DeCLARA

Editorial

Florencio I. Utreras
Executive Director of CLARA

In her closing speech at the IV European Union - Latin America and the Caribbean Ministerial Forum on the Information Society (EULAC), held in Lisbon on April 28th and 29th, 2006, EU Commissioner for Information Society and Media, Mrs Viviane Reding, highlighted the Latin American Research and Education Advanced Network, CLARA, as "the big success story of the Forum" in terms of the collaboration between Latin America and the European Union in Information Society related issues. Mrs Reding stated that this initiative "has to be highlighted, has to have continuity, has to have an extension" since RedCLARA represents the basic infrastructure to foster collaborative work among researchers from both regions, facilitating project development and consolidating working networks. This applies to ongoing projects as well as those funded by the VII Science and Technology Frame Programme that begins in 2007.

During the same session, Portugal's Minister of Science and Technology, José Mariano Gago stressed RedCLARA's importance for scientific-technological development and the cooperation between Europe and Latin America in these matters. Minister Gago referred to the Forum's Final Declaration and stated that Article 13 was not sufficient, since it should explicitly indicate the need for maintaining and expanding RedCLARA, ensuring

its extended and long term funding in order to consolidate it. In the same line as Minister Gago, Brazil's Vice Minister of Science and Technology, Luis Rebelo Fernandez, called for the extension of financial support for this initiative that has yielded the first Latin American Research Network, interconnecting it with Europe and facilitating thus cooperation between both regions. Spain's Minister of Industry, Tourism and Commerce, José Montilla, adopted the same supporting stance when he expressed Spain's intentions to maintain this initiative.

The strong support given to RedCLARA by the LAC representatives in Lisbon derives from the results of the Latin America and the Caribbean Group for the Information Society's meeting (GRULAC). GRULAC is carrying forward the region's Programme for the Information Society -eLAC2007- coordinated by ECLA. In fact, at the eLAC2007 Plan's meeting held in Lisbon on April 26 before the IV Forum, it was decided to appoint CLARA as the Elac2007 Plan's Official Work Group with a view to fulfil Goal 10 which intends to 'Develop Research and Education Networks'.

The general consensus generated by CLARA in Latin America, 'a dream come true' according to Brazil's Vice Minister, has led to the Lisbon Declaration demand for studying the continuity of European financial support for the initiative and its extension towards the Caribbean. The Caribbean inclusion was requested by people from that region, first in the speech of Barbados's Minister of Communications, Lynette Eastmond, (at the Forum's opening session) and in the emphatic interventions of the Dominican Republic representatives, who indicated that it is crucial for them to join the cooperative work with the European Union and Latin America.

RedCLARA is a dream come true. A dream we have worked hard for during many years. RedCLARA is an achievement attained by means of both the European Commission support and the general consensus on acknowledging it as the road to successfully develop greater regional collaboration links in science, technology, education and innovation. These links will allow Latin America and, in the future, the Caribbean to be better partners for top-level European networks and to better participate thus in joint researches funded either by the VII EU Frame Programme or other appropriate programmes.

The great approbation found in Latin American Governments, the definite support provided by Spain and Portugal's authorities, as well as the enthusiastic support of Commissioner Reding, meant that the EU-LAC Summit of Heads of State held in Vienna on May 11th and 12th concluded by stating in Article 51 that "it is important to maintain the political and financial support to initiatives that consolidate the ICT based scientific collaboration space". This poses a first-level political mandate that will certainly enable us to obtain the European Commission's support for the continuity of funding for our network, which is highly necessary to consolidate the huge achievements and the great impact that our networks will have in the mid and long term. Let us remember that these networks favour the creation of this "scientific collaboration space" within the region as well as with Europe.

A global look at the Ecuadorian Consortium for the Development of Advanced Internet:

CEDIA, a child turning big

The creation of CEDIA has been regarded by the Ecuadorians as the opportunity they were waiting for to get involved in new technologies development and to participate in development projects in various areas.

After overcoming problems of access to advanced networks, CEDIA has a main great goal in mind: the interconnection of its scientists with their Latin American counterparts. In this sense, CLARA is an engine that encourages Ecuador to join efforts to push its network forward. In fact, according to CEDIA's Executive Director, in Ecuador and other countries in then region, CLARA has motivated the creation of academic networks.

María Paz Mirosevic Albornoz

It was March 2002 and the world was celebrating the International year of Eco-Tourism, of World Heritage and of mountains. But Ecuadorian universities had other kind of celebration in mind. Many of these institutions were organising themselves and looking for an opportunity to make a dream come true: to get access to advanced academic networks, something that would represent a turn in the development of Science and Technology in Ecuador.

Thus, on September 18, 2002 CEDIA was born: the Ecuadorian Consortium for the Development of Advanced Internet, created with the mission of promoting and coordinating the development of advanced research networks, focused on the development of Science and Technology and the academic community.

Five moths later, the Ecuadorian Ministry of Education and Culture issued the ministerial agreement approving its statute. But right from the beginning the road to achieve the objective of getting access to advanced academic networks was not an easy one: the lack of a national telecommunications infrastructure and the high prices for accessing information with an appropriate band-width represented an obstacle.

Under these circumstances, CEDIA got providers to lower their prices and improve their connection quality. This way Ecuador sets out on a prosperous path where it has made a dream come true thanks to its own and CLARA's efforts.

CEDIA started out with seven members and now it has twenty-four (and the number is rising)

1. National Company for Electric Transmission
2. National Council for Competitiveness
3. National Department of Science and Technology
4. Santiago de Guayaquil Catholic University - UCSG
5. Milagro State University
6. Foundation for Science and Technology - FUNDACYT
7. Chimborazo Higher Polytechnic School - ESPOCH
8. Higher Polytechnic School of the Army - ESPE
9. Higher Polytechnic School of the Coast - ESPOL
10. National Higher Polytechnic School - EPN
11. National Institute of Fishing - INP
12. Oceanographic Institute of the Ecuadorian Army - INOCAR
13. Loja National University - UNL
14. Private Technical University of Loja - UTPL
15. Cuenca University - UC
16. Ecuador Central University - UCE
17. National Council for Telecommunications - CONATEL
18. Equinoctial Technical University - UTE
19. International University of Ecuador - UIE
20. San Francisco de Quito University - USFQ
21. Ambato Technical University - UTA

22. Pontifical Catholic University of Ecuador - Santo Domingo Branch

23. Pontifical Catholic University of Ecuador - Ibarra Branch

24. Chimborazo National University - UNACH

CLARA's era in CEDIA

The Ecuadorian Consortium for the Development of Advanced Internet is a new organism. Starting from the creation of RedCLARA it has been possible to physically create the Ecuadorian main network. "CEDIA has allowed us to create an on-line work culture, something that did not formerly exist in Ecuador. The mere fact of working in a team has allowed us to generate significant savings in connectivity, equipment purchase and other services" says Enrique Peláez, CEDIA's Executive Director.

