, Chile, Argentina and Brazil. Also, along the path, the fibre could be extended to Venezuela (from Colombia), Bolivia (from Peru), Paraguay (from Brasil) and Uruguay (along the path from Argentina to Brazil. All of this would use terrestrial optical fibres. If Fibre is not available, the project may tender for Wavelengths (2.5 or 10 Gbps) or even smaller capacities, but ideally based on IRU contracts.

To complete the network, the project will tender for submarine bandwidth capacity to connect Brazil to Panama and Brazil to Europe, a link that requires urgent upgrade, as many experiments require much larger capacity.

The advantages of this strategy are four :

- a) The network will have a much larger capacity than the present RedCLARA, starting at 2.5 Gbps or 10 Gbps in most links. This will allow the transport of Commodity as well as Advanced traffic, generating a clear advantage for less favoured countries where most of the academic traffic is Commodity.
- b) The network can be upgraded at marginal cost, since it only requires an equipment upgrade.
- c) The network crosses each country passing through, or near to, major cities, and hence, in many cases the same physical network can be used to provide part of a national backbone, with some marginal investment from the local NRENs.
- d) The maintenance costs of this network will be much smaller than the cost of buying a comparable network from the telecom operators and will facilitate the sustainability of CLARA.

*2. A set of user communities (researchers, educators, students) working together to solve MDG related issues and participating in ALFA & FP7 calls*

One of the main problems of academic institutions in Latin America is that researchers are scarce and funding coming from the LA Governments for Science, Technology and Innovation is less than 0.3% for most countries. Thus, even if there are extremely competent researchers in most countries, they are isolated and normally working on problems related more to developed countries than to their own.

This isolation is especially contraproductive when problems are tackled that intrinsically require the collaboration of a large team of researchers. Here is where e-Infrastructure becomes key, since the only way to build large teams in the region may be to build them « virtually », that is by creating networks of researchers that, much like the « Networks of Excellence » in Europe, may collaborate across the region to work on those issues.

As a contribution to creating such networks, ALICE2 will carry out activities aimed at creating at least 6 « User Communities », three (3) of them working on issues related to achieving the Millenium Development Goals and three (3) more working on issues related to FP7 priorities in order to foster R&D collaboration with Europe.

To do this, the project will build on the experience of the IADB Project « Stregthening RedCLARA as a Regional Public Good » which is focusing on building three additional research communities of this type in areas such as Education, Health and Government. The ALICE2 Project will add 6 additional communities and will strengthen the services provided to those communities. In particular, the project will install a set of Groupware tools and services, including an informational web site, support for virtual meetings, support for the organization of seminars and congresses, support for preparing and submitting proposals, as well as other services that will be prepared, launched and maintained using a Life Cycle Management (LCM) methodology to ensure the right connection between the communities and the services intended for them.

The project will also benefit from the recently started OAS Funded Project « Promoting the Use of Advanced Information Technology in Science, Technology and Innovation » which aims at identifying key actors for the promotion of e-Science in the region, and lobby the LA Governments for the development of national and regional e-Science policies. During this project, information will be collected concerning relevant groups of researchers and some basic groupware services will be provided to them.

ALICE2 will add more activities in the same direction, deepening the knowledge of the user communities, creating an LCM Methodology for the services provided to those communitites, and actively supporting them in submitting proposals to appropriate funding sources. In this respect, ALICE2 commits to having at least one project per community submitted to a funding source, thus demonstrating that the communities have reached a stage of collaboration, where they will continue working together on their own.

*3. A strong, well managed, participative, sustainable organisation with a clear funding model*

The Cooperación Latino Americana de Redes Avanzadas (CLARA) is certainly a major result of the ALICE Project. It has been able to assemble almost all Latin American countries around a common goal and has created a stable structure with legal existence in Uruguay and a management team spread in several countries : Chile, Mexico, Uruguay. The RedCLARA Network is currently funded and operated by CLARA and its partners: RNP (Brazil) for Engineering and REUNA (Chile) for the Network Operations Centre.

During the ALICE Project, CLARA became a well known organization in Latin America to the point of being recognised by several regional and inter-regional organizations. Also, during that time CLARA assumed progressively more responsibility for the management of the ALICE project and, thanks to careful management and the contributions of its partners, it has been possible to build a Working Capital of over US\$ 1.000.000 that is allowing it to manage RedCLARA without financial problems during 2008.

The CLARA management team has grown during this period, from a one person (Executive Director) in 2005 to a small organisation with a Chief Financial Officer, a Project Manager and a Training and Knowledge Management Officer. It will soon add a second administrative person to increase its administrative and financial capabilities.

At present CLARA is planning for growth. Thanks to an IADB funded project, the Strategic Plan developed in 2005 with ALICE funding, is being brought up to date and a set of consultancy services will propose a new Structure for the CLARA Management Team, including support for the development of services to user communities. This study will also propose a series of funding strategies that we intend to implement during the ALICE2 Project.

ALICE2 will use these studies to structure its management staff and generate the management methods that will include adequate planning cycles and indicators for accountability and control of management quality. This will strengthen CLARA at the management level. Annual plans, management reports and audited balances will be an output of the project.

The strengthening of CLARA also requires improvements in internal democracy and participation. To do this ALICE2 will carry out an internal planning and approval process for the formal creation of an Applications Committee that, in a similar way to the representation of NREN technical staff on the Technical Committee (CLARA-TEC), gives voice to the researchers and academics in the government of CLARA. Also, as part of the strategy of strengthening of the NRENs, a Management Training Workshop will provide training to NREN Managers and staff, and also carry their voice to the governance bodies of CLARA: The General Assembly and the Board of Directors. All this will be supplemented by a communications strategy and a set of feedback tools for the user community, that will be implemented as part of the User Community Support Tools.

A major achievement of ALICE2 must be the Long Term Sustainability of CLARA. We describe the working strategy towards this goal in 1.10, but certainly we can say here that it depends on three factors : a) a lower cost, higher performance RedCLARA ; b) strong, committed NRENs with a large user base working on regionally relevant issues; c) high quality management ; d) strong support from national and regional Science and Technology bodies ; e) funding support from several sectors, including private companies. We have already discussed how ALICE2 will work on a) and c).

The strengthening of the NRENs will depend on several factors, including internal leadership, that we will help tackle with the IADB Funding and Management Training, that we are proposing to reinforce in this project. An important output of this project will be the Management Training Material and a group of trained managers that will be vital to the growth and strengthening of the NRENs.

For d) we will participate in regional Science and Technology meetings to ensure that RedCLARA continues to appear on their agendas, and hence favour the funding, not only of CLARA, but also of the NRENs, when those regional priorities become national policies.

For work with the Private Sector, the IADB Project is preparing a proposal for a new Membership Structure that will include the Private Sector., We will implement that new Membership Model in ALICE2 and report on the level of Membership attained.

An important document where that participation will be shown will be the Annual CLARA Report (Memoria Anual) that we will publish in Spanish, Portuguese and English.

#### *4. A network with wide coverage in the Latin American Region with strong ties to the Caribbean.*

In ALICE we have already been able to connect 12 countries to RedCLARA, going far beyond the original goal of 7. Those countries are : Argentina, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Uruguay and Venezuela. During the ALICE Project, we also connected Costa Rica and Nicaragua, who unfortunately did not stay in the network due to political and/or financial issues.

A major result of this project will be to reach the goal of 15 countries, adding at least 3 of the countries that are not already connected: Bolivia, Costa Rica, Cuba, Honduras, Nicaragua and Paraguay. Certainly we will work towards including them all, but the difficulties encountered during ALICE still remain, and our work in ALICE2 will help to cope with some of them, mainly the cost of a high-end

infrastructure and the insufficient awareness among Science and Technology authorities of the importance of e-Infrastructures. However, the internal organisation of the potential NREN Members may act against including them all. Reports on the visits and work done to include them will be a written output of this project.

To promote Inclusion of the whole region, ALICE2 intends to collaborate closely with CKLN and to do that CLARA has proposed to CKLN to share the NOC (Network Operation Centre) on a cost sharing basis and to provide them with support for the design and implementation of their network. CLARA will request permission to attend CKLN Meetings and will propose a Yearly CLARA-CKLN Meeting to foster cooperation. Reports from those meetings will permit the evaluation of the success attained. Finally, CLARA has proposed to CKLN the sharing of links to Europe, and for that purpose the creation of an exchange point, that could be located at one of our POPs, most probably in Panama.

5. *A large group of technicians, managers and community leaders empowered to collaborate with their European counterparts and to take advantage of funding opportunities.*

The Activity of Human Capacity Building will constitute a major effort in ALICE2, continuing the efforts already begun in ALICE to train the technical administrators of the NRENs, and building on the Technical Working Group structure, which is one of the great achievements of ALICE. The project will also build on the existing Training on Management and Leadership activities of the IADB Project.

ALICE2 will support Working Group activities, thus reinforcing cooperation to develop new applications and services at the NREN and the RedCLARA level, but will also focus on Human Capacity building by cooperative technical training and onsite training periods for NREN Administrators at more developed NRENs. The RedCLARA NOC will also contribute in similar style by receiving Network Operators from different NRENs for short stays. The training activities will be carried through Training Workshops organized jointly with ALICE2 Meetings and also through the deployment of an online e-Learning System that will support asynchronous learning for technicians, managers and end users. The online e-Learning system with its content will be a visible product of the project. Another indicator will be the number of people trained, which should exceed 100 people in the 4 year project lifetime.

Management Training workshops will continue, and will extend the training capabilities provided through the IADB Funded « Strengthening RedCLARA as a Regional Public Good ». The online e-Learning System will also support the training of managers and leaders of the NRENs. At least 4 persons per NREN will be trained through onsite training and many more through the online eLearning System.

In the Community Support activity, training will be designed to help researchers make better use of advanced tools provided through RedCLARA, onsite « train the trainers » workshops will be organized at ALICE2 Meetings and virtual training days will be organized via Videoconference and using the GroupWare tools and the e-Learning System. As well as providing direct support to user communities virtual training days will also be open to all users through video streaming and other technologies.

Last, but not least, training will be a major focus in the special attention that will be designed for Less Developed Networks (LDN), that will receive specially tailored training in their own countries in order to ensure the largest possible coverage. 8 of those Workshops will be organised and the contents will also be made available via the e-Learning System for further study and more extensive coverage.

The Streaming and Video Conference Tools will be widely used to extend the use of workshop materials, and all the workshops will be broadcast in collaboration with the FP7 GLOBAL Project of which CLARA is the Latin American Partner. This content will be a very visible product of the project.



## **Activities**

In order to organise the proposal, we have grouped the activities by Workpackage as can be seen in Section 1.9. In this section we will group the activities by Objective and put the Work Package number for cross-reference, so the reader may better understand the organizational logic.

### ***Objective 1. Extend and further develop RedCLARA***

#### ***O1.1 (WP4) To plan and design an Optical RedCLARA Network***

This activity will survey NREN needs and forecasts of traffic for advanced and commodity Internet services, identifying not only the average requirement, but also the large potential users, such as astronomers, high energy physicists, oceanographers, etc, so that the design takes also into account the need for large bursts of traffic that have to be accommodated without perturbing the majority of small and medium scale users. Most of this activity will be performed before the start of the project in order to ensure a rapid preparation of the design documentation, once the project starts.

The activity will also update the study of available optical fibre infrastructure that was developed using ALICE and ensure that all possible optical fibre providers are included in the tender process. A complete set of international, regional and local companies, including the telecom operators will be compiled. To complete the picture, a complete report on available telecommunications and networking technologies will be presented where the options for the construction of the updated RedCLARA will be made clear.

With all this information, CLARA-TEC with the support of DANTE and the European partners RedIRIS and GARR will design the network from physical and logical points of view as well plan for basic transport services that will be offered. The Technical Requirements Document will be an output of this activity, and will be required for the Tender process.

From the service point of view, two major changes are expected:

- a) The implementation of Service Level definitions
- b) The deployment of an improved Network Operations Center with 24x7 on duty operators and online performance and usage statistics

As has been done in ALICE, the Network Operations Center will be tendered among all NRENs using a Service Requirements document that will be part of the Deliverables of this activity.

Activity Leader: CLARA-TEC, composed of CUDI, InnovaRed, RNP, REUNA, CEDIA, RAAP and RAGIE

This Design Activity should be completed during Month 1 since most of it will be carried out in preparation of ALICE2 as a CLARA funded activity.

The Deployment and Migration Plan will need to be issued by Month 6.

#### ***O1.2 (WP2) To procure the required telecommunications services and telecommunications equipment.***

As explained above, the strategy adopted to lower maintenance costs and build an upgradeable, state of the art network is to procure, wherever possible, long term Rights of Use of Services, including Optical Fibre Strands, Wavelengths and Capacity. In Telecommunications, these are known as Irrevocable Rights of Use (IRUs). Using an EC Approved Tender Process CLARA, with the support of DANTE and CLARA's Technical Committee headed by RNP, will procure these telecommunications services as well as all the necessary transmission and networking equipment and their maintenance services.

In year one it is planned to conduct a tender where IRUs of Wavelengths/Capacity and/or Optical Fibre are sought in all of South America, since the Puebla Panama Plan (PPP), which is the major Optical Fibre initiative in Central America, has announced that their infrastructure will only be operational by mid 2010. Thus, in Central America and Mexico the project will tender for Ethernet or SDH transport capacity, as available, and seek one year contracts, that can be extended as need be. If the cost of direct interconnection of Central American countries using such telecommunication services is more expensive than connecting them to Miami, as has been the case in the past, CLARA will propose to use its Point of Presence (POP) in Miami to concentrate Central America Traffic and route it back to Panama, in order to inject it into RedCLARA. This may also permit direct peering with the CKLN Network in Miami, if that is more cost effective than a direct connection Panama-CKLN. In any case, the decisions will require careful technical and financial analyses of the offers.

For the link to Europe, IRUs will be sought, but in case this is not possible or largely out of budget, year to year SDH or Ethernet transport services will be substituted.

In the Mercosur countries, ALICE2 will team up with a initiative of the Brazilian NREN, RNP, and funded by the Brazilian government, which will invest up to US\$ 10,000,000 in buying IRUs for Optical

Fibres/Wavelengths connecting Brazil to Argentina, Paraguay and Uruguay with an extension to Chile. Thus, in this part of the network, only telecommunications and networking equipment will be tendered.

Considering that there are very few large telecom operators in Latin America, it would be not advisable for the sake of competition to leave out one of the world's major cable operators, even if it is neither Latin American nor European owned. Thus we will submit a request for derogation of the Rule of Origin in order to guarantee that we can reach those less favoured countries, which is precisely where less competition exists.

The tender will be led by the CLARA Team (Executive Director plus Chief Financial Officer) and a Tender Committee formed by representatives of DANTE, the European NREs, CLARA-TEC and the CLARA Board.

The tender process should be concluded by Month 6, or, in case this not possible, by Month 8 at the latest, in order to guarantee that the current network can be supported during the entire deployment phase.

Since it is foreseen that availability of new Telecommunications Infrastructure will only be available in Central America during 2010, we expect to carry out a second tender process at the beginning of Year 2 with the expectation of signing contracts by the end of Month 8 of that year.

### *01.3 (WP4) Deployment and migration from RedCLARA to the upgraded network, RedCLARA2*

In order to guarantee a smooth transition from RedCLARA to RedCLARA2, it will be necessary to carry out careful planning, taking many aspects into account. These extend from allowing time to deploy the telecommunications services, to customs and tax issues which are not always straightforward in many countries in Latin America. Care will be taken so as not to cause any service blackouts. Adequate superposition of service contracts will be planned in order to guarantee this.

During this stage, CLARA-TEC, teaming up with the Network Engineering Group (NEG) and led by RNP and the CLARA Chief Engineer, will prepare a Deployment and Migration Plan that will take into account all details of the deployment and configuration of telecommunications services and equipment. The plan will also include all peering and transit issues as well as new transport services that will be made available on RedCLARA2, namely Lightpaths (circuit services) and VPNs.

The installation of completely new NOC will be a necessary first step, since it must be fully operational before the telecommunications/networking equipment and the telecommunication services are in place. The NOC will be a functional part of RedCLARA2 Deployment, when a team composed by engineers from NOC, NEG, the NREs where POPs are installed (CUDI, InnovaRed, RNP, REUNA) will be coordinated by the Chief Engineer, in close collaboration with CLARA-TEC, in order to achieve the smooth transition to the new network that the project requires.

While the upgraded network, RedCLARA2, is being deployed, CLARA will maintain the current service contracts.

RedCLARA2 should be up and running by Month 12 of Year 1.

### *01.4 (WP4) Integration of application services*

Under the leadership of CLARA's Working Groups, and the Services Survey carried on by the IADB Project (currently underway), the project will:

- Identify opportunities for developing application services
- Evaluate application service platforms
- Perform interoperability testing between services offered by different NREs
- Elaborate technical recommendations
- Support technical user training

These activities will allow the Project to define a portfolio of application services that can be offered to CLARA users, by means of RedCLARA2. These services are expected to include, amongst others, collaboration services, such as voice and videoconferencing, video distribution services and identity management services, to support distributed applications and services. Some of these may be these implemented on platforms deployed by the Project or by the NREs and operated by one or more of the NREs, as is case with the CLARA NOC. The full implementation of these services will be evaluated with the Methodology to be developed by the Marketing and Services Workpackage (WP5) where the concept of Sustainable Whole Product will be applied in order to ensure pertinence and quality as well as financial sustainability of the provided services.

This activity is an ongoing activity, since the portfolio of services will be evolving. Nevertheless, a major milestone will occur in Month 12, when the Portfolio of Services Report is issued.

### *O1.5 (WP4) Coordinate and promote WGs*

CLARA's Working Groups, modeled upon TERENA's Working Groups are a key means for coordination, study, awareness, support and service prototyping. The groups are formed by engineers from different NRENs, thus bringing together people from more developed and less developed NRENs, to share knowledge and work together on technical issues concerning networking (e.g. Advanced Routing, IPv6, Measurements, Multicast, Security), services (VideoConference, VoIP) and Training.

The Project will support the activities of the WGs by providing support for the coordination, promotion and information systems through partial funding for WG Coordination, as well as funding for bi-annual face-to-face meetings to take place jointly with the CLARA Technical Meetings. The location of these meetings is defined so that geographical diversity is preserved.

These activities will be carried out throughout the entire Project, and these bi-annual meetings constitute the milestones where each WG issues a Report on its activities.

The WG are currently coordinated by engineers from different NRENs, as follows:

- Videoconference, RAAP
- Voice over IP, RAGIE
- Security, CUDI
- Multicast, InnovaRed
- IPv6, CUDI
- Advanced Routing, RNP
- Measurements, CUDI
- Training, RNP

The entire WG Activity is coordinated by RNP.

### **Objective 2. Create user communities supporting MDG and FP7 oriented applications**

*O2.1 (WP6) To identify and select major application areas, with great impact in the region, where University research and development and RedCLARA can contribute to help meet the Millennium Development Goals*

- i. Disseminate documentation such as the UN MDG proposal to familiarize CLARA partners with it.
- ii. Determine the MDGs that could be addressed during the next 4 years.
- iii. Identify Stakeholders and establish alliances with them.
- iv. Identify and participate in key forums, in each country and/or region, dealing with the MDGs.
- v. Identify the priorities for each country.
- vi. Identify and/or generate knowledge bases related to researchers and projects in the priority areas

The major output of this set of activities will be a report on priorities and potential projects by country, where RedCLARA can be the platform that will provide those projects with greater possibility of success. The second output will a Database of Projects and Researchers working on the selected MDGs and priority areas in each country.

This activity will be led by RAGIE (Guatemala) and the manpower will be provided by CLARA Staff. The amount of time required for this activity is 6 months. This information will be updated yearly.

*O2.2 (WP6) To identify and select FP7 programmes, with greater impact in the region, where University research and development and RedCLARA can contribute.*

- i. Review of CORDIS and WINDS database and websites to determine those programmes and activities
- ii. Establish alliances with the FP7 Stakeholders (Universities, R&D Centres, etc.)
- iii. Identify and participate in forums, in each country and/or region, dealing with the FP7 programmes.
- iv. Identify the priorities for each country
- v. Identify and/or generate knowledge bases related with researchers and projects in the priority areas

Besides the work of WINDS, this part of the project will benefit from the findings of the OAS Funded Project "Fostering the Use of Advanced Networks in Science, Technology and Innovation". The major output of this set of activities will be a report on priorities and potential projects by country, where RedCLARA can be the platform that will provide those projects with greater success possibilities. The second output will a Database of Projects and Researchers working on the selected FP7 and priority areas in each country.

This activity will be led by RENATA (Colombia) and the manpower will be provided by CLARA Staff. The amount of time required for this activity is 6 months. This information will be updated yearly.

*02.3 (WP6) To identify or create groups/communities working in the selected thematic areas to meet the Millennium Development Goals, and define a list of initial potential projects that would benefit from the use of RedCLARA.*

- i. Refine the criteria that will be used to select or create the groups/communities starting from the IADB Project Report on Communities.
- ii. Determine what groups/communities in the region are already working on the selected MDGs.
- iii. Define the groups/communities and specific areas, that should be considered for potentiating their work through the use of RedCLARA and its resources
- iv. Identify the interest in participating and needs of this communities (technical and aspects directly related to their projects: scope, context, timelines, participants, financing, possibilities of extending the work through other CLARA members, etc.)
- v. Create a Database with all the information obtained
- vi. Select a coordinator for each community.

This set of activities will be led by RAGIE with manpower provided by CLARA Staff and its duration will be 3 months.

The major output of this set of activities will be the Database of the Identified/Selected Communities.

*02.4 (WP6) To identify or create groups /communities working in the selected areas in order to participate in FP7 activities and programmes, and define a list of initial potential projects that would benefit from the use of RedCLARA*

- i. Define the criteria that will be used to select or create the groups/communities
- ii. Determine the groups/communities in the region that are already working on the selected FP7 areas
- iii. Define the groups/communities and specific areas, that should be considered for potentiating their work through the use of RedCLARA and its resources
- iv. Identify the interest in participating and needs of these communities (both technical, and others directly related to their projects: scope, context, timelines, participants, financing, possibilities of extending the work through other CLARA members, etc.)
- v. Create a Database with all the information obtained.
- vi. Select a coordinators for each community,

This set of activities will be led by RENATA with manpower provided by CLARA's Staff and its duration will be 3 months.

The major output of this set of activities will be the Database of the Identified/Selected Communities.

*02.5 (WP6) To develop, deploy and maintain applications and services which are useful to communities, according to WP5 Marketing and Services, such that these become an open platform upon which interested scientists/educators can build up new applications*

- i. Identify existing tools, ITC tools, grid computing technologies and laboratory-sharing technologies that can be used to foster and ease collaboration and to help the development of innovative projects within LA and between LA and EU institutions. This work will be carried out in close coordination with CLARA-TEC and CLARA WGs.
- ii. Identify other community support tools that may have to be developed and/or purchased.
- iii. Identify personnel within the NREN (LA and EU) communities to help deploy them, or acquire professional commercial help.
- iv. Develop and/or deploy all identified tools.
- v. Design and organise virtual regional workshops to train prospective users of these tools.
- vi. Evaluate and disseminate on a permanent basis the availability of any appropriate tool that can be used for research or education.

This activity will be led by CLARA's teams of Project Management and Marketing with the support of CLARA-TEC and the corresponding WGs.

The output of this activity will be a Website with Groupware tools to be used by communities to carry out their work.

The website will be implemented by the end of Year 1.

*O2.6 (WP6) To Identify ongoing projects that would have the highest impact, i.e. in agriculture, health, education, disaster prevention, etc., on satisfying the objectives of the Millennium Development Goals initiative, AIDCO and other programmes (updating the study funded by IABD) and carry out case studies to help communities with proposals in these areas to apply for selected funding sources.*

- i. Create an Applications Committee (8 Members) that will be in charge of the planning, organisation and control of all activities.
- ii. Create an annual work plan of activities for the benefit of the different groups/communities.
- iii. Select a list of 3 or 4 innovative ongoing projects that might benefit a significant number of CLARA members, and contribute towards fulfilling the needs of developing countries and meeting the objectives of the MDG, AIDCO and other similar programmes.
- iv. Carry out case studies of them to show and extend best practices.
- v. Design and execute a remote training course on the formulation and management of projects that require the use of advanced networks.
- vi. Identify donor/funding programmes appropriate to MDG focused projects.
- vii. Formulate and develop one project per community to present a proposal to an appropriate donor program.

The outputs of this set of activities will be a proposal by each community to work on a joint project. These proposals will be submitted to appropriate funding agencies/donor programmes.

These activities will cover the entire Project lifetime and will be coordinated by CLARA Project Management Team.

*O2.7 (WP6) Actively to disseminate and promote FP7, ALFA, CYTED and other donor programme calls among higher development communities and research groups, in order to help groups/communities to participate in the elaboration and development of research projects in the FP7 and other programme areas, contributing to an increase the interaction and collaboration between the EU and LA.*

- i. Maintain close contact with the EU offices in CLARA member countries, and watch for calls for proposals, workshops, information days, etc.
- ii. Identify projects in execution and organisations focused on promoting activities related to FP7 and other donor programmes. Also, identify European research facilities installed in LA and promote its connection to RedCLARA thru the development of FP7 Projects modeled upon EVALSO and AugerAccess.
- iii. Keep the CLARA community informed about important events and potential research and education collaboration opportunities.
- iv. Promote virtual meetings, with the support of technologies available through RedCLARA, to disseminate to the research and education community detailed information of how the EU expects to fund different projects in FP7, ALFA and other programmes.
- v. Formulate and develop one project per community to present a proposal to an appropriate donor programme.

The results of this set of activities will be a proposal by each community to work on a joint project. That proposal will be submitted to an appropriate funding agency/donor programme.

These activities will cover the entire Project lifetime and will be coordinated by the CLARA Project Management Team.

### **Objective 3. Develop a sustainability model for CLARA and RedCLARA**

*O3.1 (WP7, WP5 and WP9) Strengthening CLARA's Management Team and Strategies*

It is clear that the management of a sustainable institution requires adequate manpower to perform functions which presently are understaffed (like the Financial Office and the Project Office) or are not assigned to specific managers, like the Marketing and Engineering functions (see the recommendations of the ALICE Evaluation Report). The strengthening of the management team will be done following the recommendations of the ALICE Evaluation Report and the Consultancy activity

that was carried out in the IADB Project. This will include hiring a Marketing and Services Manager, who will create a Life Cycle Methodology to introduce services, which can be sustained over time and have the right amount of users and quality of service. The plan will also include strengthening the Financial and the Project Offices and enhance the actual Training and Knowledge Management Office recently created.

This new structure will allow for the establishment of a clear 5 year financial, business and marketing plan, where the new cost structure of RedCLARA becomes a pillar in lowering costs, while new services developed according to the right marketing methodology will introduce new sources of cashflow that will ensure a new stable operational income/cost structure. In addition, the CLARA Management Team will elaborate annual Workplans that include performance indicators to introduce accountability and ensure that all partners see CLARA as a transparent organization with clear goals and costs.

All this will be accompanied by extending the Management Training of the NREN leaders that has been started by the IADB funded project already mentioned. So, after the end of the IADB Project in 2009, the ALICE2 Project will organise an annual Management Workshop to be held during Project Meetings. In this way the NRENs will be able to improve their performance in their own countries and hence be a better partner of a strong CLARA Organisation.

This activity will be led by CUDI and supported by the CLARA Management team, the Board of Directors and the WG on Training.

The outputs of this activity will be: a) The 5 year Financial, Business and Marketing Plan (Month 12); b) the Annual Workplans (Months 12, 24, 36, 48); c) the Management Workshop Reports (Months 24, 36, 48).

### *03.2 (WP7) Generate a high level of Governance of CLARA that ensure a permanent funding level from the NRENs*

In order for the NRENs to feel responsible for CLARA, it is necessary to strengthen the functioning of CLARA Institutions and, if necessary, add some new bodies to ensure participation of all stakeholders. In this respect, with the support of the IADB Project, CLARA is preparing a New Membership Model that seeks to include other stakeholders in CLARA, in particular, the private sector. With this report in hand, CLARA and its partners will prepare a new Governance Proposal that will be submitted to the General Assembly. These bodies will at least include a way for the direct participation of Researchers (probably through application communities) and of the Private and Government Sectors (through Membership and participation in some of the Governance bodies).

Once the new Governance Model is implemented, a series of dissemination and negotiation activities will be carried on to ensure that all NRENs and their respective stakeholders, including Governments, are aware of the commitments, both organizational and financial, that they are assuming as part of CLARA. From these activities there will emerge a stronger commitment between the NRENs and CLARA that will produce a stronger and financially sounder organization.

This activity will be led by CLARA's Board of Directors and supported by the CLARA Staff.

The outputs of these activities are: a) A new Governance Model for CLARA (Month 8); b) the contracts between CLARA and the NRENs ensuring funding (Month 12).

### *03.3 (WP7) Implement a strategy to work with the Science & Technology, Innovation, Communication and Education Sectors of the partner countries in order to develop e-Infrastructure Strategies in each country*

The sustainability of CLARA depends strongly on the sustainability of the NRENs and their ability to reach and serve their respective communities. As it is the case in most developed countries, NREN sustainability depends on the appropriate support from Scientific, Technological, Communications and Innovation Communities and Government bodies related to them. The Project will support the work of the NRENs with their national bodies aimed at developing e-infrastructure strategies by attending meetings with appropriate national authorities to disseminate CLARA's and RedCLARA's benefits and by supporting the NRENs with dissemination materials and information in order to ensure that they hold yearly meetings with their national authorities to promote the NRENs and seek for their support.

CLARA, as an organization with relationships to the most prominent research and education communities, will facilitate regional collaborative opportunities by identifying and archiving them and disseminating information to potentially interested researchers, academics and government bodies of its NREN members.

This activity will be led by CUDI.

The outputs of this activity will be the Meetings Reports by CLARA on its visits to national authorities, to be issued once a year. (Months 12, 24, 26, 48),

#### *03.4 (WP7) Develop and implement a strategy to work with International Organizations and Funding Agencies on a permanent basis*

The relationships between CLARA and the eLAC Program and with agencies like the IADB and OAS has been crucial for the promotion of CLARA among the multilateral Government institutions of the region. This project will deepen those relationships and seek to make them more stable and institutional. To do this, it will take advantage of a Plan to Work with Funding Agencies as developed by the IADB Project and implement that strategy by ensuring that CLARA management holds an annual meeting with the appropriate authorities to disseminate CLARA and NREN activities, results and business plans and explore possible collaboration schemes.

In order to ensure proper coordination with the other @LISII initiatives CLARA will attend the appropriate meetings with regional bodies like eLAC and REGULATEL so that joint positions are taken in regards to the development of a Regional e-Infrastructure Policy. Moreover, CLARA, jointly with CEPAL and REGULATEL, will organize an annual Coordination Meeting of the 3 Initiatives to be held at either one of the corresponding regular meetings of either CLARA, CEPAL or REGULATEL.

This activity will be lead by RAU and CUDI.

The outputs of this activity will be an Annual Report on the Work with Regional and Funding Agencies. (Months 12, 24, 36 and 48) and the Joint Workshop Reports between CEPAL, REGULATEL and CLARA..