CEDIA's evolution can be understood in three stages. The first was the creation of the national network based on the infrastructure of a provider. This network operated since March 2005 as an additional service to the Internet access service hired by the Consortium for its members. The next stage is the current one, where, as of January 2006, CEDIA gets connected to RedCLARA. The third stage is already being planned and consists in migrating the national academic network towards the optical fibre infrastructure of the State Company of Electric Transmissions, TRANSELECTRIC. As a result, Ecuador will receive a zero-cost 45 mbps capacity for five years. "In this region we have a different development level in relation to advanced networks. In some of our

countries, CLARA has made it possible to start creating academic networks which now represent a development catalyst", states Peláez, referring to CLARA's importance.

For many countries CLARA has represented the great opportunity to form academic networks. The absence of such networks was undermining the slow development of these countries, either because of poor access to information, weak participation in relevant technological development projects, weak telecommunications infrastructure and/or high interconnection costs. All of this had to change because of CLARA. In fact, in Ecuador the Latin American Cooperation for Advanced Networks motivated the union of efforts to push its network forward, as narrated by Peláez himself.

The next challenge has already begun!

Connectivity among CEDIA members is a problem that has been almost solved. The challenge of interconnecting Ecuadorian scientists with their Latin American counterparts is now more important.

Apart from this challenge, there is also the idea of "opening the opportunity for our researchers to participate in the development of joint initiatives with other researchers in the region and the world. As part of our strategy of getting involved and participating in this development, we have organised ourselves in interest groups in order to work in various areas related to telemedicine, tele-education, materials and nanotechnology, biotechnology, grids systems, earthquakes and other hydrogeodynamic events, among others, to act as counterparts of our Latin American peers" explains CEDIA's Executive Director, who also tells us that the real intention is to be able to make use of RedCLARA's infrastructure and of the access to research groups in the region for the development of joint projects.

These challenges have already yielded their first results in one of the first applications: videoconferences to offer joint educational programmes. Undoubtedly, this is expected to be only the beginning and it is hoped that

in the mid and long term the countries in the area will be able to carry out many other applications thanks to advanced networks.

CEDIA and CLARA in the eyes of Ecuadorians.

Since its creation CLARA was regarded as the opportunity Ecuador was waiting for and needing to get involved in new technologies development and to participate in development projects in various areas.

"It is the opportunity to access not only information and a researchers network but also, and most significantly, remotely access technological resources that would not be available in Ecuador otherwise. This has been one of the main motivations for CEDIA members" explains Enrique Peláez. It is clear that for Ecuadorians this is a way of witnessing concrete advances and projections for their country in terms of advanced networks, education and technology.

CLARA becomes the vehicle that can make this opportunity possible, especially in those countries where the development of research infrastructure has been postponed because of other 'apparent priorities'. In this sense, it is not surprising that RedCLARA represents an unprecedented contribution for these nations since the mere fact of providing direct access to applications and infrastructure and opening new roads for the development of joint projects effectively contributes to breaching the digital divide.

The job is not finished yet

According to CEDIA's Executive Director, there are several levels of digital divide but there is one in particular that requires much further efforts: the lack of connectivity in rural areas: "The lack of opportunities for accessing information and developing local capacities to address the effects of the divide is more intensely felt in rural areas, mainly because of the lack of communications infrastructure which entails high prices that hinder their development".

But Enrique Peláez is certain that there is a clear solution: An initiative for regulating and opening the regional market. With this, he sustains, it could be possible to level the divide since the lack of competence and opportunities has caused high prices to deter centres from participating in advanced issues. For CEDIA it has been very hard to realise that some counties in the region have to pay up to six times more than others to access the same information, using the same technology and with identical skills. The grief derives from the repercussions of this kind of inequalities.

This is the reason why, in Ecuador as well as in the entire region, work has to continue. In Ecuador, initiatives for development are crucial, like the one mentioned by Peláez: remote access to technological resources. "This is a very big bet for development that depends on the agreements and disposition of our regional and world counterparts. It is true that this will be a reality insofar as our scientists and researchers are able to get involved, but the disposition of institutions and other researchers is also necessary so that our researchers can make use of these infrastructures" he ads full of hope.

A high expectations event:

WALC 2006: An instance of training

The Ninth Latin American Workshop on Internet Technology (WALC) is about to begin. Its organisers are working on the last details to make a fundamental instance for Latin American professionals out of the ninth WALC version.

CLARA's Technical Workshop and the ALICE/CLARA Project Meeting will be held within the context of this event.

María Paz Mirosevic

One of the main objectives of the IX Latin American Workshop on Internet Technology, WALC, is to identify and establish individual and institutional links that can contribute to the development of national and regional activities based on the Internet. The other objective is to establish strategies to promote discussion, reflection and collaboration in relation to public policies among participants and guests, by means of a forum organised for that purpose. WALC is maybe one of the most transcendental programmes in the region since 1992, providing professionals from this area of the globe with a significant opportunity. The present version is scheduled for July 24th – 29th in Quito, Ecuador.

The instance is a way of contributing towards the fulfilment of the training needs of technicians and professionals from Latin American and Caribbean countries in the field of Information and Communication Technologies. The event is organised by: CLARA (www.redclara.net), CEDIA (www.cedia.org.ec), Eslared Foundation (www.eslared.org.ve), Equinoctial Technical University (www.ute.edu.ec), and Venezuela's Andes University (www.ula.ve).

The General Manager of the Latin American Networks School Foundation and Workshops General Coordinator, Edmundo Vitale, is familiar with network technology issues throughout Latin America and the Caribbean and is very positive that the questioning of the current state of Latin American ICT professionals and technicians has more to do with their quantity rather than their quality, which, he says, is very good. According to him, there is a change in the region in this respect, and this change is due to the fact that higher education institutions are focusing on offering information technologies related studies. In this context, WALC is an event offering advance and development opportunities to all countries interested in breaching the digital divide.

"The idea is that there has been progress in terms of professional relations. WALC is the first programme that has been strengthening human resources in the network technologies area, and is supported by institutions such as the Internet society, OAS, the World Bank and UNESCO. This is the most transcendental event in the whole region. This programme is even complemented by the UNESCO Lecture, which has to do not only with the workshops we offer throughout Latin America, but also with the development of research and distance learning projects", explains Vitale.

Within this context, what would be the new contribution of the WALC workshops in this ninth version? How is it different from other versions?

One of the most important aspects is that the WALC workshops and CLARA's technical workshop will coincide for the first time, something that will benefit both groups. It will be an instance of collaborative meeting and work among professionals from the different networks. CLARA and the technicians from its regional networks will have the chance to work with the other academic group and with the group of public and private organisations that are in need of ICT services. This is a scheduled coincidence that will allow the gathering of groups that need each other.

Now, concerning the workshops proper, new programmes are being incorporated. First of all, we have incorporated a workshop on IPv6 protocols, which will allow the development of many more networks at a global level. Because of this, training professionals in this area will be fundamental. There will also be a workshop on network management, offered for the first time, that tries to deal technically with the way the network is administrated, and with the security and programming measures that are

necessary for the proper functioning of a n institutional or organisational network. Another novelty will be a workshop identified with project administration. It will help network coordinators from different organisations to administrate personnel and resources. There will also be a workshop on IP telephony, which represents a revolution in the communications industry. In fact, we can now have telephone voice transmission over the Internet.

These are the new workshops that try to cover everything that is going on in the world of ICT. Everybody is concerned about security, about having wireless connections to easily transmit data from a computer to the Internet or IP telephony. What is important is that we can obtain enormous benefits since we have a network and what we are adding to it is a software or hardware that enables us to easily communicate in near and remote places.

Apart from these workshops, there is a forum on the Internet and Society where we will discuss the best ways to involve the community in the efficient use of Internet resources. We will also discuss the gender issue and how women are making use of technologies in every day life".

According to Vitale, the advances of Latin America and the Caribbean in terms of technology depends on the people who make decisions in each of these countries. They should bear in mind that the competitive advantages of working with the aid of technology in government, industry, health and education areas, is crucial for an optimal development. "If we manage to get governments and the private enterprise alike to realise the importance of using these resources, then we will advance as users towards making the most out of technology".

How do you perceive the future of ICT in Latin America? Where will it take us?

If we make an account of what we had in Latin America and what we have now then we have to be optimistic. Every day there are more low-cost resources that allow access to Internet. Relations and communications among professionals from different continents are faster, simpler and more dynamic, which implies that we have the opportunity to improve the state of technology in our countries. However, there is still a great need to incorporate cultural changes to make the most of the resources offered by new technologies. We have made progress and we are doing better than years ago, but there is still a divide, a gap between our countries and developed countries. The size of this gap has not lessened, and the explanation lies in the fact that as we move forward, developed countries make much more progress.

Workshops offered in the ninth version of WALC

Training professionals is, undoubtedly, a goal that the entire region is responsible for. It is a fact that Latin America is moving forward, but we depend on dynamic initiatives and on the motivation of professionals to improve the quality as well as the quantity of these initiatives. WALC is one of these initiatives and is willing to offer training and preparation to those who are interested. Registration is still open and the workshops offered by WALC are:

• Wireless networks for data transmission
• Web Development with free software
• Content development and production
• Network management
• IP Telephony
• Informatic Security
• Geographical Information Systems (GIS) with free software
• IPV6

For further information on this event and how to register on line go to: ttp://walc2006.ula.ve/index.html.

In Ecuador, July finishes with ALICE and CLARA meetings

CEDIA, the Ecuadorian Consortium for the Development of Advanced Internet, will be the host institution of the half-yearly ALICE and CLARA meetings, which will held jointly with WALC 2006.

María José López Pourailly

Scheduled dates:
July 24-25:
ALICE/CLARA Technical Meeting
July 27-28:
ALICE Project Meeting
July 28 (afternoon):
CLARA Assembly

The ALICE Project will pay for the airfare and travel expenses of one technical person (to attend the ALICE/CLARA Technical Meeting - TEC) and one managing person (to attend the ALICE Project Meeting) from those member institutions that, to date, have paid all their membership fees.

In general terms, the following topics will be revised during the ALICE Meeting:
- CLARA Update.
- GÉANT2 Update.
- NOC, NEG, TEC AND GT Update.
- CLARA's Strategic and Public Relations Plans.
- ACLARA's Update.
- Presentation of monitoring results.
- ALICE's budget and NREN contribution. Future implications and action map for sustainability.

The following topics will be dealt with at the CLARA-Tec meeting:
- Work Groups: elaboration of recommendations, work plans execution, technical discussions.
- Experiences in the implementation process of the NREN already connected to RedCLARA: equipment used, problems and solutions.
- New NREN connected to RedCLARA.
- EELA Project.
- Low-cost Wireless Networks.

RedCLARA stands out at the IV EU-LAC Ministerial Forum and its future looks bright after the Vienna Summit

After being highlighted during the IV EU-LAC Ministerial Forum on the Information Society, as the main achievement resulting from the cooperation between the two regions, there were still doubts as to the support RedCLARA would get from the EU-LAC Heads of State. These doubts dissipated after the release of the Vienna Declaration on May 12th.

María José López Pourailly

IV EU-LAC Summit
Vienna, Austria, May 12th, 2006
Vienna Declaration

"51. We recognise the role of Information and Communication Technologies to support social cohesion, regional integration and the competitiveness of our economies. We attach great importance to working together towards their further development in our regions, and towards the promotion of universal, equitable and affordable access to ICTs, notably through comprehensive strategies addressing the new challenges and opportunities of technological convergence.

We welcome the outcome and the declaration adopted at the IV EU-LAC Ministerial Information Society Forum 'An alliance for social cohesion through digital inclusion' held in Lisbon in April 2006. We acknowledge the encouraging achievements of the on-going bi-regional activities in this field and consider that it is important to maintain the political and financial support to initiatives that consolidate the ICT-based scientific collaboration space".