#### *03.5 (WP7) Develop and implement a strategy to create alliances with the private sector*

The private sector has participated moderately in the ALICE Project by making donations of hardware or providing discounted prices for telecommunications services. The IADB Project is working on preparing a new Membership Model that will include the Private Sector in CLARA so they can contribute to its development and obtain value for their investment. The ALICE2 Project will help to implement this report, ensuring that a clear limit is established between their contribution and the value they obtain in return, ensuring that no subsidy is provided to them by the ALICE2 Project.

This activity will be lead by CLARA's Management.

The Output of this activity will be the Annual Membership Report and CLARA's Annual Report where activities with the Private Sector will be clearly outlined. (Months 16, 28, 40)

### **Objective 4. Ensure Regional inclusion**

#### *04.1 (WP8) Negotiate access to the new telecommunications infrastructures being deployed in Central and South America.*

To work with national governments, multinational institutions, private providers and other key actors in the region and in subregions, in order to access the new telecommunications infrastructures being deployed in Central and South America, in particular, the Puebla Panama Plan that will connect all countries in Central America, the Electrical Interconnection between Peru and Bolivia, and other new Oil and Gas pipelines being deployed where optical fibre can be installed. This activity is crucial, since purely private negotiations will not guarantee the costs that a sustainable RedCLARA requires. In particular we will seek donations of fibre pairs to ensure that ALICE2 investment will only need to provide equipment for those connections.

These negotiations will also contribute to develop a RedCLARA Strategy based on terrestrial optical fibre infrastructure that generates synergies with the NRENs. To do this, the new RedCLARA, based on long term optical fibre or capacity contracts, will prefer to adopt a topology which includes the major cities in each country traversed, in order to strengthen the national backbones, and creating in this way a synergic development of the NRENs and the RedCLARA Backbone.

This activity will be lead by RAICES with the support of the CLARA Management Staff.

A Report on Negotiations with PPP and CAN and other Groups will be issued in Month 12.

#### *04.2. (WP8) To invite the ALICE beneficiaries Bolivia, Cuba, Costa Rica, Honduras, Nicaragua and Paraguay to participate in RedCLARA.*

The ALICE beneficiaries Bolivia, Cuba, Costa Rica, Honduras, Nicaragua and Paraguay will be invited to participate in RedCLARA, through visits to the non-connected countries, where talks will be held with NREN Stakeholders and visits to the corresponding national authorities will be scheduled.

Special care will be taken in improving the access capabilities of those countries, so that the cost of connecting them to the network can be sustainable after the completion of ALICE2.

This activity will be lead by CEDIA with the support of the CLARA Management Staff.

The contracts with 3 new countries will be the main output of this activity. Results will be reported in CLARA's Annual Report.

*04.3. (WP7, WP8 and WP9). To provide Technical and Management Support to the NRENs in order to help them develop their National Networks*

Technical and Management Support to the NRENs, in order to help them develop their National Networks, will be provided through Technical Workshops to be held onsite in collaboration with the local NREN in order to improve internal technical skills. Also, by enhancing the coverage and extent of the Managerial Courses developed by the IADB Project, the NREN Managers will be trained to improve the long term sustainability of the NRENs.

This activity will be led by RNP with the support of the CLARA Training and Knowledge Management staff.

The output will be part of the Training Report issued at the ALICE2 Meetings (Months 11, 23, 35 and 47).

*04.4 (WP8) To outreach to, and maintain close cooperation with, the Caribbean Advanced Networks initiative.*

This will be done by working closely with CKLN in order to help them develop their engineering and operations plan and, whenever possible, carrying out joint tendering, in order to improve their negotiation capacity. In addition, by establishing a physical link between both networks, we will make possible the transit of CKLN thru the RedCLARA link to Europe and the possibility of running joint tenders in some cases so that both networks improve their bandwidth by using joint negotiation power.

This activity will be lead by RAGIE with the support of the CLARA Management Team.

The output will be the CKLN-CLARA Cooperation Agreement (Month 6) and the physical link between CKLN and RedCLARA, to be established at the end of Year 2 (Month 24).

### ***Objective 5. Empower NREN and Research Communities by providing Training to technicians, managers and communities of researchers***

*05.1. (WP9) Provide training on technical issues to the NRENS*

To do this, the project will identify NREN technical training needs and potentially available instructors, either from Latin America or from Europe. As a result, a 4 Year Training Plan will be proposed and submitted for approval to the CLARA Board. To carry out the training plan, the Project will coordinate the elaboration of training material for onsite and remote training, and carry out the technical training seminars, jointly with the bi-annual CLARA-TEC meetings.

This activity will be lead by the WG on Training led by RNP and the Training and Knowledge Coordinator on the CLARA Team.

The outputs will be: a) The 4 Year Training Plan; b) The Annual Training Reports (Months 12, 24, 36 and 48).

*05.2. (WP9 and WP5) Community Leaders training camps*

To support the activities of WP6 (Objective 2), this activity will elaborate technical material to maintain end users informed on how the RedCLARA network helps their research and experiments, focusing on the user communities promoted by WP 6. Using the "Train the Trainers" methodology, it will also promote at least 4 workshops for User Community leaders during the project lifetime, jointly with the technical and training workshops, to disseminate how the RedCLARA network can help and extend their research and experiments.

This activity will be coordinated by the WG on Training and CLARA's Project Management Team supported by the Training and Knowledge Management Team.

The outputs will Reports on the Annual Training Camps (Months 12, 24, 26 and 48).



### *05.3. (WP9) Keep the technical users aware of new network technologies*

In order to maintain the awareness of technical administrators of the NRENs of new technical developments, the project will identify network vendors and create a channel with vendors to provide technical training to NREN network administrators. Agreements with vendors will be sought in order to have early access to information on new product releases. Technical meetings will be the ideal place for vendors to contact the NREN technical administrators, so cooperation with vendors will be sought in order to conduct Information Workshops at these events.

This activity will be led by CLARA-TEC and the WG on Training, supported by the Chief Engineer of CLARA and the NEG.

The output will be Information Workshops conducted with the vendors at least once a year.

### *05.4. (WP9) Enhance and Maintain an E-learning system for continuous training*

Starting with the e-Learning Platform that is being deployed in CLARA with IADB Funding (Open Source), this activity will enhance that platform by updating the system and adding an "On Demand video service", that will provide further content distribution capabilities to the WG on Training for the use of the different training activities of this project. The e-Learning and the Video on Demand platforms will be defined as Services, in accordance with the methodologies defined by WP5. The technical aspects of this deployment will be provided by the NEG and the CLARA Chief Engineer.

Furthermore, this activity will provide instructional design support, which will be carried on by one of the NRENs, as well as everything needed to assist content providers (university professors) in generating the appropriate e-Learning materials. The content of the technical, management and community leaders' workshops will be the primary material to import into the e-Learning platform.

This activity will be led by the WG on Training and CLARA's Training and Knowledge Management Manager.

The outputs of this activity will be the e-Learning and Video on Demand platforms that will be visible through their websites. The Technical talks will be captured on video and loaded into the system for further viewing. At least 5 online courses, appropriately designed, will also be part of the output (Month 24).

### *05.5 (WP9 and WP7) Provide management training to NREN managers.*

As established in O3, Training to NREN Managers will be a crucial activity. This will be carried out by continuing the IADB Project Management Workshops, holding at least four workshops during the project lifetime, and producing nine courses using the e-Learning Platform.

This activity will be led by the WG on Training and CLARA's Training and Knowledge Management Manager.

The outputs of this activity will be the Training Workshops and reporting activities in CLARA's Annual Report. (Months 16, 28, 40).

## **Visibility Plan.**

*General Objective: To efficiently disseminate the objectives, developments, advances and achievements of ALICE2, the RedCLARA network and CLARA and to help in the construction of an inclusive RedCLARA community.*

### *V1. Develop a Visibility Plan for ALICE2.*

Build a Communications and Public Relations Plan intended to raise awareness on the importance and impacts of the ALICE2 project and the benefits of the RedCLARA(2) network and encourage the utilisation of this infrastructure. The Plan will also emphasize on taking advantage of the current momentum and to highlight the importance of CLARA for the long term sustainability of the RedCLARA network. A key point of success of this Plan will be the definition of the "audience": identification of the relevant LA and EU research communities and stakeholders (the audience will be completed by the LA + EU NRENs). A second key point of success for this Plan will be the definition of the relevant messages and the distribution channels for them, in order to better address the defined "audience". This Plan must be revised and updated each year through a PR Yearly activities report.

This Plan will include a Launch Event which should ideally coincide with the EU-LAC Summit of Ministers of the Information Society to be organized by CEPAL in the context of the Political Dialog activity within the @LISII Program.

An important part of this plan is the regular attendance of LA Representatives to the TERENA Networking Conferences, the IST Conferences and the e-Challenges Conferences.

The outputs of this activity will be the Public Relations Plan and its yearly updates (Months 2, 14, 26, 38), the reports on attendance to conferences and the Launch Event Report (Month 20).

#### *V2. Redesign and enhance Virtual and Physical Communication Tools*

The CLARA Website will be redesigned to make it more interactive and allow for user participation as well as motivate contributions from the NREN's PR Representatives and other stakeholders. Within this redesign process, the ALICE logo will be redesigned to become the ALICE2 logo and all distribution materials will be built accordingly, including the brochures, flyers, network maps and so on. All printed and electronic distribution materials will be written in English, Portuguese and Spanish. The site will be fed periodically and Press Releases will be issued periodically as well as each time an important event happens.

The DeCLARA Bulletins (quarterly) as DeCLARA Express (bi-weekly) will be maintained and distribution lists will be automated to allow a wider distribution among stakeholders.

A new tool, the CLARA Compendium, modeled upon the TERENA Compendium, will be developed and published yearly.

Finally, the contacts with the media will be enhanced by creating a network of Journalists to be periodically informed of ALICE2 issues and new developments.

The outputs of this activity will be the New Logo (Month 3), the New Website (Month 5), the Quarterly DeCLARA Bulletins (Quarterly), the DeCLARA Express (Bi-weekly), the CLARA Compendium (Yearly) and the visibility materials: brochures, flyers, maps (Months 5, 19, 40).

#### *V3. Create a Network of PR Representatives and connect to the TERENA PR Network.*

Create a Network of the NREN's PR Representatives to work together in the dissemination activities of ALICE2 and CLARA, as well as creating synergies in the promotion of the NRENs inside their own communities of users and towards the local media and the community in general. This group of PR Representatives will meet by VideoConference every two months and at the Project Meetings at least twice during the project.

Additionally this Network will appoint the PR Representatives that will participate at the Meetings of the TERENA PR Task Force that meets every year at the TERENA Networking Conference.

The outputs of this activity will be the PR Representatives Wiki and the Annual PR Reports (Months 12, 24, 36, 45) where a special section will be included on the joint PR activities. Another output of this activity will be the reports on the attendance to conferences.

#### *V4. To promote Applications and Demonstration Projects to Promote the Use of RedCLARA*

To identify the demonstration projects that are carried in each LA country over RedCLARA (the global idea is to evidence the real importance and impact that this infrastructure has for the LA development and for the collaboration between LA and the rest of the world – mainly Europe). Identify the researchers in charge of those projects. Write and edit reports about those projects for the DeCLARA bulletin and the WebSite. Follow the yearly development of those projects. This information will serve as a basis in order to create a yearly report on applications – projects - communities. The information shall include interviews to the researchers and the stakeholders of the project. This activity will be carried out jointly with the Objective 2 Activities.

Another important task to be carried out is the support to the promotion of funding opportunities for the Communities that will be created and maintained by the Objective 2 group of activities.

The outputs of this activity will be the new appeared in the DeCLARA Bulletin and the WebSite as well as the inserts in CLARA's Yearly Report and brochures and flyers designed for the promotion

events. Another important output will be the Virtual Information events to be carried out jointly with InfSo and ALFA.

#### *V5. To support the marketing actions for CLARA's services and applications.*

To create and implement dissemination plans for CLARA's services as defined by the Marketing Management and the Technical Committees so that potential users become fully aware of the importance of the tools for their daily activities. The plans will include the media planning as well as brochures, flyers and electronic dissemination media such as websites for the applications and the management of tools like wikis, self service portals and other required tools.

The Outputs of this activity will be the Dissemination Plan for each new Service (Months 12, 24, 26, 45) as well as all the brochures, flyers and electronic tools.

## **Methodology**

ALICE2 will build on the success and experiences of the ALICE project and will follow the recommendations of the monitoring and final evaluation process of that project. To do that, CLARA will strengthen its Management Team, in order to include more personnel in the Financial and Contracts Area that will allow it to carry out careful administration of the project according to the EC rules and procedures.

The project will seek the establishment of CLARA owned, long term telecommunications contracts, mainly fibre optic strands or wavelengths, to be acquired in the form of an IRU (Irrevocable Right of Use) or installed by the project itself, when costs advise that path. The project will seek to build a telecommunications infrastructure that is maintained by a third party, ideally a telecom operator that will ensure fast response time and a maximum MTBF (Mean Time Between Failures). This maintenance cost will continue after the end of ALICE2, and it will substitute transmission capacity contracts at a fraction of their cost and with maximum flexibility. The Project will also invest in acquiring the equipment needed to light the fibre and build the data network on top of the optical infrastructure.

Where Optical Fibre IRUs are not available, the project will seek to acquire high capacity IRUs, ideally wavelengths, in order to guarantee that the investment made by the EC lasts for a long time, and can be maintained by CLARA and its associated NRENs. Data equipment will be acquired to handle this capacity.

This strategy is similar to the one followed by GEANT2 in Europe and more recently in the TEIN2 Project.

The project will prefer to make these optical fibre investments along terrestrial routes which traverse member countries, since that will create synergies with the development of the NRENs, by providing them with transport between the major cities of their countries, and hence facilitate the construction of their National Backbones. This will constitute a major pillar of the inclusion strategy since it has two advantages, on one side it expands internal networks of connected NRENs, and on the other side it may cross countries not yet connected to RedCLARA, such as several in Central America, and hence will facilitate their connection to the new network.

The resulting network that will replace the present RedCLARA Network, will be connected directly to GEANT2 through a high speed link contracted from a submarine cable provider, ideally on a IRU based contract.

The ALICE2 project will procure, establish and operate research networking infrastructure using best practices drawn from experience from European research networking, while taking account the local needs and conditions of the Latin American region and the experience of the ALICE Project and CLARA.

Infrastructure, capacity and equipment will be tendered using standard EuropeAid Tendering procedures, but for some more complex goods, like the acquisition of IRUs, Negotiated Procedures will be proposed in order to give maximum scope for negotiation with suppliers and flexibility in determining the scale and topology of the resulting network.

A major goal of the project is to attain self sustainability of CLARA and its resulting infrastructure. To achieve this, the strategy of ownership of infrastructure is crucial, since it will guarantee in the long term that maintenance costs remain low while permitting low cost upgrades of the network as needed.

Financial management will be crucial, and CLARA and its NRENs will work on establishing firm commitments on the part of the NRENs in order to secure a solid financial basis for its operations, including the payment of the shared costs of the project.

Another part of the strategy consists in working with the national Governments and the regional organizations, especially those working with Science & Technology, Innovation, Education and the Information Society, in order to create e-Infrastructure policies inside the LA countries that guarantee local support for NRENs and ensure their sustainability, which is the basis for any sustainability of CLARA.

CLARA and its partners will also work in self sustainability by improving their internal business processes through training in management and taking care to set up market-driven processes for the establishment of successful and high quality services oriented towards communities of researchers and educators working on MDG related projects. ALICE2 will seek to identify and provide support to these communities, and in this way to make evident the value to them of the infrastructure and services provided. In their turn these communities will support the development of the NRENs and their regional organization.

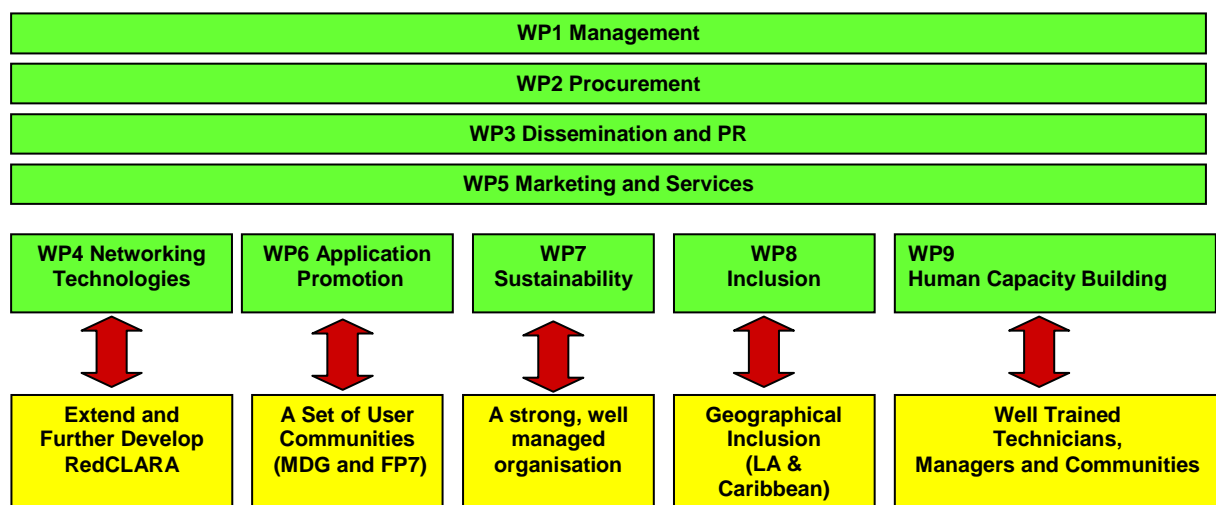
The Project will also aim at creating a large basis of well trained technicians and managers that can ensure the long term sustainability of the NRENs and at the same time, through the training and awareness activities related to the user communities, will support the development of those communities, resulting in the benefits already mentioned in the preceding paragraph.

The project will be managed by CLARA, with the support of DANTE and some of the European NRENs. CLARA will manage the tender processes, contracts, subscriber agreements, financial issues and coordination between the NRENs and the RedCLARA2 infrastructure. Finances will be audited by an international auditing company selected in agreement with the European Commission.

The design and implementation of the network, as well as the technical design of services will be the responsibility of CLARA-TEC, the technical group of the LA NRENs, in coordination with DANTE and the European NRENs.

The Operation of the network will be carried out by the CLARA NOC, which will be carried on by one of the NRENs, selected by the Board of Directors according to an internal process that was created during the ALICE Project and continued by CLARA.

Project tasks and activities will be organised as nine Work Packages. Four of these Packages are designed to carry on general tasks encompassing all the objectives, and the other five will address specific objectives as shown in the diagram below. Management of the whole project will be carried out by CLARA, which will monitor the execution of the different tasks and make sure all the deliverables are submitted on time.



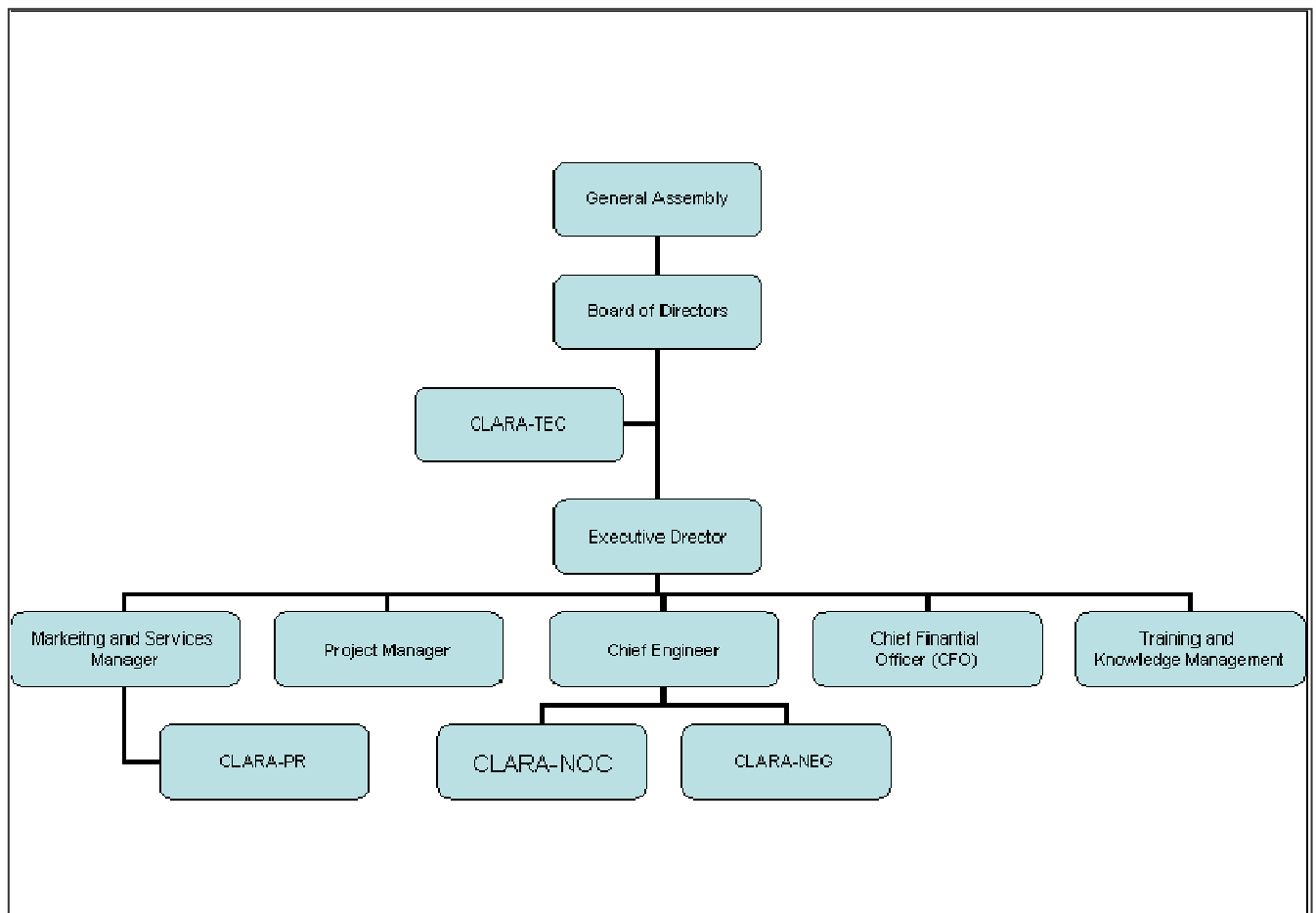
## Management of the Project

The management of the Project will be carried on under the responsibility of CLARA's Executive Director whose work will be supported by a Project Manager and the Area Managers of CLARA who in their turn will supervise and coordinate the activities of all the Working Groups as indicated in the Block Diagram below. This staff will provide all the support for the activities of the Working Groups and will be responsible for the time issuing of the deliverables and check of the control points.

## Management Control Tools

The control of the whole project will be carried on using an Open Source Project Management Tool (Open Workbench) that will facilitate the task advancement control and the milestone and deliverables scheduling follow up. This task will be carried on by the Project Manager Team supervised by the Executive Director of CLARA.

The following diagram details the CLARA Team working on ALICE2 and its structure:



## Project Coordination Meetings.

CLARA will coordinate a bi-monthly Project Coordination Meeting where all Working Packages will report on their activities and a Meeting Report will be issued. One of the key issues that will be analysed during these meetings is the degree of accomplishment of the different goals and the corrective measures to be taken in case some deviation is noted.

## Board Meetings

CLARA's Board will overview all the activities of the Project, the Board's Sessions are scheduled 5 times a year. And official minutes of each session are issued and archived.

## **Project Partners Meetings**

The bi-annual Project Meetings Assembly will be the highest authority of the ALICE2 Project. These meetings will be organized by CLARA in WP1 and will be the key Supervision and Control Activity of the Project. This Assembly will have to approve Operational Plans and Project Reports and will ultimately approve all financial sheets before these are submitted to the auditors. After auditing, it will have to analyse and take corrective actions or approve the reports.

The following is the complete list of Working Packages and its Coordinating Partner:

- WP1 Management  
CLARA (Leader)  
DANTE
  
- WP2 Procurement  
CLARA (Leader)  
RNP, Brazil  
CUDI, Mexico  
REUNA, Chile  
DANTE  
RedIRIS, Spain
  
- WP3 Dissemination  
CLARA (Leader)  
REUNA, Chile  
RNP, Brazil
  
- WP5 Marketing and Services  
CLARA, (Leader)  
RNP, Brazil  
REUNA, Chile
  
- WP4 Networking Technologies  
RNP, Brazil (Leader)  
Innova-Red, Argentina  
REUNA, Chile  
CEDIA, Ecuador  
RAGIE, Guatemala  
CUDI, Mexico  
RAAP, Peru  
DANTE  
RedIRIS, Spain  
GARR, Italy  
CLARA
  
- WP6 Applications Promotion  
  
RAGIE, Guatemala (Leader)  
RNP, Brazil  
REUNA, Chile  
REDCYT, Panama  
REACCIUN, Venezuela  
RENATA, Colombia  
RedIRIS, Spain  
RENATER, France  
CLARA

- WP7 Sustainability  
CUDI, Mexico (Leader)  
CLARA  
RNP, Brazil  
RAU, Uruguay  
RENATA, Colombia
- WP8 Inclusion  
RAICES, El Salvador (Leader)  
RAGIE, Guatemala  
CEDIA, Ecuador  
CLARA
- WP9 Human Capacity Building  
RNP, Brazil (Leader)  
CUDI, Mexico  
RAGIE, Guatemala  
RedIRIS, Spain  
CLARA

## 1.8. Duration and indicative action plan for implementing the action

The duration of the action will be 45 months.

The Plan for Year 1 is the following.

	Year 1												Implementing Body
	Semester 1						Semester 2						
	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Mo. 9	Mo. 10	Mo. 11	Mo. 12	
O1.1													CLARA-TEC
O1.2													CLARA Staff + DANTE
O1.3													CLARA Staff + NEG + NOC + CLARA-TEC
O1.4													CLARA-WG + CLARA Marketing
O1.5													WG Coordination (RNP)
O1.6													CLARA-TEC; CLARA-NOC; CLARA Engineering; CLARA-NEG
O2.1													RAGIE + CLARA
O2.2													RENATA + CLARA
O2.3													RAGIE + CLARA
O2.4													RENATA + CLARA
O2.5													CLARA + CLARA-TEC + WG
O2.6													CLARA Project Management Team
O2.7													CLARA Project Management Team
O3.1													CUDI + Board of Directors + CLARA Team
O3.2													CLARA Board of Directors + CLARA Team
O3.3													CUDI + CLARA Team
O3.4													RAU + CUDI + CLARA Team
O3.5													CLARA Team
O4.1													RAICES + CLARA Team
O4.2													CEDIA + CLARA Team
O4.3													RNP + CLARA Team
O4.4													RAGIE + CLARA Team
O5.1													RNP + CLARA Team
O5.2													RNP + CLARA Team
O5.3													CLARA-TEC + CLARA Team
O5.4													RNP + CLARA Team
O5.5													RNP + CUDI + CLARA Team
V1													CLARA PR Team
V2													CLARA PR Team



V3													CLARA PR Team
V4													CLARA PR Team
V5													CLARA PR Team + CLARA MarketingTeam

The Plan for subsequent years is the following.

	Sem. 3	Sem. 4	Sem. 5	Sem. 6	Sem. 7	Sem. 8	Implementing Body
O1.1							CLARA-TEC
O1.2							CLARA Staff + DANTE
O1.3							CLARA Staff + NEG + NOC + CLARA-TEC
O1.4							CLARA-WG + CLARA Marketing
O1.5							WG Coordination (RNP)
O2.1							RAGIE + CLARA
O2.2							RENATA + CLARA
O2.3							RAGIE + CLARA
O2.4							RENATA + CLARA
O2.5							CLARA + CLARA-TEC + WG
O2.6							CLARA Project Management Team
O2.7							CLARA Project Management Team
O3.1							CUDI + Board pf Directors + CLARA Team
O3.2							CLARA Board of Directors + CLARA Team
O3.3							CUDI + CLARA Team
O3.4							RAU + CUDI + CLARA Team
O3.5							CLARA Team
O4.1							RAICES + CLARA Team
O4.2							CEDIA + CLARA Team
O4.3							RNP + CLARA Team
O4.4							RAGIE + CLARA Team
O5.1							RNP + CLARA Team
O5.2							RNP + CLARA Team
O5.3							CLARA-TEC + CLARA Team
O5.4							RNP + CLARA Team
O5.5							RNP + CUDI + CLARA Team
V1							CLARA PR Team
V2							CLARA PR Team
V3							CLARA PR Team
V4							CLARA PR Team
V5							CLARA PR Team + CLARA MarketingTeam

## 1.9. Sustainability (max 3 pages)

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As has already been said, the ALICE project was not able to produce a sustainable organization, even if tremendous advances were made in that direction. Nevertheless, the factors mentioned in paragraph 1.6: a) The recent creation of most NRENs, which have difficulties to support themselves; b) The lack of an e-Infrastructure policy inside the LA countries; c) The scarcity and dispersion of research groups; and d) The high cost of telecommunications infrastructure; have led to a unstable situation where CLARA has grown as a solid and well recognized organization but has weak partners and a high-cost infrastructure that it is impossible to maintain in the long term.

In order to overcome these difficulties and achieve the Sustainability Objective, ALICE2 will work on these 4 areas by:

- A) Strengthening CLARA's Management Team and Strategies (WP1 & WP5). CLARA's Staff is presently composed by an Executive Director who plays the role of a General Manager, a Chief Financial Officer, a Project Manager and a Training and Knowledge Management Manager. It is clear that the management of a long lasting institution requires more manpower to take charge of functions which presently are, on the one hand, understaffed, like the Financial Office and the Project Office, or are not included, like the Marketing and Engineering functions (see recommendation of the ALICE Evaluation Report). Restructuring will be carried out according to the recommendations of the ALICE Evaluation Report and the Consulting that was carried out through the IADB Project.
- B) Generating a high level of Governance of CLARA that ensures a permanent support by involving all stakeholders: the NRENs, the Researchers and the Private and Government Sectors. This will be done by strengthening the functioning of CLARA's Institutions and, if necessary, add some new bodies to ensure participation of all stakeholders. In this respect, with the support of the IADB Project, CLARA is preparing a New Membership Model that seeks to include other stakeholders in CLARA, in particular, the private sector. With this report in hand, CLARA and its partners will prepare a new Governance Proposal that will be submitted to the General Assembly. These bodies will at least include a way for the direct participation of Researchers (probably through application communities) and of the Private and Government Sectors (through Membership and participation in some of the Governance bodies).
- C) Pursuing a Long Term Telecommunications Service Strategy (IRUs) (WP4 & WP2). As has been previously analysed, the maintenance cost of RedCLARA is due mainly to the payment of local and long distance telecommunications services, which are extremely expensive in the LA Region. Thus, any sustainability strategy requires the reduction in this main item of cost, in order to make the financial charge less onerous for the partners and thus permitting its long term sustainability. These costs are especially high in the case of less developed countries and hence it is crucial to develop a strategy that solves this problem. As in the case of GEANT2 and other academic networks, the solution lies on the acquisition (or long term access to rights of use) of infrastructure in the form of optical fibre or wavelengths (virtual fibre). This can be done in LA because telecommunications infrastructure there is expanding and creating the opportunities for successful negotiations leading to the ownership of such basic building blocks of RedCLARA.