Although it is true that the Vienna Declaration, subscribed by the highest State authorities from the European Union, Latin America and the Caribbean, contains no explicit reference to RedCLARA, it does refer to the recommendations issued in relation to it at the IV EU-LAC Ministerial Forum held in Lisbon two weeks ago. We refer to the recommendations stated in Article 13 of the Lisbon Declaration:

"13. We acknowledge the progress made in the interconnection among the Latin American (RedCLARA) and European (GÉANT) networks, which provides a solid basis for scientific bi-regional cooperation, contributing to achieve the objectives adopted at the World Summit on the Information Society of Tunis. In this regard, we want to bring to the attention of the Heads of State and Government the importance of maintaining the political

and financial support to initiatives that consolidate the ICT based scientific collaboration space, such as RedCLARA and its interconnection with GÉANT, to guarantee its continued operation and bring an extension to the Caribbean region. We express our support to the strengthening of EU-LAC research & development cooperation, notably in the context of Seventh EU Framework Programme for research, which will cover the period 2007-2013, based on common priorities jointly identified and building on the potential extension of the interconnection between RedCLARA and GÉANT;"

Prudence certainly tells us to be careful before celebrating, but it would be ungrateful not to acknowledge the advantageous position in the EU-LAC scene that RedCLARA is in after the Lisbon Forum and the Vienna Summit. Specially so considering that in her closing speech at the Lisbon Ministerial Forum (29 April) Viviane Reding, the EU Commissioner for the Information Society, mentioned RedCLARA as 'the big success story' resulting from the collaboration between the European Union and Latin America in Information Society related issues.

According to Commissioner Reding, RedCLARA is the basic infrastructure to foster the cooperation between researchers from both regions, facilitating project development and reinforcing working networks. This applies to ongoing projects as well as those financed by the VII Science and Technology Framework that begins in 2007.

During the same closing session at the IV Forum, Portugal's Minister of Science and Technology, José Mariano Gago stressed RedCLARA's importance for scientific-technological development and the cooperation between Europe and Latin America in these matters. Minister Gago was particularly emphatic when referring to the Forum's Final Declaration and did not hesitate to state that Article 13 was not sufficient, since it should explicitly indicate the need for maintaining and expanding RedCLARA, ensuring its extended and long term funding in order to consolidate it.

In the same line as Minister Gago, Brazil's Vice Minister of Science and Technology, Luis Rebelo Fernandez, called for the extension of financial support for this initiative that has yielded the first Latin American Research Network, interconnecting it with Europe and facilitating thus cooperation between both regions. Spain's Minister of Industry, Tourism and Commerce, José Montilla, adopted the same stance when he expressed Spain's intentions to maintain this initiative.

The strong support given to RedCLARA by the LAC representatives in Lisbon derives from the results of the Latin America and the Caribbean Group for the Information Society's meeting (GRULAC). GRULAC is carrying forward the region's Programme for the Information Society -eLAC2007- coordinated by ECLA. In fact, at the eLAC2007 Plan's meeting held in Lisbon on April 26 before the IV Forum, it was decided to appoint CLARA as the Elac2007 Plan's Official Work Group with a view to fulfil Goal 10 which intends to 'Develop Research and Education Networks'.

The general consensus generated by CLARA in Latin America, 'a dream come true' according to Brazil's Vice Minister, has led to the Lisbon Declaration demand for studying the continuity of European financial support for the initiative and its extension towards the Caribbean. It is worth mentioning that the ministers and representatives from that region have explicitly demanded the Caribbean inclusion. This was corroborated both by the speech of Barbados's Minister of Communications, Lynette Eastmond, (at the Forum's opening session) and by the emphatic interventions of the Dominican Republic representatives who indicated that it is crucial for them to join the cooperative work with the European Union and Latin America.

There is not much to add, the evidence of international recognition for the ALICE project, RedCLARA and CLARA is very powerful, as stated by Florencio Utreras, CLARA's Executive Director "RedCLARA is a dream come true. A dream we have worked hard for during many years. RedCLARA is an achievement attained by means of both the European Commission support and the general consensus on acknowledging it as the road to successfully develop greater regional collaboration links in science, technology, education and innovation. These links will allow Latin America and, in the future, the Caribbean to be better partners for top-level European networks and to better participate thus in joint researches funded either by the VII EU Frame Programme or other appropriate programmes".

We refer back to Utreras' words to close this article: "The great approbation found in Latin American Governments, the definite support provided by Spain and Portugal's authorities, as well as the enthusiastic support of Commissioner Reding, will undoubtedly allow RedCLARA to obtain the financial supports necessary to serve for many years the Science, Technology, Education and Innovation Community of Latin America and the Caribbean and their counterparts in Europe.

Commissioner Viviane Redding enclosing speech IV EU-LAC Ministerial Forum on the Information Society Lisbon, April 29, 2006

Colleague Ministers, excellencies, ladies and gentlemen:

We have come to the end of this day and a half very interesting and fruitful bi-regional dialogue and I must say on a personal note that I have been not only happy with the outcome, but mostly with the relations which have been built up. It was a very outspoken engagement ministers and representatives have shown in order to increase the collaboration in between the two sides and to breach the digital divide and work for better inclusion of all our citizens. We know that this forum is essential for the preparation for the EU-LAC summit of the 12th May, which will be attended by the heads of state and of government. And they will address three key themes of our partnerships: social cohesion, regional integration, multilateralism. And at the last summit in 2004 in Mexico, they have asked us to work on the potential of ICT for the social cohesion and they have given us a mandate. Now, we have taken this mandate very seriously. Once we have been working in Rio de Janeiro, notably the Brazilian Science and Technology Ministry represented at the session by Minister Luiz Cavalhes has been making the work possible. Today the work has been possible in continuity by the very strong engagement of our Portuguese friends and I would really like to thank them because without their help it would not have been possible to reach such positive conclusions.

I think we have all understood that ICT are a very important factor in order to foster regional integration. Common and open ICT standards will provide a contribution to crop out regional and global Integration as shown by the successful examples of the Internet and the mobile communications with the GSM standard.

Now we have managed to get a declaration, although it is not perfect but I think one has to read it from the beginning to the end. Because I fully agree with my colleague

ministers, if you look at article 4 of the draft declaration, it is not very satisfactory. I prefer to forget article 4 and read article 13, because in article 13 they have said, and I believe, and you believe and is written down mainly, that the big success story, which is the RedCLARA -GÉANT collaboration has to be highlighted, has to have continuity, has to have an extension. So I would very much like article 13 of the joint declaration to be our conclusion of this meeting.