There are two major contributions from the Region that are key in implementing this strategy:

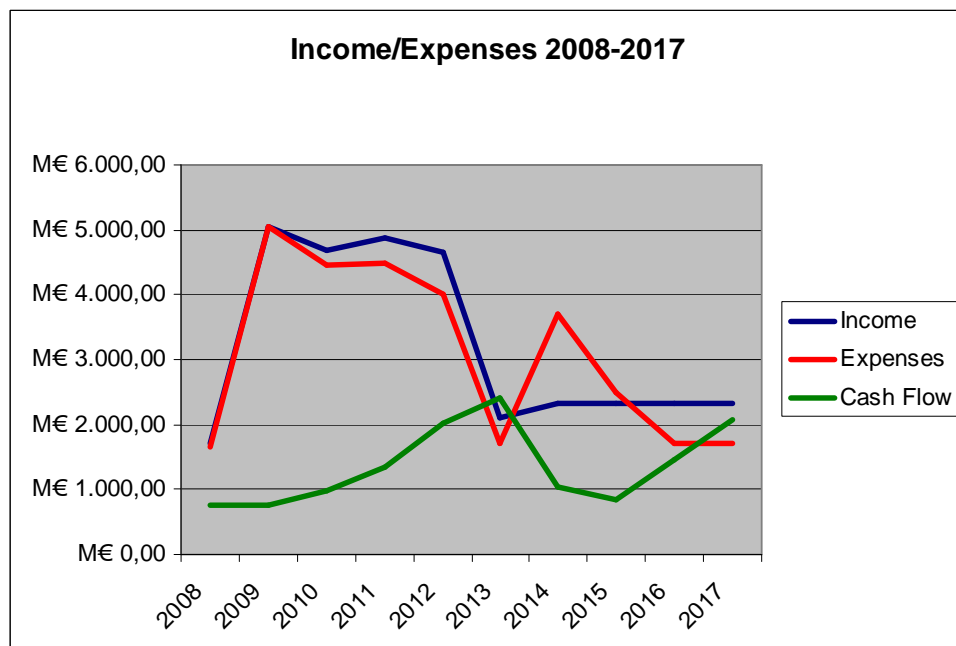
- 1) The contribution from Brazil, which will donate to CLARA an estimated € 5,000,000 in order to acquire fiber optic strands to connect the Mercosur countries. These fiber optic strands will be used by the project to connect those countries and hence in our budget for ALICE2, no funds are allocated to buy fiber between those countries.
- 2) The Plan Puebla Panamá, which is expected to be in operation during 2010 will deploy fiber optic between all Central American countries plus Mexico and Colombia. We expect to obtain a donation of a couple of fiber strands for the use of CLARA, so that ALICE2 is budgeted to pay for the optical equipment to light that fiber and use to connect those countries. Since this Plan will not be implemented in 2009, during that year ALICE will have to lease capacity from the telecom carriers.

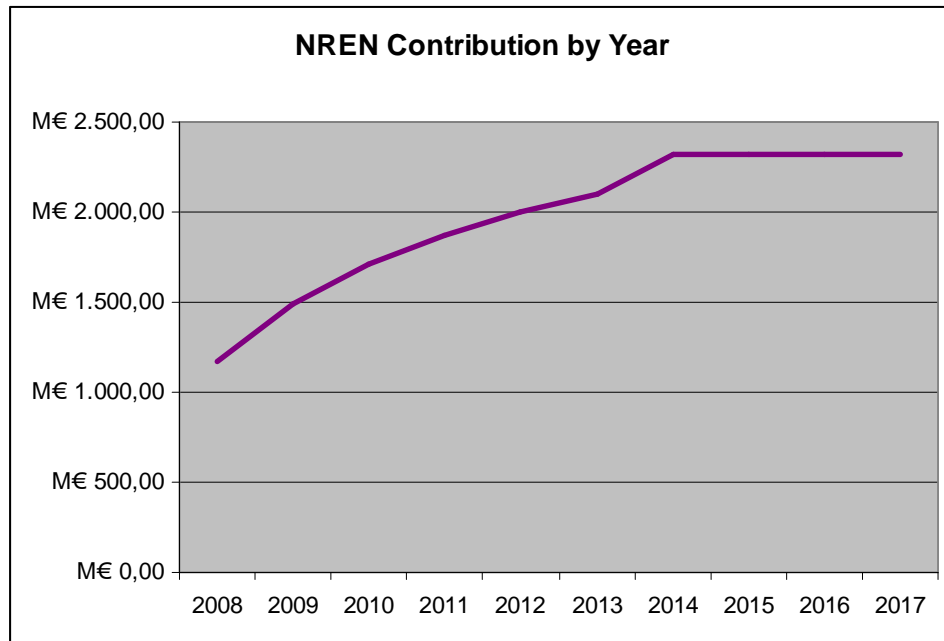
The fiber optic has low maintenance costs and the optical equipment has been dramatically diminishing its prices. This makes possible that the cost of maintenance and upgrade of an optical network be very low compared to purchasing the service to telecommunication companies on an annual basis.

This is the key financial issue, since a simulation of the income/expenses for the next 10 years looks as in the following graph, where the decay in expenses due to the lower maintenance costs is the key to keeping the operation sustainable. On the other hand, the NREN contribution will continue to be the most important part of the income on a permanent basis, this contribution is planned to be increased more than 50% over the coming 4 years based on:

- 3) Added partners, like Bolivia, Paraguay, Honduras, Nicaragua, Costa Rica and eventually Cuba.
- 4) Increased demand in bandwidth which will make the countries to increase their contribution
- 5) Value added services developed during the span of the ALICE2 Project and beyond, like Commodity Internet Access for countries where that service is extremely expensive and hence CLARA may sell that service to those countries with a margin.

In the graph, the increase in the income 2009-2012 is of course due to the EC contribution.





- D) Pursuing standardisation on network technology and management with GEANT2 procurement rules (WP2&WP4). Taking into account activity (b), CLARA's networking team will have to redesign the RedCLARA topology and routing, in order to become more efficient while reducing infrastructure and operating costs. It will also be necessary to work together with GEANT2 network specialists to make connectivity and interoperability of networks and services transparent to users. For that purpose, RedCLARA2 will deploy and design an advanced operation centre, and will prepare a services plan for basic networking services and support the development of value added services.
- E) Strengthening the NRENs (WP7 & WP8). A major result of ALICE was the creation of 9 NRENs. Those NRENs are in the process of improving their internal organization, training their users, convincing their national governments of the importance of adopting e-infrastructure policies, and creating their internal structures and processes. The project aims at helping them in this process so they can follow the development road at a faster pace than their predecessors, by building on the experience of the older and more experienced NRENs and being trained in management and technical aspects. Stronger NRENs will result in a solid financial and organisational support for CLARA. Training NREN members will become an important permanent job for CLARA.
- F) Helping the creation and support of Research Community User Groups (WP6). One of the major problems of the newly created NRENs is the lack of a solid user base, that will stand up for them and seek to influence their university and national authorities when financial support is requested. Providing them with a set of key applications and Cases of Success will provide them with arguments to grow internally, with both university and political support, building in this way their stakeholder base. CLARA will promote greater participation of the Research Community User Groups in the design and implementation of national and regional public policies for research network development.
- G) Working on influencing the National e-Infrastructure Policies (WP7). In most countries where e-infrastructure is blooming, the governments have made a clear political decision in favour of developing e-Infrastructures for Science, Research, Education and Innovation. This is not the case in Latin America, except maybe in Argentina, Brazil and Venezuela. It is necessary to build consensus on the importance

of such policies for the development of good quality science, education and innovation. The project will work on promoting such policies, joining forces with the EU InfoSoc activities, eLAC, OAS and other organisations. Sustainability of the NRENs and CLARA depend on how effectively the organisation gains support from governments for stability and growth of e-Infrastructures.

- H) Maintaining a permanent relationship with funding agencies in order to gain support for national and regional ICT e-Inclusion projects. NRENs and RedCLARA may also contribute to seeking ways of financing not only collaborative research networks, but also fostering the expansion of e-Education and e-Health social networks in isolated areas, as established in the MDG.
- I) Establishing a closer relationship with telecom carriers and ICT (software and hardware) manufacturers could lead to collaborative research projects that will benefit both parties and help CLARA's networking team gain access to state of the art technology that can be tested and implemented in NRENs and RedCLARA e-infrastructures. CLARA and the NRENs should facilitate the use of their high capacity networks for collaborative research projects developed by NREN members and the private sector. CLARA and the NRENs should aim to have private sector partners in every country.

## **1.10. Logical framework**

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Please fill in Annex C<sup>5</sup> to the Guidelines for applicants.

### **2. BUDGET FOR THE ACTION**

Fill in Annex B (worksheet 1) to the Guidelines for applicants for the total duration of the action and for its first 12 months. For further information see the Guidelines for grant applicants (Section 2.1.4).

### **3. EXPECTED SOURCES OF FUNDING**

Fill in Annex B (worksheet 2) to the Guidelines for applicants to provide information on the expected sources of funding for the action.

Please note that there are two different sheets to be completed

RNP, the NREN of Brazil has negotiated a contribution from FINEP which will be established on an annual basis, intended to buy telecommunications assets connecting the MERCOSUR Countries. This has been taken into consideration in the Project where we have not requested funding from the EC for the acquisition of fiber optic between those countries. The expected contribution of RNP over the 45 months of the project is over € 5.000.000.

It is important to declare that, all funding necessary to complete the co.funding will be paid by the Latin American ALICE2 Partners as part of their annual contribution to CLARA's activities.

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<sup>5</sup> Explanations can be found at the following address:  
[http://ec.europa.eu/europeaid/reports/index\\_en.pdf](http://ec.europa.eu/europeaid/reports/index_en.pdf)

#### 4. EXPERIENCE OF SIMILAR ACTIONS

Maximum 1 page per action. Please provide a detailed description of actions managed by your organisation over the past three years

This information will be used to assess whether you have sufficient and stable experience of managing actions in the same sector and of a comparable scale to the one for which you are requesting a grant.

<b>Reference no:</b>	<b>Project title:</b>		<b>Sector (see section 2.2 of section II):</b>			
<b>Name of organisation</b>	<b>Location of the action</b>	<b>Cost of the action (EUR)</b>	<b>lead manager or partner</b>	<b>Donors to the action (name)<sup>6</sup></b>	<b>Amount contributed (by donor)</b>	<b>Dates (from dd/mm/yyyy to dd/mm/yyyy)</b>
CLARA	LATIN AMERICA	€ 12,500,000	DANTE	€ 10,000,000	€ 2,500,000	01/06/2003 to 31/03/2008
<b>Object and results of the action</b>						
Creation of RedCLARA, the Latin American Research and Education Network and CLARA, the Cooperacion Latino Americana de Redes Avanzadas.						

<sup>6</sup> If the Donor is the EU Commission or an EU Member States, please specify the EC budget line, EDF or EU Member State.

## II. THE APPLICANT

<b>EuropeAid ID number<sup>7</sup></b>	
<b>Name of the organisation:</b>	COOPERACION LATINO AMERICANA DE REDES AVANZADAS (CLARA)

Applicants that are registered in PADOR do not need to fill in the rest of this section.

### 1. IDENTITY

<b>Legal Entity File number<sup>8</sup></b>	6000157284
<b>Abbreviation :</b>	CLARA
<b>Registration Number (or equivalent)</b>	317/03
<b>Date of Registration</b>	23 December 2003
<b>Official address of Registration</b>	Rambla República de México 6125 Montevideo 11400 Uruguay
<b>Country of Registration<sup>9</sup> / Nationality<sup>10</sup></b>	Uruguay / Uruguay
<b>E-mail address of the Organisation</b>	Florencio.Utreras@redclara.net
<b>Telephone number:</b> Country code + city code + number	+598 2 604 2222
<b>Fax number:</b> Country code + city code + number	+598 2 604 2222 Ext 112
<b>Website of the Organisation</b>	<a href="http://www.redclara.net">http://www.redclara.net</a>

<sup>7</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>8</sup> If the applicant has already signed a contract with the European Commission

<sup>9</sup> For organisations. If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>10</sup> For individuals. If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location



## 2. PROFILE

<b>Legal status</b>	International Not for Profit
<b>Profit-Making</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>NGO</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Value based<sup>11</sup></b>	<input type="checkbox"/> Political <input type="checkbox"/> Religious <input type="checkbox"/> Humanistic <input checked="" type="checkbox"/> Neutral
<b>Is your organisation linked with another entity?</b>	<input type="checkbox"/> Yes, parent entity: (please specify its EuropeAid ID:.....) <input checked="" type="checkbox"/> Yes, controlled entity(ies) <input type="checkbox"/> No, independent

### 2.1. Category

<b>Category<sup>12</sup></b>	<b>Public</b>	<b>Private</b>
	<input type="checkbox"/> Public Administration <input type="checkbox"/> Decentralised representatives of Sovereign States <input type="checkbox"/> International Organisation <input type="checkbox"/> Judicial Institution <input type="checkbox"/> Local Authority <input type="checkbox"/> Implementation Agency <input type="checkbox"/> University/Education <input type="checkbox"/> Research Institute <input type="checkbox"/> Think Tank <input type="checkbox"/> Foundation <input type="checkbox"/> Association <input type="checkbox"/> Media <input type="checkbox"/> Network/Federation <input type="checkbox"/> Professional and/or Industrial Organisation <input type="checkbox"/> Trade Union <input type="checkbox"/> Cultural Organisation <input type="checkbox"/> Commercial Organisation	<input type="checkbox"/> Implementation Agency <input type="checkbox"/> University/Education <input type="checkbox"/> Research Institute <input type="checkbox"/> Think Tank <input type="checkbox"/> Foundation <input checked="" type="checkbox"/> Association <input type="checkbox"/> Media <input checked="" type="checkbox"/> Network/Federation <input type="checkbox"/> Professional and/or Industrial Organisation <input type="checkbox"/> Trade Union <input type="checkbox"/> Cultural Organisation <input type="checkbox"/> Commercial Organisation <input type="checkbox"/> Other Non State Actor

<sup>11</sup> Please choose only one set of values.

<sup>12</sup> Please specify 1) the Sector to which your organisation belongs, as defined in its statutes (or equivalent document): Public (established and/or funded by a public body) OR Private (established and/or funded by a private entity); 2) in the appropriate column, the Category to which your organisation belongs (ONE CHOICE ONLY).

## 2.2. Sector(s)<sup>13</sup>

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- 112 Basic education
- 113 Secondary education
- 114 Post-secondary education
- 121 Health, general
- 12240 Basic Nutrition
- 12250 Infectious Disease Control
- 12261 Health Education
- 12281 Health Personnel Development
- 13020 Reproductive Health Care
- 13040 STD control including HIV/AIDS
- 14 WATER SUPPLY AND SANITATION
- 15130 Legal and judicial development
- 15140 Government administration
- 15150 Strengthening civil society
- 15161 Elections
- 15162 Human Rights
- 15210 Security system management and reform
- 15220 Civilian peace-building, conflict prevention and resolution
- 15230 Post-conflict peace-building (UN)
- 15240 Reintegration and SALW control
- 15250 Land mine clearance
- 15261 Child soldiers (prevention and demobilisation)
- 16064 Social mitigation of HIV/AIDS
- 21 TRANSPORT AND STORAGE
- 220 Communications
- 22030 Radio/Television/Print Media
- 22040 Information and communication technology (ICT)
- 23 ENERGY
- 24 BANKING AND FINANCIAL SERVICES
- 25 BUSINESS AND OTHER SERVICES
- 311 Agriculture
- 312 Forestry
- 313 Fishing
- 321 Industry
- 322 Mineral resources and mining
- 323 Construction
- 331 Trade policy and regulation
- 332 Tourism
- 41 GENERAL ENVIRONMENTAL PROTECTION
- 42010 Women in development
- 52 DEVELOPMENTAL FOOD AID/FOOD SECURITY
- 600 ACTION RELATING TO DEBT
- 7 HUMANITARIAN AID
- 72030 Aid To Refugees (In Recipient Country)
- 730 Reconstruction relief
- 740 Disaster prevention and preparedness
- 92010 Support to national NGOs
- 92020 Support to international NGOs
- 92030 Support to local and regional NGOs
- 99820 Promotion of Development Awareness

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<sup>13</sup> Please tick the box for each sector your organisation has been active in. The sectors starting with a reference come from the DAC list set up by the OECD.

### 2.3. Target group(s)

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- All
- Child soldiers
- Children (less than 18 years old)
- Community Based Organisation(s)
- Consumers
- Disabled
- Drug consumers
- Educational organisations (school, universities)
- Elderly people
- Illness affected people (Malaria, Tuberculosis, HIV/AIDS)
- Indigenous peoples
- Local authorities
- Migrants
- Non Governmental Organisations
- Prisoners
- Professional category
- Refugees and displaced
- Research organisations/Researchers
- SME/SMI
- Students
- Urban slum dwellers
- Victims of conflicts/catastrophies
- Women
- Young people
- Other (please specify): .....

### 3. CAPACITY TO MANAGE AND IMPLEMENT ACTIONS

#### 3.1. Experience by Sector (for each sector selected in 2.2.)

Sector	Year(s) of Experience	Experience in the last 3 years	Number of Projects	Estimated Amount (in thousand Euros)
22040	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input checked="" type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input type="checkbox"/> Less than a year <input type="checkbox"/> 1 year <input type="checkbox"/> 2 years <input checked="" type="checkbox"/> 3 years	<input checked="" type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input checked="" type="checkbox"/> 1000 <input type="checkbox"/> Unknown
	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input type="checkbox"/> Less than a year <input type="checkbox"/> 1 year <input type="checkbox"/> 2 years <input type="checkbox"/> 3 years	<input type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input type="checkbox"/> 1000 <input type="checkbox"/> Unknown
	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input type="checkbox"/> Less than a year <input type="checkbox"/> 1 year <input type="checkbox"/> 2 years <input type="checkbox"/> 3 years	<input type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input type="checkbox"/> 1000 <input type="checkbox"/> Unknown

### 3.2. Experience by Geographical area (country or region)

By Geographical area (country or region)	Year(s) of Experience	Number of Projects	Estimated Amount (in thousand Euros)
Latin America Region	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input checked="" type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input checked="" type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input checked="" type="checkbox"/> 1000 <input type="checkbox"/> Unknown
	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input type="checkbox"/> 1000 <input type="checkbox"/> Unknown
	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 3 years <input type="checkbox"/> 4 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> 20 years +	<input type="checkbox"/> 1 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input type="checkbox"/> 21 to 50 <input type="checkbox"/> 51 to 200 <input type="checkbox"/> 200 to 500 <input type="checkbox"/> 500+	<input type="checkbox"/> Less than 1 <input type="checkbox"/> 1 to 5 <input type="checkbox"/> 5 to 20 <input type="checkbox"/> 20 to 50 <input type="checkbox"/> 50 to 100 <input type="checkbox"/> 100 to 300 <input type="checkbox"/> 300 to 1.000 <input type="checkbox"/> 1000 <input type="checkbox"/> Unknown

#### Cross-reference of experience by Sector and by Geographical area:

Sector(s) (as selected in 2.2)	Geographical area(s) (country or region, as identified previously)
22040	Latin America

### 3.3. Resources

#### 3.3.1 Financial data. Please provide the following information, if applicable, on the basis of the profit and loss account and balance sheet of your organisation

Year	Turnover or equivalent	Net earnings or equivalent	Total balance sheet or budget	Shareholders' equity or equivalent	Medium and long-term debt	Short-term debt (< 1 year)
2007	US\$ 1,661,046	US\$ 575,812		N/A	US\$ 0	US\$ 0
2006	US\$ 652,962	US\$ 131,684		N/A	US\$ 0	US\$ 0
2005	US\$ 102,000	(US\$ 107,011)		N/A	US\$ 0	US\$ 0

#### 3.3.2. Financing Source(s) (please tick the source(s) of the revenues of your organisation and specify the additional information requested)

Year	Source	Percentage (total for a given year must be equal to 100%)	Number of fee-paying members (only for source = Member's fees)
N	<input checked="" type="checkbox"/> EU Commission		N/A
N	<input type="checkbox"/> Member States Public Bodies		N/A
N	<input type="checkbox"/> Third Countries Public Bodies		N/A
N	<input type="checkbox"/> United Nations		N/A
N	<input checked="" type="checkbox"/> Other International Organisation(s)		N/A
N	<input type="checkbox"/> Private Sector		N/A
N	<input checked="" type="checkbox"/> Member's fees		12
N	<input type="checkbox"/> Other (please specify): .....		N/A
N	Total	100%	N/A

Year	Source	Percentage (total for a given year must be equal to 100%)	Number of fee-paying members (only for source = Member's fees)
N – 1	<input type="checkbox"/> EU Commission		N/A
N – 1	<input type="checkbox"/> Member States Public Bodies		N/A
N – 1	<input type="checkbox"/> Third Countries Public Bodies		N/A
N – 1	<input type="checkbox"/> United Nations		N/A
N – 1	<input type="checkbox"/> Other International Organisation(s)		N/A
N – 1	<input type="checkbox"/> Private Sector		N/A
N – 1	<input type="checkbox"/> Member's fees		
N – 1	<input type="checkbox"/> Other (please specify): .....		N/A
N – 1	<b>Total</b>	<b>100%</b>	<b>N/A</b>
N – 2	<input type="checkbox"/> EU Commission		N/A
N – 2	<input type="checkbox"/> Member States Public Bodies		N/A
N – 2	<input type="checkbox"/> Third Countries Public Bodies		N/A
N – 2	<input type="checkbox"/> United Nations		N/A
N – 2	<input type="checkbox"/> Other International Organisation(s)		N/A
N – 2	<input type="checkbox"/> Private Sector		N/A
N – 2	<input type="checkbox"/> Member's fees		
N – 2	<input type="checkbox"/> Other (please specify): .....		N/A
N – 2	<b>Total</b>	<b>100%</b>	<b>N/A</b>

[Furthermore, where the grant requested exceeds EUR 500 000 (EUR 100 000 for an operating grant), please provide the references of the external audit report established by an approved auditor for the last financial year available. This obligation does not apply to international organisations nor to public bodies. To be inserted if the authorising officer, depending on his risk assessment, waive the requirement for the following categories: Nor does it apply to secondary and higher education establishments and beneficiaries who have accepted joint and several liabilities in the case of agreements with a number of beneficiaries]

Year	Name of approved auditor	Period of validity
2007	MRI Contadores (Praxity), Uuguay	From 01/12/2007 to 31/12/2007
2006	Tea Deloitte & Touch, Uruguay	From 01/12/2006 to 31/12/2006
2005	Tea Deloitte & Touch, Uruguay	From 01/12/2005 to 31/12/2005

**3.3.3. Number of staff (full-time equivalent) (please tick one option for each type of staff):**

Type of staff	Paid	Unpaid
HQ Staff: recruited and based in Headquarters (located in Developed Country)	<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A	<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A
Expat Staff: recruited in Headquarters (located in Developed Country) and based in Developing Country	<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A	<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A
Local staff: recruited and based in Developing Country	<input checked="" type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A	<input type="checkbox"/> < 10 <input type="checkbox"/> > 10 and < 50 <input type="checkbox"/> > 50 and < 100 <input type="checkbox"/> > 100 <input type="checkbox"/> N/A

**4. LIST OF THE MANAGEMENT BOARD/COMMITTEE OF YOUR ORGANISATION**

Name	Profession	Function	Country of Nationality	On the board since
Mr. Carlos Casasús	Administrator	President of the Board	Mexico	2003
Ms. Ida Holz	Engineer	General Secretary	Uruguay	2003
Mr. Luis Furlán	Engineer	Vice President	Guatemala	2005
Mr. Joaquín Guerrero	Engineer	Treasurer	Peru	2005
Mr. Nelson Simoes	Engineer	Director	Brazil	2003



### III. PARTNERS OF THE APPLICANT PARTICIPATING IN THE ACTION

#### 1. DESCRIPTION OF THE PARTNERS

This section must be completed **for each partner organisation** within the meaning of section 2.1.2 of the Guidelines for Applicants. Any associates as defined in the same section need not be mentioned. You must make as many copies of this table as necessary to create entries for more partners.

	CEDIA
<b>EuropeAid ID number:</b> <sup>14</sup>	EC-2008-ASZ-050681656
<b>Full legal name</b>	Consortio Ecuatoriano para el Desarrollo de Internet Avanzado

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	10 de enero del 2003
<b>Legal status</b> <sup>15</sup>	Non for Profit Private organization
<b>Official address of Registration</b> <sup>16</sup>	Ciudad de Guayaquil, Provincia del Guayas , Escuela Superior Politecnica del Litoral, km 30,5 via perimetral.
<b>Country of Registration</b> <sup>17/</sup> <b>Nationality</b> <sup>18</sup>	Ecuador /Ecuatoriana
<b>Contact person</b>	Carlos Monsalve
<b>Telephone number:</b> country code + city code + number	(593) (4) 2269296 ext. 1013
<b>Fax number:</b> country code + city code + number	(593-4) 2269250
<b>E-mail address</b>	monsalve@espol.edu.ec
<b>Number of employees</b>	5

<sup>14</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>15</sup> E.g. non profit making, governmental body, international organisation

<sup>16</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>17</sup> For organisations

<sup>18</sup> For individuals

<b>Other relevant resources</b>	
<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Fundación Consorcio Ecuatoriano para el Desarrollo de Internet Avanzado (CEDIA) is the Ecuadorian NREN, therefore this organization has the experience of dealing with different research and education institutions that are willing to use different kind of information and communication technologies for achieving their goals. We have coordinated different projects with our members. We have also represented them before national and international organizations. CEDIA provides its members a national interconnection network, and the coordination of different activities to promote their cooperation and exploitation of this resource CEDIA was also part of the project ALICE
<b>History of cooperation with the applicant</b>	As a Latin American NREN, CEDIA is a member of CLARA and its network is connected to RedCLARA since January 2006. During these years, CEDIA has cooperated in different projects led by CLARA. All of these projects have had a regional scope, and are related to different areas such as: telemedicine, regional strategic planning, and development of e-science in our region. The role of CEDIA in all these projects has been to lead and to coordinate actions in Ecuador
<b>Role and involvement in preparing the proposed action</b>	The proposed action has been discussed in different CLARA meetings and assemblies. CEDIA has participated in those discussions, and also has reviewed and cooperated with its opinion.
<b>Role and involvement in implementing the proposed action</b>	As one of the Latin American NRENS, CEDIA is committed to contribute to the fulfilment of the goals of the project. CEDIA will coordinate all the actions to keep Ecuador included as part of RedCLARA

	CENIT
<b>EuropeAid ID number:</b> <sup>19</sup>	VE-2008-FRH-0606295578
<b>Full legal name</b>	CENTRO NACIONAL DE INNOVACION TECNOLOGICA

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	13/06/2008
<b>Legal status</b> <sup>20</sup>	Organismo De Derecho Público
<b>Official address of Registration</b> <sup>21</sup>	AV. UNIVERSIDAD, ESQUINA EL CHORRO, TORRE MINISTERIAL, PISO 11. CARACAS, REPÚBLICA BOLIVARIANA DE VENEZUELA
<b>Country of Registration</b> <sup>22/</sup> <b>Nationality</b> <sup>23</sup>	Venezuela
<b>Contact person</b>	Amely Caraza
<b>Telephone number:</b> country code + city code + number	582127718501
<b>Fax number:</b> country code + city code + number	582122340776
<b>E-mail address</b>	ACARAZA@CENIT.GOB.VE
<b>Number of employees</b>	> 100
<b>Other relevant resources</b>	

<sup>19</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>20</sup> E.g. non profit making, governmental body, international organisation

<sup>21</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>22</sup> For organisations

<sup>23</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Participación en proyecto ALICE como socio de CLARA
<b>History of cooperation with the applicant</b>	Participación en proyecto ALICE como socio de CLARA
<b>Role and involvement in preparing the proposed action</b>	Work in the Editorial Committee and Workpackages preparation
<b>Role and involvement in implementing the proposed action</b>	Partner

	CNC/UNA
<b>EuropeAid ID number:</b> <sup>24</sup>	
<b>Full legal name</b>	Universidad Nacional de Asunción

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	
<b>Legal status</b> <sup>25</sup>	Not for Profit Organization Public University
<b>Official address of Registration</b> <sup>26</sup>	Campus Universidad de Asunción
<b>Country of Registration</b> <sup>27/</sup> <b>Nationality</b> <sup>28</sup>	Paraguay
<b>Contact person</b>	Jorge Cabañas
<b>Telephone number:</b> country code + city code + number	(595) 21 585550
<b>Fax number:</b> country code + city code + number	(595) 21 585554
<b>E-mail address</b>	director@cnc.una.py
<b>Number of employees</b>	
<b>Other relevant resources</b>	National University

<sup>24</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>25</sup> E.g. non profit making, governmental body, international organisation

<sup>26</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>27</sup> For organisations

<sup>28</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Member of the ALICE Project
<b>History of cooperation with the applicant</b>	Member of CLARA since 2003
<b>Role and involvement in preparing the proposed action</b>	Involved since June 2008. Check and review of the proposal.
<b>Role and involvement in implementing the proposed action</b>	Will participate in WP8, Regional Inclusion

	CUDI
<b>EuropeAid ID number:</b> <sup>29</sup>	MX-2008-CED-0506287178
<b>Full legal name</b>	CORPORACIÓN UNIVERSITARIA PARA EL DESARROLLO DE INTERNET AC

Partners that are registered in PADOR do not need to fill in the rest of this section which is marked in grey.

<b>Date of Registration</b>	12/05/1999
<b>Legal status</b> <sup>30</sup>	Asociacion Civil (non profit corporation)
<b>Official address of Registration</b> <sup>31</sup>	Parral #32, Colonia Condesa, Delegación Cuauhtemoc,CP 06140, Distrito Federal Mexico City, Mexico
<b>Country of Registration</b> <sup>32/</sup> <b>Nationality</b> <sup>33</sup>	México
<b>Contact person</b>	Carlos Casasús
<b>Telephone number: country code + city code + number</b>	+ 52 55 52 11 30 60
<b>Fax number: country code + city code + number</b>	+ 52 55 52 11 51 99
<b>E-mail address</b>	ccasasus@cudi.edu.mx
<b>Number of employees</b>	11
<b>Other relevant resources</b>	

<sup>29</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>30</sup> E.g. non profit making, governmental body, international organisation

<sup>31</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>32</sup> For organisations

<sup>33</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Member of the Alice project
<b>History of cooperation with the applicant</b>	Member since the start of the Alice project in 2003
<b>Role and involvement in preparing the proposed action</b>	M Work in the Editorial Committee and Workpackages preparation.
<b>Role and involvement in implementing the proposed action</b>	Member of the project and in several workpackages



	INNOVA-T
<b>EuropeAid ID number:</b> <sup>34</sup>	AR-2008-FZK-0706297534
<b>Full legal name</b>	Fundación INNOVA-T

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	March 1994
<b>Legal status</b> <sup>35</sup>	Not for Profit Organization (Foundation)
<b>Official address of Registration</b> <sup>36</sup>	Esmeralda 339, 2do cuerpo, Tercer piso, Buenos Aires, Argentina
<b>Country of Registration</b> <sup>37/</sup> <b>Nationality</b> <sup>38</sup>	Argentinergentina
<b>Contact person</b>	Aníbal Gattone
<b>Telephone number:</b> country code + city code + number	+54 11 43228488 ext 309
<b>Fax number:</b> country code + city code + number	+54-11 43228488
<b>E-mail address</b>	gattone@innova-red.net
<b>Number of employees</b>	6
<b>Other relevant resources</b>	

<sup>34</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>35</sup> E.g. non profit making, governmental body, international organisation

<sup>36</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>37</sup> For organisations

<sup>38</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Member of the Alice project
<b>History of cooperation with the applicant</b>	Member of the Alice project and CLARA since 2003
<b>Role and involvement in preparing the proposed action</b>	Revision and recommendations
<b>Role and involvement in implementing the proposed action</b>	As a full member of CLARA is responsible for the implementation in Argentina and links to neighbour countries.