The European Commission, as you know ladies and gentlemen, has recently adopted two communications, one on its relations with Latin America and one on its relations with the Caribbean; you have read them and you know that is important that we have added to them a very important argument in order to put this declaration into practice because we need ICT in order to further and to deepen our partnership, and in this sense, research is one on the fields where there is a very strong potential, and new opportunities for international cooperation, under the 7th Framework Programme which will start on January 1st, 2007. As you know, in this programme we will reflect on common priorities for the regions and one of these, I am sure, it's certainly going to be the digital inclusion. We will notably work together on research and development for low-cost technologies and applications to breach the digital divide. One area with a strong potential for such a cooperation is the digital TV, even its role to foster digital inclusion, and I would like to repeat what I said already yesterday, that we are willing to establish a partnership on the development of a new LAC digital TV system in order to accommodate the system to specific needs of the LAC region. And as I said already and I am glad behind this article 13 of the conclusions we have a real success story which is our research and communications network RedCLARA and GEANT and this pioneering endeavour will remove the geographical distance factor, fosters virtual cooperation able to cross-fertilise the results of research. The ALICE projects have already developed it, so the enduring role of infrastructure and moreover the world-leading European grid infrastructures have now been extended to Latin America opening new horizons on the sharing of expensive computing facilities, sophisticated scientific instruments, expensive medical equipment, or data repositories of scientific information, and it becomes clear that the interconnection of RedCLARA and GEANT is a major success and that's why it is important that we ensure its reinforcement and its extension in time and towards regions such as for example the Caribbean who are so eager to participate in this effort. And it will be also important to ensure the continuity of the ongoing dialogues under the @LIS programme, not only regarding

policy and regulating dialogues. Ladies and gentlemen, I will not finish this speech without having told you what is very dear to my heart and you know it, and that is our content industry, that is our rules, that is the expression the modern technology is as to work on what we are, what we want, what we strive for, what are our dreams, and most of all and most dutifully, what are the dreams of those who are next to us. And so I believe that we really should concentrate between your area of the world and between my area of the world, about fostering the creativity which is in our citizens, the creative industry, the creation of content, the creation of innovative services, because that is what our people want us to do and that is what we'll create a world where we'll be together, understand each other, work together, and show solidarity. So I really do believe that we have come a step further this time in order to explore the potential of ICT to foster social cohesion, competitiveness, cultural diversity, and I would very much like that the successes which each of us experiences will be shared successes by all. If we manage to do that, then this conference was a good invest.

IV EU-LAC Ministerial Forum on the Information Society held in Lisbon:

Commissioner Reding calls for extension to RedCLARA-GÉANT2 partnership

Commissioner Viviane Reding has called for an extension to the RedCLARA-GÉANT2 partnership, created by the ALICE project. Speaking at the IV EU-LAC Ministerial Forum on the Information Society held in Lisbon on 28th and 29th April 2006, she stated that the "RedCLARA-GÉANT collaboration has to be highlighted; has to have continuity; has to have an extension" and that this should be the main conclusion of the Forum's declaration.

In a speech to more than 400 delegates, Reding highlighted the role ICT plays in fostering close relationships between Europe and the Latin American and Caribbean region. "We need ICT to further and deepen our partnership and in this sense research is one of the fields where there is very strong potential and new opportunities for international cooperation."

The ALICE project manager, Cathrin Stöver said of the event "It is very encouraging to see the success of ALICE recognised at such a high level within the Commission. Securing the future of RedCLARA will not only benefit the LAC region, but will also strengthen Europe's research and education community, by providing increased opportunities for collaboration."

One field of research keen to see the continuation of the RedCLARA-GÉANT2 partnership is within the Grid community. The EELA project (E-infrastructure shared between Europe and Latin America) is creating a collaborative network to share grid infrastructures between the two continents, to drive the development of advanced applications in biomedicine, high energy physics, e-learning and climate modelling. The EELA project receives the support of the European Commission, not only in terms of funding, but also in objective. Reding commented that "The world-leading European grid infrastructures have now been extended to Latin America offering new possibilities for sharing of expensive computing facilities and sophisticated scientific instruments."

The ALICE project exhibited at the event, in collaboration with its CLARA partners, to demonstrate the success of RedCLARA and outline its future role in strengthening relationships between the two regions. Amongst other exhibitors were @LIS Tech-net, which is actively deploying e-learning platforms between the two regions. It has already benefited from RedCLARA's implementation and sees potential for expansion. "From the first day of connection with the new RedCLARA capacity, we saw message round trip times halved between partners in Chile, Mexico and Europe. Collaboration was faster than ever" said Steven Willmott from the project. He also highlighted the role that @LIS-funded projects like ALICE and @lis Technet play in testing new technologies. "They provide an advanced testbed to enable researchers in Latin America and Europe to trial new technologies and develop new solutions for the future."

In her closing words to delegates, Commissioner Reding said "It becomes clear that the interconnection of RedCLARA and GÉANT2 is a major success, and that's why its important we ensure its reinforcement and its extension in time and towards regions such as the Caribbean, who are so eager to participate."

EELA/GRID helps predicting Mount Etna eruptions:

Have you ever heard a volcano singing?

Current knowledge of volcanic eruptions does not yet allow scientists to predict future eruptions. But since the sonification of volcano seismograms of Mount Etna has been carried out within the context of the EELA Project, the scientific community is one step nearer to the prediction asset.

Roberto Barbera and Domenico Vicinanza
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A reliable and accurate eruption forecasting would be extremely useful for all the people who live and/or work close to volcanoes and in all situations where the volcanic activity is connected to other geophysical phenomena (such as huge earthquakes, tides, and so on.). To improve knowledge, a large amount of scientific data has to be collected and analysed by the scientific community which is possible with the EELA e-Infrastructure.

On the GILDA e-Infrastructure of the EELA Project, sonification of volcano seismograms of Mount Etna has been carried out. A seismogram is a particular representation of the regular oscillations of a volcano. Using this approach, it is possible to consider the volcano as a huge musical instrument, which can produce a sound non detectable by the human ear as the frequency is too low. The larger the mountain, the lower the frequencies emitted. Seismograms are the graphical representations of these infrasonic sounds.

To make it possible to hear these sounds, it is necessary to perform a slight manipulation called "pitch shift". In other words, the infrasonic frequencies are mapped to ones that can be heard by the human ear. The hope is that by studying large amount of these sounds (which can be easily collected, categorised, stored, and retrieved thanks to the grid databases) it will be possible to learn more about the phase before eruptions. It will also potentially be possible to fully characterise eruptions from a sonic point of view to make more accurate predictions of their occurrences.