	RAAP
<b>EuropeAid ID number:</b> <sup>39</sup>	PE-2008-DFG-1106327319
<b>Full legal name</b>	RED ACADÉMICA PERUANA

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	June 2003
<b>Legal status</b> <sup>40</sup>	Non profit organisation
<b>Official address of Registration</b> <sup>41</sup>	Av. Universitaria cuadra 18 s/n San Miguel
<b>Country of Registration</b> <sup>42/</sup> <b>Nationality</b> <sup>43</sup>	Perú
<b>Contact person</b>	Joaquín Guerrero
<b>Telephone number:</b> country code + city code + number	511-6262025
<b>Fax number:</b> country code + city code + number	511-6262467
<b>E-mail address</b>	jguerre@pucp.edu.pe
<b>Number of employees</b>	4,000
<b>Other relevant resources</b>	Universitary Campus

<sup>39</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>40</sup> E.g. non profit making, governmental body, international organisation

<sup>41</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>42</sup> For organisations

<sup>43</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	RAAP has been part from the beginning in project ALICE and has played a leading role building the Peruvian NREN
<b>History of cooperation with the applicant</b>	RAAP is a founder member of CLARA
<b>Role and involvement in preparing the proposed action</b>	RAAP is participating, together with the other members of CLARA, in preparing the Grant application form for the proposal “Extending and Strengthening RedCLARA as e-Infrastructure for Collaborative Research and Support to Development (ALICE2)”
<b>Role and involvement in implementing the proposed action</b>	As a member of CLARA, RAAP is part of the action proposed. As the Peruvian NREN we seek to interconnect universities and research local institutions and bring them connectivity with the world through CLARA.

	RAGIE
<b>EuropeAid ID number:</b> <sup>44</sup>	GT-2008-CIH-0506287345
<b>Full legal name</b>	Red Avanzada Guatemalteca para la Investigación y Educación

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	February 18, 2004
<b>Legal status</b> <sup>45</sup>	Non-profit civil association
<b>Official address of Registration</b> <sup>46</sup>	11 Avenida 32-35, zona 5 Guatemala 01005, Guatemala
<b>Country of Registration</b> <sup>47/</sup> <b>Nationality</b> <sup>48</sup>	Guatemala
<b>Contact person</b>	Luis R. FUrlán
<b>Telephone number:</b> country code + city code + number	+502 2368 8566
<b>Fax number:</b> country code + city code + number	+502 2369 3452
<b>E-mail address</b>	furlan@uvg.edu.gt
<b>Number of employees</b>	one part time
<b>Other relevant resources</b>	

<sup>44</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>45</sup> E.g. non profit making, governmental body, international organisation

<sup>46</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>47</sup> For organisations

<sup>48</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	<b>Partner in the ALICE project</b>
<b>History of cooperation with the applicant</b>	RAGIE was formed as a result of the ALICE project. We have participated with CLARA in other projects funded by IADB and OAS
<b>Role and involvement in preparing the proposed action</b>	Package leader for WP 6 – Applications Promotion
<b>Role and involvement in implementing the proposed action</b>	Coordination as member of CLARA’s Board and participant as a partner in the project

	RAICES
<b>EuropeAid ID number:</b> <sup>49</sup>	SV-2008-GHA-0906306303
<b>Full legal name</b>	Red Avanzada de Investigación, Ciencia y Educación Salvadoreña (RAICES)

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	January 29, 2004
<b>Legal status</b> <sup>50</sup>	Private Not for Profit
<b>Official address of Registration</b> <sup>51</sup>	Universidad Centroamericana José Simeón Cañas Bulevar Los Próceres, Antiguo Cuscatlán, La Libertad, El Salvador
<b>Country of Registration</b> <sup>52/</sup> <b>Nationality</b> <sup>53</sup>	El Salvador/Salvadorean
<b>Contact person</b>	Rafael Ibarra
<b>Telephone number:</b> country code + city code + number	(503) 22106636
<b>Fax number:</b> country code + city code + number	(503) 2210-6636
<b>E-mail address</b>	ribarra@di.uca.edu.sv
<b>Number of employees</b>	7 part time employees
<b>Other relevant resources</b>	

<sup>49</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>50</sup> E.g. non profit making, governmental body, international organisation

<sup>51</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>52</sup> For organisations

<sup>53</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Participant in ALICE project, as part of Red CLARA
<b>History of cooperation with the applicant</b>	Participant in ALICE project, as part of Red CLARA
<b>Role and involvement in preparing the proposed action</b>	Colaboration in discussing the whole and writing parts of the proposal
<b>Role and involvement in implementing the proposed action</b>	Our National Research and Education Network (NREN) will be one of the active beneficiaries



	RAU
<b>EuropeAid ID number:</b> <sup>54</sup>	UY-2007-DUQ-2711446324
<b>Full legal name</b>	Universidad de la Republica

Partners that are registered in PADOR do not need to fill in the rest of this section which is marked in grey.

<b>Date of Registration</b>	1850
<b>Legal status</b> <sup>55</sup>	State University
<b>Official address of Registration</b> <sup>56</sup>	18 de julio 1968 Montevideo 11200 Uruguay
<b>Country of Registration</b> <sup>57</sup> / <b>Nationality</b> <sup>58</sup>	Uruguay / Uruguay
<b>Contact person</b>	Ida Holz
<b>Telephone number:</b> country code + city code + number	+5982 4083901
<b>Fax number:</b> country code + city code + number	+5982 4027242
<b>E-mail address</b>	holz@seciu.edu.uy
<b>Number of employees</b>	12,000
<b>Other relevant resources</b>	80,000 students

<sup>54</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>55</sup> E.g. non profit making, governmental body, international organisation

<sup>56</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>57</sup> For organisations

<sup>58</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	The Universidad de la Republica has been partner and coordinator of several Academic Projects jointly with several international organizations, including the European Union.
<b>History of cooperation with the applicant</b>	Partner of the ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Work in the Editorial Committee and Workpackages preparation
<b>Role and involvement in implementing the proposed action</b>	Partner and workpackage member

	REDCYT
<b>EuropeAid ID number:</b> <sup>59</sup>	
<b>Full legal name</b>	Red Científica y Tecnológica de Centros de Investigación y Universidades

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	2/02/2006
<b>Legal status</b> <sup>60</sup>	Not for Profit Organization
<b>Official address of Registration</b> <sup>61</sup>	Campus Universidad de Panamá
<b>Country of Registration</b> <sup>62/</sup> <b>Nationality</b> <sup>63</sup>	Panamá
<b>Contact person</b>	Máximo Escobar
<b>Telephone number:</b> country code + city code + number	(507) 6672-0150
<b>Fax number:</b> country code + city code + number	(507) 517-0023
<b>E-mail address</b>	mescobar@ancon.up.ac.pa
<b>Number of employees</b>	3 Part time
<b>Other relevant resources</b>	

<sup>59</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>60</sup> E.g. non profit making, governmental body, international organisation

<sup>61</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>62</sup> For organisations

<sup>63</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Member of the ALICE Project
<b>History of cooperation with the applicant</b>	Member of CLARA since 2003
<b>Role and involvement in preparing the proposed action</b>	Involved in all the preparation
<b>Role and involvement in implementing the proposed action</b>	Will participate in WP6, Applications Promotion

	RENATA
<b>EuropeAid ID number:</b> <sup>64</sup>	N/A There's some problem because we haven't received yet an ID number. A request has been sent to the applications address in the web form.
<b>Full legal name</b>	Corporación Red Nacional Académica de Tecnología Avanzada RENATA

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	June 26, 2008
<b>Legal status</b> <sup>65</sup>	Non for profit organization
<b>Official address of Registration</b> <sup>66</sup>	Kra. 7 Bbis 132-28
<b>Country of Registration</b> <sup>67</sup> / <b>Nationality</b> <sup>68</sup>	Bogotá
<b>Contact person</b>	Martha Giraldo
<b>Telephone number:</b> country code + city code + number	57-1-6258480
<b>Fax number:</b> country code + city code + number	57-1-6258481
<b>E-mail address</b>	migiraldo@renata.edu.co
<b>Number of employees</b>	5
<b>Other relevant resources</b>	RENATA is an organization of 3 government institutions and 7 Regional Networks: RUMBO, RUMBA, RADAR, RUP, UNRED, RUANA and RUAV; 70 research and education institutions are members of RENATA through these regional networks.

<sup>64</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>65</sup> E.g. non profit making, governmental body, international organisation

<sup>66</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>67</sup> For organisations

<sup>68</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Although RENATA was borned as an institution last year, RENATA has been doing a lot of efforts to cooperate with European Projects and good results have come out of this work. Participation in EELA2 is the most important one.
<b>History of cooperation with the applicant</b>	Member of the ALICE Project and of CLARA
<b>Role and involvement in preparing the proposed action</b>	RENATA, as a member of CLARA, has participated actively in the development of the ALICE2 project proposal.
<b>Role and involvement in implementing the proposed action</b>	RENATA is participating in two working groups: WP7: Sustainability and WP6: Applications Promotion.

	REUNA
<b>EuropeAid ID number:</b> <sup>69</sup>	60001557042
<b>Full legal name</b>	Red Universitaria Nacional

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	13/08/1994
<b>Legal status</b> <sup>70</sup>	Not for Profit Association
<b>Official address of Registration</b> <sup>71</sup>	Canada 239, Providencia, Santiafo
<b>Country of Registration</b> <sup>72/</sup> <b>Nationality</b> <sup>73</sup>	Chile
<b>Contact person</b>	Paola Arellano
<b>Telephone number:</b> country code + city code + number	(56-2) 337 0340
<b>Fax number:</b> country code + city code + number	(56-2) 204 0865
<b>E-mail address</b>	secdirec@reuna.cl
<b>Number of employees</b>	21
<b>Other relevant resources</b>	REUNA has a National Research and Academic Network, this network connects 17 institutions ( <a href="http://www.reuna.cl">www.reuna.cl</a> ) REUNA is a partner of CLARA.

<sup>69</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>70</sup> E.g. non profit making, governmental body, international organisation

<sup>71</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>72</sup> For organisations

<sup>73</sup> For individuals

<p><b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b></p>	<p>REUNA has been part of different international projects. In the case of European projects, REUNA is a partner in:</p> <ul style="list-style-type: none"> <li>• EELA E-Infrastructure Shared between Europe and Latina America</li> <li>• RINGrid Remote Instrumentation on Next Generation Networks</li> <li>• EELA-2 E-Infrastructure Shared between Europe and Latina America</li> <li>• ALFA-CID Intercultural Community for the Development of Learning Objects</li> <li>• EVALSO Enabling Virtual Access to Latin American Southern Observatories</li> <li>• EXPRESS, as the supporting organization of U. de Concepcion.</li> </ul>
<p><b>History of cooperation with the applicant</b></p>	<p>REUNA has been one of the drivers of the ALICE Project, it is a member of CLARA and supports different initiatives and projects of this institution.</p>
<p><b>Role and involvement in preparing the proposed action</b></p>	<p>REUNA, as a member of CLARA, has had an active participation in the development of the ALICE2 Proposal.</p> <p>REUNA has participated in all work meetings</p>
<p><b>Role and involvement in implementing the proposed action</b></p>	<p>Due to the experience gained as one of the oldest LA NRENs. REUNA is involved in all of the ALICE WP, bearing its experience, has committed its active participation in five specific WP: Dissemination, Marketing, Networking Technologies, Applications Promotion and Inclusion.</p>



	RNP
<b>EuropeAid ID number:</b> <sup>74</sup>	LEF ID 6000151240
<b>Full legal name</b>	

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	
<b>Legal status</b> <sup>75</sup>	Private Not for Profit
<b>Official address of Registration</b> <sup>76</sup>	
<b>Country of Registration</b> <sup>77/</sup> <b>Nationality</b> <sup>78</sup>	Brazilian/Brazil
<b>Contact person</b>	Nelson Simões
<b>Telephone number:</b> country code + city code + number	55 613321 0635
<b>Fax number:</b> country code + city code + number	55 21 2279-3731
<b>E-mail address</b>	nelson@na-df.rnp.br
<b>Number of employees</b>	
<b>Other relevant resources</b>	

<sup>74</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>75</sup> E.g. non profit making, governmental body, international organisation

<sup>76</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>77</sup> For organisations

<sup>78</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	RNP has played a similar role at a national level in Brazil since 1989. In particular, since 1997, RNP has been involved in setting up and operating networks based on dark fibre infrastructure.
<b>History of cooperation with the applicant</b>	RNP was a participant in the ALICE project.
<b>Role and involvement in preparing the proposed action</b>	Two staff members of RNP are part of the committee which is preparing the current proposal.
<b>Role and involvement in implementing the proposed action</b>	RNP, as the operator of the largest NREN in the region, fully supports this initiative and will participate in every possible way to make it a success.

	DANTE
<b>EuropeAid ID number:</b> <sup>79</sup>	
<b>Full legal name</b>	Delivery of Advanced Network Technology to Europe Ltd

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	30-03-1993
<b>Legal status</b> <sup>80</sup>	Not for Profit Company
<b>Official address of Registration</b> <sup>81</sup>	3 Worcester Street, Oxford OX1 2PZ
<b>Country of Registration</b> <sup>82/</sup> <b>Nationality</b> <sup>83</sup>	United Kingdom
<b>Contact person</b>	Tom Fryer
<b>Telephone number:</b> country code + city code + number	+44 (0)1223 371 300
<b>Fax number:</b> country code + city code + number	+44 (0)1223 371 371
<b>E-mail address</b>	<a href="mailto:tomfryer@dante.org.uk">tomfryer@dante.org.uk</a>
<b>Number of employees</b>	35
<b>Other relevant resources</b>	

<sup>79</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>80</sup> E.g. non profit making, governmental body, international organisation

<sup>81</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>82</sup> For organisations

<sup>83</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	Leader of the ALICE Project
<b>History of cooperation with the applicant</b>	ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Review of the proposal
<b>Role and involvement in implementing the proposed action</b>	Administrative and technical advice.

<b>EuropeAid ID number:</b> <sup>84</sup>	
<b>Full legal name</b>	Fundação para a Computação Científica Nacional, FCCN

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	1987
<b>Legal status</b> <sup>85</sup>	Non-profit institution
<b>Official address of Registration</b> <sup>86</sup>	Av. do Brasil, 101 1700-066 Lisboa Portugal
<b>Country of Registration</b> <sup>87/</sup> <b>Nationality</b> <sup>88</sup>	Portugal/ Portuguese
<b>Contact person</b>	Pedro Veiga
<b>Telephone number:</b> country code + city code + number	+351 21 844 01 00
<b>Fax number:</b> country code + city code + number	+351 21 847 21 67
<b>E-mail address</b>	pedro.veiga@fccn.pt
<b>Number of employees</b>	86 (permanent and non permanent)
<b>Other relevant resources</b>	

<sup>84</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>85</sup> E.g. non profit making, governmental body, international organisation

<sup>86</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>87</sup> For organisations

<sup>88</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	ALICE Project
<b>History of cooperation with the applicant</b>	ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Review of the proposal
<b>Role and involvement in implementing the proposed action</b>	Technical support services

<b>EuropeAid ID number:</b> <sup>89</sup>	
<b>Full legal name</b>	Entidad Pública Empresarial Red.es

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	29/12/2000
<b>Legal status</b> <sup>90</sup>	Public Company
<b>Official address of Registration</b> <sup>91</sup>	Plaza Manuel Gómez Moreno s/n. Edificio Bronce. Madrid 28020 Spain
<b>Country of Registration</b> <sup>92/</sup> <b>Nationality</b> <sup>93</sup>	Spain/ Spanish
<b>Contact person</b>	Tomás de Miguel
<b>Telephone number:</b> country code + city code + number	+34 91 212-7620/25
<b>Fax number:</b> country code + city code + number	+34 91 556-8864
<b>E-mail address</b>	tomas.demiguel@rediris.es
<b>Number of employees</b>	200
<b>Other relevant resources</b>	

<sup>89</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>90</sup> E.g. non profit making, governmental body, international organisation

<sup>91</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>92</sup> For organisations

<sup>93</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	ALICE Project
<b>History of cooperation with the applicant</b>	ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Review of the proposal
<b>Role and involvement in implementing the proposed action</b>	Technical support services



<b>EuropeAid ID number:</b> <sup>94</sup>	
<b>Full legal name</b>	Consortium GARR

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	
<b>Legal status</b> <sup>95</sup>	Association of Public Organisations
<b>Official address of Registration</b> <sup>96</sup>	Consortium GARR Viale Palmiro Togliatti, 1625 00155 Roma
<b>Country of Registration</b> <sup>97/</sup> <b>Nationality</b> <sup>98</sup>	Italy/ Italian
<b>Contact person</b>	Enzo Valente
<b>Telephone number:</b> country code + city code + number	+39 0643361441
<b>Fax number:</b> country code + city code + number	+39 0643361444
<b>E-mail address</b>	enzo.valente@garr.it
<b>Number of employees</b>	27
<b>Other relevant resources</b>	

<sup>94</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>95</sup> E.g. non profit making, governmental body, international organisation

<sup>96</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>97</sup> For organisations

<sup>98</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	ALICE Project
<b>History of cooperation with the applicant</b>	ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Review of the proposal
<b>Role and involvement in implementing the proposed action</b>	Technical support services

<b>EuropeAid ID number:</b> <sup>99</sup>	
<b>Full legal name</b>	RENATER

Partners that are registered in PADOR do not need to fill in the rest of this section which is **marked in grey**.

<b>Date of Registration</b>	
<b>Legal status</b> <sup>100</sup>	Groupement D'Interet public
<b>Official address of Registration</b> <sup>101</sup>	151 Boulevard de l'Hopital 75013 Paris France
<b>Country of Registration</b> <sup>102/</sup> <b>Nationality</b> <sup>103</sup>	France/ French
<b>Contact person</b>	Dany Vandromme
<b>Telephone number:</b> country code + city code + number	+33 153 94 2030
<b>Fax number:</b> country code + city code + number	+33 153 94 2031
<b>E-mail address</b>	<a href="mailto:Dany.Vandromme@renater.fr">Dany.Vandromme@renater.fr</a>
<b>Number of employees</b>	25
<b>Other relevant resources</b>	

<sup>99</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>100</sup> E.g. non profit making, governmental body, international organisation

<sup>101</sup> If not in one of the countries listed in section 2.1.1 of the Guidelines, please justify its location

<sup>102</sup> For organisations

<sup>103</sup> For individuals

<b>Experience of similar actions, in relation to the role in the implementation of the proposed action</b>	ALICE Project
<b>History of cooperation with the applicant</b>	ALICE Project
<b>Role and involvement in preparing the proposed action</b>	Review of the proposal
<b>Role and involvement in implementing the proposed action</b>	Technical support services

## 2. PARTNERSHIP STATEMENT

A partnership is a relationship of substance between two or more organisations involving shared responsibilities in undertaking the action funded by the <indicate the name of the Contracting Authority> (Contracting Authority). To ensure that the action runs smoothly, the Contracting Authority requires all partners to acknowledge this by agreeing to the principles of good partnership practice set out below.

1. All partners must have read the application form and understood what their role in the action will be before the application is submitted to the Contracting Authority.
2. All partners must have read the standard grant contract and understood what their respective obligations under the contract will be if the grant is awarded. They authorise the lead applicant to sign the contract with the Contracting Authority and represent them in all dealings with the Contracting Authority in the context of the action's implementation.
3. The applicant must consult with his partners regularly and keep them fully informed of the progress of the action.
4. All partners must receive copies of the reports - narrative and financial - made to the Contracting Authority.
5. Proposals for substantial changes to the action (e.g. activities, partners, etc.) should be agreed by the partners before being submitted to the Contracting Authority. Where no such agreement can be reached, the applicant must indicate this when submitting changes for approval to the Contracting Authority.
6. Where the Beneficiary does not have his headquarters in the country where the action is implemented, the partners must agree before the end of the action, on an equitable distribution of equipment, vehicles and supplies for the action purchased with the EU grant among local partners or the final beneficiaries of the action.

I have read and approved the contents of the proposal submitted to the Contracting Authority. I undertake to comply with the principles of good partnership practice.

Name:	
Organisation:	
Position:	
Signature:	
Date and place:	

## IV. ASSOCIATES OF THE APPLICANT PARTICIPATING IN THE ACTION

This section must be completed for each associated organisation within the meaning of section 2.1.2 of the Guidelines for Applicants. You must make as many copies of this table as necessary to create entries for more associates.

	Associate 1
<b>Full legal name</b>	
<b>EuropeAid ID number:</b> <sup>104</sup>	
<b>Country of Registration</b>	
<b>Legal status</b> <sup>105</sup>	
<b>Official address</b>	
<b>Contact person</b>	
<b>Telephone number:</b> country code + city code + number	
<b>Fax number:</b> country code + city code + number	
<b>E-mail address</b>	
<b>Number of employees</b>	
<b>Other relevant resources</b>	
<b>Experience of similar actions, in relation to role in the implementation of the proposed action</b>	
<b>History of cooperation with the applicant</b>	
<b>Role and involvement in preparing the proposed action</b>	
<b>Role and involvement in implementing the proposed action</b>	

<sup>104</sup> This number is available to an organisation which registers its data in PADOR. For more information and to register, please visit <http://ec.europa.eu/europeaid/onlineservices/pador>

<sup>105</sup> E.g. non profit making, governmental body, international organisation

## V. CHECKLIST

<PUBLICATION REFERENCE + TITLE OF THE CALL + BUDGET LINE>

<b>ADMINISTRATIVE DATA</b>	
<b>Name of the Applicant</b>	CLARA
<b>EuropeAid ID number</b>	
<b>Nationality<sup>106</sup>/Country<sup>107</sup> and date of registration</b>	Uruguay
<b>Legal Entity File number<sup>108</sup></b>	6000157284
<b>Legal status<sup>109</sup></b>	Not for Profit Private Organization
<b>Partner 1</b>	Name/EuropeAid ID number: CEDIA Nationality/Country of registration: Ecuador Legal status: Not for Profit Organization
<b>Partner 2</b>	Name/EuropeAid ID number: CUDI Nationality/Country of registration: Mexico Legal status: Not for Profit Organization

<sup>106</sup> For individuals

<sup>107</sup> For organisations

<sup>108</sup> If the applicant has already signed a contract with the European Commission

<sup>109</sup> E.g. non profit making, governmental body, international organisation...

<b>Partner 3</b>	Name/EuropeAid ID number: CENIT Nationality/Country of registration: Venezuela Legal status: Public Not for Profit
<b>Partner 4</b>	Name/EuropeAid ID number: CNC/UNA Nationality/Country of registration: Paraguay Legal status: Public Not for Profit
<b>Partner 5</b>	Name/EuropeAid ID number: Innova-T Nationality/Country of registration: Argentina Legal status: Private Not for Profit
<b>Partner 6</b>	Name/EuropeAid ID number: RAAP Nationality/Country of registration: Peru Legal status: Private Not for Profit
<b>Partner 7</b>	Name/EuropeAid ID number: RAGIE Nationality/Country of registration: Guatemala Legal status: Private Not for Profit
<b>Partner 8</b>	Name/EuropeAid ID number: RAICES Nationality/Country of registration: El Salvador Legal status: Private Not for Profit



<b>Partner 9</b>	Name/EuropeAid ID number: RAU Nationality/Country of registration: Uruguay Legal status: Private Not for Profit
<b>Partner 10</b>	Name/EuropeAid ID number: REDCYT Nationality/Country of registration: Panama Legal status: Private Not for Profit
<b>Partner 11</b>	Name/EuropeAid ID number: RENATA Nationality/Country of registration: Colombia Legal status: Private Not for Profit
<b>Partner 12</b>	Name/EuropeAid ID number: REUNA Nationality/Country of registration: Chile Legal status:
<b>Partner 13</b>	Name/EuropeAid ID number: RNP Nationality/Country of registration: Brazil Legal status: Private Not for Profit
<b>Partner 14</b>	Name/EuropeAid ID number: DANTE Nationality/Country of registration: United Kingdom Legal status: Private Not for Profit

<b>Partner 15</b>	Name/EuropeAid ID number: GARR Nationality/Country of registration: Italy Legal status: Private Not for Profit
<b>Partner 16</b>	Name/EuropeAid ID number: Renater Nationality/Country of registration: France Legal status: Private Not for Profit
<b>Partner 17</b>	Name/EuropeAid ID number: RedIRIS Nationality/Country of registration: Spain Legal status: Private Not for Profit
<b>Partner 18</b>	Name/EuropeAid ID number: FNCC Nationality/Country of registration: Portugal Legal status: Private Not for Profit

<b>BEFORE SENDING YOUR PROPOSAL, PLEASE CHECK THAT EACH OF THE FOLLOWING COMPONENTS IS COMPLETE AND RESPECTS THE FOLLOWING CRITERIA :</b>	<b>To be filled in by the applicant</b>	
<b>Title of the Proposal:</b>	<b>Yes</b>	<b>No</b>
1. The correct grant application form, published for this call for proposals, has been used	√	
2. The proposal is typed and is <in English, French, Portuguese or in Spanish>	√	
3. One original and 3 are included	√	
4. An electronic version of the proposal (CD-Rom) is enclosed	√	
5. Each partner has completed and signed a partnership statement and the statements are included.	√	
6. The budget is presented in the format requested, is expressed in € and is enclosed	√	
7. The logical framework has been completed and is enclosed	√	
8. The duration of the action is equal to or lower than <X months> (the maximum allowed)	N/A	
9. The duration of the action is equal to or higher than <X months> (the minimum allowed)	N/A	
10. The requested contribution is equal to or higher than <X EURO/other currency> (the minimum allowed)	N/A	
11. The requested contribution is equal to or lower than <X EURO/other currency> (the maximum allowed)	N/A	
12. The requested contribution is equal to or higher than <X %>of the total eligible costs (minimum percentage required)	N/A	
13. The requested contribution is equal to or lower than <X %> of the total eligible costs (maximum percentage allowed)	N/A	
14. The Declaration by the applicant has been filled in and has been signed	√	

## VI. DECLARATION BY THE APPLICANT

The applicant, represented by the undersigned, being the authorised signatory of the applicant, including every partner, hereby declares that


- the applicant has the sources of financing and professional competence and qualifications specified in section 2 of the Guidelines for Applicants;
- the applicant undertakes to comply with the obligations foreseen in the partnership statement of the grant application form and with the principles of good partnership practice;
- the applicant is directly responsible for the preparation, management and implementation of the action with its partners and is not acting as an intermediary;
- the applicant and its partners are not in any of the situations excluding them from participating in contracts which are listed in Section 2.3.3 of the Practical Guide to contract procedures for EC external actions (available from the following Internet address: [http://ec.europa.eu/europeaid/work/procedures/index\\_en.htm](http://ec.europa.eu/europeaid/work/procedures/index_en.htm)). Furthermore, it is recognised and accepted that if we participate in spite of being in any of these situations, we may be excluded from other procedures in accordance with section 2.3.5 of the Practical Guide;
- if selected, the applicant is in a position to deliver immediately, upon request, the supporting documents stipulated under section 2.4 of the Guidelines for Applicants.;
- the applicant and each partner (if any) are eligible in accordance with the criteria set out under sections 2.1.1 and 2.1.2 of the Guidelines for Applicants;
- if recommended to be awarded a grant, the applicant accepts the contractual conditions as laid down in the Standard Contract annexed to the Guidelines for Applicants (annex F);
- the applicant and its partners are aware that, for the purposes of safeguarding the financial interests of the Communities, their personal data may be transferred to internal audit services, to the European Court of Auditors, to the Financial Irregularities Panel or to the European Anti-Fraud Office.

The following grant applications have been submitted (or are about to be submitted) to the European Institutions, the European Development Fund and the EU Member States in the current year:

- <list only actions in the same field as this proposal>

The applicant is fully aware of the obligation to inform without delay the Contracting Authority to which this application is submitted if the same application for funding made to other European Commission departments or Community institutions has been approved by them after the submission of this grant application.

Signed on behalf of the applicant

<b>Name</b>	<b>Florencio I. Utreras</b>
<b>Signature</b>	
<b>Position</b>	<b>Executive Director</b>
<b>Date</b>	<b>October 22, 2008</b>

**VII. ASSESSMENT GRID**  
(to be used by the Contracting Authority)

	YES	NO
<b>STEP 1: OPENING SESSION AND ADMINISTRATIVE CHECK</b>		
1. The Deadline has been respected		
2. The Application form satisfied all the criteria mentioned in the Checklist (Section V of Part B of the Grant application form).		
The administrative verification has been conducted by: Date:		
<b>DECISION 1:</b> The Committee has recommended the Concept Note for Evaluation after having passed the Administrative check.		
<b>STEP 2 : EVALUATION OF THE CONCEPT NOTE</b>		
<b>DECISION 2:</b> The Committee has approved the Concept Note and decided to proceed with the evaluation of the full proposal after having pre-selected the best Concept Notes.		
The evaluation of the Concept Note has been conducted by: Date:		
<b>STEP 3: EVALUATION OF THE FULL APPLICATION FORM</b>		
<b>DECISION 3:</b> A. The Committee has recommended the proposal for Eligibility verification after having been provisionally selected within the top ranked scored proposals within the available financial envelope.		
B. The Committee has recommended the proposal for Eligibility verification after having been put on the reserve list according to the top ranked scored proposals		
The verification of the proposal has been conducted by: Date:		
<b>STEP 4: ELIGIBILITY VERIFICATION</b>		
3. The supporting documents listed hereunder, submitted according to the Guidelines (Section 2.4), satisfied all the eligibility criteria of the applicant and its partner(s) (if any)		
a. The applicant's statutes		
b. The statutes or articles of association of <u>all partners</u>		
c. The applicant's external audit report (if applicable)		
<to be inserted when the Contracting Authority is the European Commission> d. The Legal Entity File (see annex D of the Guidelines for Applicants) is duly completed and signed by the applicant and is accompanied by the justifying documents requested.		
<to be inserted when the Contracting Authority is the European Commission> e. A Financial Identification form (see annex E of the Guidelines for Applicants).		
f. Copy of the applicant's latest accounts.		
The assessment of the eligibility has been conducted by: Date:		
<b>DECISION 4:</b> The Committee has selected the proposal for funding after having verified its eligibility according to the criteria stipulated in the Guidelines.		