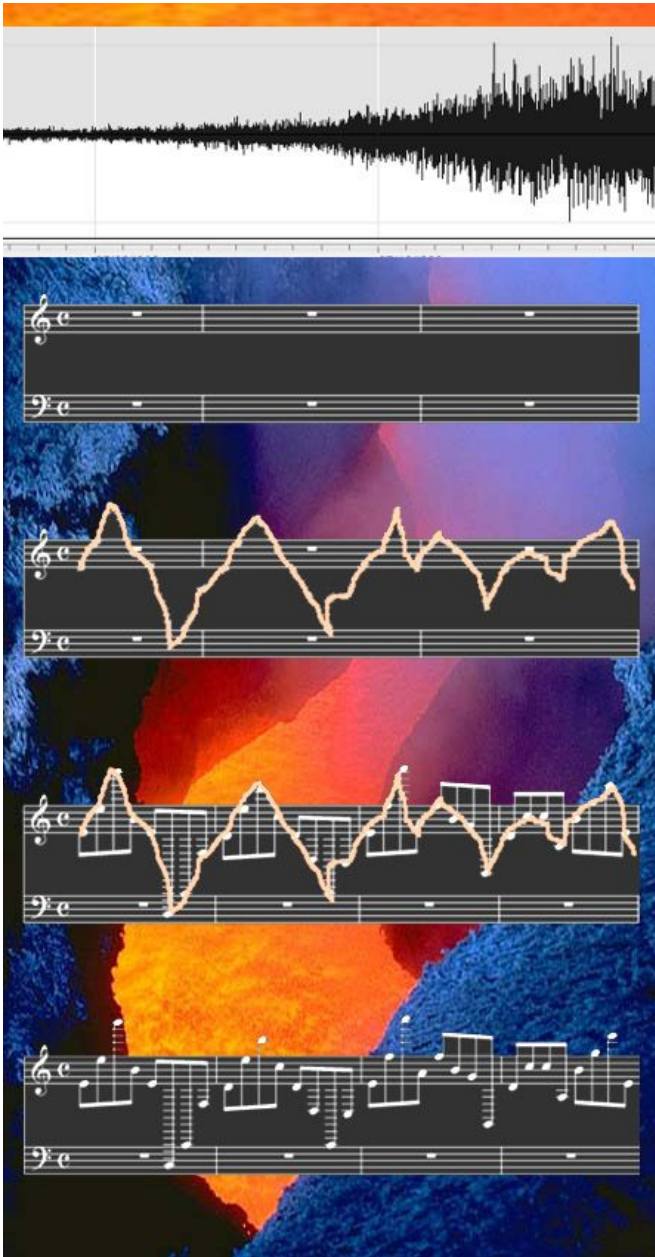Mount Etna is Europe's largest volcano - its volume is at least 350 km^3 - and is one of the most active volcanoes of the planet. It is situated along the eastern (Ionian) coast of Sicily and occupies a surface area of around 1200 km^2 with a perimeter exceeding 135 km. Its summit height varies frequently (from about 3315 to 3350 metres) depending upon the eruptive activity or minor collapse events at the summit craters.

"Scientific data sonification is becoming one of the most promising analysis tools, because sounds can summarise significant amounts of information and can be characterised, stored, and studied in a simpler and easier way with respect to images," said Dr. Domenico Vicinanza, Department of Mathematics and Computer Science of the University of Salerno and INFN, who developed the Etna sonification software.

Even though the usefulness of sound representations was clearly accepted by the scientific community, its practical use has received limited attention, because of the intensive computation usually required to produce the sounds. The Grid has enabled this method to become a reality. Digital audio usually deals with very high sampling rate, the standard value for CD quality audio signals is 44100 Hz, so to produce one second of audio data is necessary to compute 44100 values. One minute will take 60 x 44100 = 2646000 calculated samples, just to have a snapshot of the sonification procedure from the point of view of computing.

Data sonification just one of a wide range of applications that can greatly benefit from grid computing.

Domenico Vicinanza added: "The first experiments about grid sound generation started in 2003, when CSound a

free and cross-platform acoustic compiler, was installed on the Catania INFN-GRID site. Since then we improved the audio engine, developing a complete Java package for a high-quality sound generation and customizable audio analysis"

Seismographical data has been recorded by a digital seismograph at a sampling frequency of about 100 Hz (i.e., 100 measures per seconds). The total amount of processed data was 44 files, each of them taking almost 990 Kilobytes and containing 27 minute of recording of the Mount Etna volcano activity (so to have a huge recording of about 1188 minutes, i.e. 20 hours).

The produced waveforms coded in the audio file have exactly the same properties (such for example amplitude, regularities) of the original data. The order of magnitude of the frequency of quasi-regular phenomena is in the range 0-50 Hz, with a spectral envelope centered around 25-30 Hz. Moreover, thanks to an accurate pitch mapping procedure, the same waveform could be made hearable. Some examples can actually be heard at the URL: http://grid.ct.infn.it/etnasound/page4/page8/page8.html.

Latin America has many volcanoes that must be heard

María José López Pourailly

The Andes and the Centro American mountains are part of the Circum-Pacific system of mountain ranges, a region with an outstanding seismic and volcanic activity. In fact, more than 80 volcanoes are placed between Mexico and Guatemala, El Salvador is known as the country of volcanoes, and Ecuador and Colombia are not far from that category. In the Central Andes there are volcanoes in the high plateau between 15º and 27º of latitude South in the area comprised between the south of Peru, Bolivia, the north of Chile, and the northwest of Argentina. This region holds the world record of the biggest terrestrial volcanoes concentration on Earth. In Latin America there is then a huge number of active volcanoes, volcanoes that roar, volcanoes that we could hear singing, volcanoes that we must study.

If you are interested in participating in a project of sonification of volcano seismograms, or in a working group in this area, and your institution is part of CLARA and/or the ALICE project, please send an email to María José López (mjlopez@reuna.cl), CLARA Communications and PR Manager, indicating in the subject "sonification of volcano seismograms" and, in the content, which ideas you have in mind.

E-Infrastructure shared between Europe and Latin America

In Itacuruça, by the end of June

2nd EELA Workshop and 3rd EELA Tutorial

To be held in Itacuruça, an island 120 Km. away from Rio de Janeiro (Brazil) on 24 and 25 of June 2006, the 2nd EELA Workshop will precede the 3rd EELA Tutorial that will occur from 26 to 30 of June 2006 in the Institute of Physics of the Federal University of Rio de Janeiro (IF-UFRJ).

More information and registration form at: http://www.eu-eela.org/private/eela_brazilian_workshop.php

HERMES Project releases

Code of Good Practices for the Administration of e-Mail in the Latin American Academic Community (RedCLARA)

This document is part of the project "Security in Communications: Quality Platform in the Electronic Mail Service" subscribed to the FRIDA program (Regional Fund for Digital Innovation in Latin America and the Caribbean). This project has articulated the creation of the HERMES platform (Towards an Environment of Secure Electronic Messaging) constituted by different European and Latin American academic networks.

María José López Pourailly

The Code of Good Practices for the Administration of the E-mail Service in the Latin American Community (RedCLARA) wants to establish a common framework to mitigate the security problems affecting electronic mail in the academic environment so that it can continue being a useful tool. The document intends to help all the actors involved define and configure their Service with certain minimum criteria that certify the quality of the outbound and inbound SMTP traffic of their institutions.

Its creators state that "the commitment to adopt these criteria is not only improving the service within the institution since it is generating a better quality NETWORK of services within the institutions adopting them. The adoption of these criteria by each of the institutions will result in a service of similar quality with a common basis, greater control and optimisation".

Additionally, the implementation of these recommendations will not only improve the exchange quality of SMTP traffic. It will also help to reduce many of the security problems affecting the service: Spam, spoofing, malware, etc.

This document is mainly aimed at administrators of the electronic mail service of the Latin American academic world (universities, research centres, etc) but it could be applied in any other context and can be downloaded from the following website: http://hermes.reuna.cl.

The following academic networks took part in the elaboration of the document:

RETINA (Argentina) http://www.retina.ar.

RNP (Brazil) http://www.rnp.br.

REUNA (Chile) http://www.reuna.cl.

RedIRIS (Spain) http://www.rediris.es.

RedCLARA NEG TREK

Captain Porto a man that says not too many words but the right ones

The serious Captain Eriko Porto is passing through a very silent period; very few words have been written in his diary. Few words for a period full of successes. How do we know this? Elemental, my dear Watson, once again, we stole his diary and now we've got the new reports of the voyages of the CLARA Network Engineering Group – NEG… very few words actually, to few to the great achievements of the captain Porto and his brave crew.

NEG mission: following the route drawn up by the crew of the ALICE Project -the mother airship-, to explore new worlds, to seek out the unique and perfect way to establish the CLARA ring backbone and the connection of the Latin-American NRENs to it and to Europe - to boldly go where no other Latin-Americans has gone before, and to take CLARA members there.

The following quotes have been taken from captains Eriko Porto diary.

María José López Pourailly

Monday 20, April, 2006
Last month we have managed to complete the full transport network in Central America that is serving as the basis for the connectivity from Nicaragua, Guatemala, El Salvador and now also Costa Rica.

We have established BGP peering with RENIA (NREN from Nicaragua) and a direct BGP peering with Costa Rica, which is no more connected via CUDI. All Central American current connections are operating with guaranteed 10 Mbps bandwidth per VC, on top of the EoMPLS transport network implemented with several routers provided by CLARA for this purpose.

RedCLARA had now achieved connectivity with 13 countries in Latin America, and is expecting to connect one more very soon within the next weeks, that is the Colombian NREN - RENATA.

We are executing several IPv4 and IPv6 multicast tests with the NRENs in order to adjust the configurations to provide a better service. We have made arrangements to allocate IPv6 blocks within RedCLARA's range to the NRENs who requested, in order to speed up the development and expertise in using the new protocol and all associated services. As a matter of fact, today we established BGP peering with RENIA (NREN from Nicaragua).

CLARA is now working on establish policies to exchange traffic with important international networks, aiming expand the services and the connectivity we have at present.

I have thanked and congratulated to all groups and members that helped me and my crew in these missions, for all the good work, support and above all, for all the infinite patience.

Wednesday 22, March, 2006
We established IPv6 peering with RENIA

Friday 24, March, 2006
The BGP peering with RENATA (NREN from Colombia) is now established.

Monday 24, April, 2006
We have established MSDP peering with CalREN.

Tuesday 03, May, 2006
The IPv6 peering with CEDIA was establish today.

Monday 08, May, 2006
We have established the MSDP peering with REACCIUN.

This is all for now… by the way, we don't know if we are going to have more reports; we mean, what's the point, if the story of success of the NEG continues at this rhythm, Captain Porto will quit writing… so, we don't know.

University Corporation for the Development of Internet in Mexico

CUDI makes positive balance of its XIII Spring Meeting 2006

This half-yearly meeting, held between April 3 and 5, 2006 in Oaxaca, Mexico gathered authorities, researchers, teachers, enterprises and academics to present and discuss Internet2's advances, applications, challenges and opportunities.

The meeting was carried out with the support of the Oaxaca Unit of the IPN's Lifelong Education Centre. The results of the conclusions are available in CUDI's website: http://www.cudi.edu.mx/primavera_2006/conclusiones.htm.

The University Corporation for the Development of Internet in Mexico, CUDI, organised the Thirteenth Spring Meeting 2006 in order to promote the advances of the Internet2 network in Mexico, continue offering a forum for this network development, boost the collaboration among the CUDI community institutions in this country and to reinforce its links with the academic community.

The event, held in Oaxaca between April 3 and 5, 2006, included the presentation of national and international conferences, as well as a variety of demonstrations. The attendants consisted of 430 people from 114 educational and research institutions and enterprises interested in fostering projects that make use of a network with features similar to those of Internet2.

One of the most important points, stressed in the meeting's results, was the consolidation of collaboration ethos between the CUDI community and academics, researchers, technicians and authorities from the community. Another important point was the increase of the CUDI community, whose members have increased by 43% in the last year. Today, they proudly tell that the Corporation is made up of 119 research and education institutions.

Three networks workshops were carried out during the event. These were related to wireless networks security, Ipv6 Multicast, Implementation of a DMZ. The event also included three application workshops devoted to Digital Libraries, Health and Learning Objects. The high level of collaboration among CUDI members was a major highlight. Added to this, there was an international board where three papers were presented: one on the advance that is being attained in collaborations projects

with CUDI (an agreement for the translation of Science courses was signed here); one on the current situation of the Mexican academic network; and one on the state of the network and the opportunities for developing collaboration projects with Latin America.

Specialists in Internet2 related issues were concentrated in the parallel sessions. These included 24 presentations related to Technological Trends, Advanced Networks, Multicast, Security and to the advances of the Networks Committee. Concerning Applications, there were 40 presentations related to Education, Digital Libraries, Earth Sciences, Health Sciences and Grids.

All the event's sessions were broadcast via Video Streaming on commercial Internet and Internet2 as well. 32 videoconference links with CUDI member institutions and from the USA, Chile, Spain and Portugal were carried out.

All presentations and the list of participants are available in the website: http://www.cudi.edu.mx.

CUDI extends the invitation to those people interested in attending the Autumn Meeting 2006 to be held in San Luis de Potosí between October 26th and 27th, 2006.

RNP launches Telemedicine University Network

RUTE Network will promote the interconnection and collaboration among health research groups throughout Brazil.

On April 24th, in Brazil, the National Education and Research Network (RNP) and the Ministry of Science and Technology (MCT) launched the Telemedicine University Network (RUTE) with the support of the Brazilian Association of University Hospitals (ABRAHUE). The first of its kind, RUTE will interconnect university hospitals from education and research institutions throughout the country and will promote collaboration among these health research groups. The objectives are supporting the improvement of ongoing telemedicine projects and fostering the development of future university works.

RUTE, funded by Finep, will interconnect education and research institutions that have already worked in the field of telemedicine. RNP will provide the appropriate high capacity and quality infrastructure by means of its national backbone, Red Ipê and metropolitan education and research networks (Redcomep). Initially, the 20 RUTE member institutions (UFPR, UNIFESP, INSTITUTO PAZZANESE, UNIMAR, HU-USP/LSITEC, UNICAMP, UFES, UFBA, UFAL, UFPE, UFPB, UFC, UFMA, UFAM, FIOCRUZ, HC-FMUSP, ISCMPA, UERJ, UFMG, UFSC), located in 14 different states, will share medical data, inquiries, diagnoses, images and videos throughout Brazil. Additionally, it will be possible to collaborate with institutions from abroad by means of RedCLARA and international connections with Europe and North America. The investments amount to R$ 5 million (Reales) and it is expected that by the end of the year all institutions will be part of RUTE, forming thus a telemedicine community.

The incorporation of university hospitals to RUTE will allow the exchange of medical information, case studies, enquiries through videoconference, medical signals and images analyses, image radiology, virtual analysis rooms, diagnoses and distance medical training courses, among others. Thus, RUTE will promote the improvement of specialised attention for the population, education and cost reduction by means of communication and decentralisation. In this sense RNP wants RUTE to foster the development of health applications that can make use of the advanced network and can stimulate the integration of university hospitals and health collaborative networks.

Network administrators, infrastructure technicians and students of various medical specialities, constitute the telemedicine unit teams from university hospitals and have access to a very advanced ICT infrastructure. The specialties currently practised include general clinic, general surgery, pediatrics, gynecology, obstetrics, nephrology, cardiology, epidemic and infectious ailments, rheumatology, pathology, pneumology, physiotherapy, illnesses, pharmacology, angiology, labour/biosecurity medicine, dermatology, endocrinology, gastroenterology, pediatric gastroenterology, hematology, pediatric hematology, neurology, anaesthesiology, oncology, ortopedics, image radiology and diagnoses, otorrinolaringology, pediatric neurology, infectology, urology and orthodoncy.

Telemedicine actions have been performed in Brazil since the 1990's and now the efforts yield promising results. The biggest cities have very advanced hospital units, together with an increasing demand for specialised attention that is being addressed by means of some telemedicine initiatives and projects. Some instances of such initiatives include the Pediatrics Oncology Network (ONCONET), the Health Channel, the Millennium Institutes project, ELSA (health protection for adults), T@lemed (image telediagnosis), Telehanseníase, Minas Telecardio, BH Telemed, NUTES (Telehealth Hubs) and the Brazilian Digital Television System, among others.

Further information:
- www.rute.rnp.br
- www.redecomep.rnp.br
- www.rnp.br
- www.redclara.net

A G E N D A

JUNE

Third VoIP Security Annual Workshop
June 1st & 2nd in Berlin, Germany
http://www.iptel.org/voipsecurity/index.html

IV Computing Workshop on Grids and their applications
Curitiba. Parana, Brazil, June 2nd, 2006
http://wcga06.Incc.br/

III Congress on Bioinformatics
From 5th to 9th June in Mérida, Venezuela
http://www.cecalc.ula.ve/bioinfo2006

Sixth ALE International Workshop on Active Learning in Engineering Education
From 7th to 9th June in Monterrey, Mexico
http://www.mty.itesm.mx/dia/centros/cidyt/ale2006/

I CTS+I Latin American Congress on Science, Technology, Society and Innovation
From 19th to 23rd June at the Mining Palace, Mexico D.F.
http://www.oei.es/congresoctsi/index.html

The 15th IEEE International Symposium on High Performance Distributed Computing
From 19th to 23rd June in Paris, France.
http://www.hpdc.org

V Latin American Conference of Rectors and Higher Education Networks
From 20th to 23rd June
http://www.virtualeduca.org/2006/documentos/ve06_150206.doc

Fourth International Symposium of Digital Libraries (S.I.B.D.)
From 21st to 23rd June in Malaga, Spain
http://www.uma.es/servicios/biblioteca/4sibd.htm

EUNIS 2006
From 28th to 30th June, 2006, at Tartu University, Estonia
http://www.ut.ee/EUNIS2006/

XI International Congress on Educational Informatics
From 29th June to 1st July
http://dewey.uab.es/pmarques/pdigital/es/docs/CIIE061resumen.doc

JULY

Tenth World Multi-Conference on Systemics, Cybernetics e Informatics: WMSCI 2006 will be held n conjunction with the 12th International Conference on Information Systems Analysis and Synthesis: ISAS 2006
From 16th to 19th July in Orlando, Florida, USA.
http://www.iiisci.org/wmsci2006/website/default.asp

52nd International Congress of Americanists
July 17th to 21st. Seville, Spain
http://www.52ica.com

Fifth Latin American Conference on Systemics, Cybernetics and Informatics: "CISCI 2006"
July 20th to 23rd in Orlando, Florida, USA
http://www.iiisci.org/cisci2006/website/default.asp

Fourth International Conference on Education and Information Systems, Technologies and Applications: EISTA'06
July 20th to 23rd in Orlando, Florida, USA
http://www.conf-info.org/eista06/website/default.asp

Third International Conference on Cybernetics and Information Technologies systems and applications
July 20th to 23rd, 2006, in Orlando, Florida, USA
http://www.info-cybernetics.org/citsa2006

9th Workshop on INTERNET Networks Technology for Latin America and the Caribbean
July 24th to 29th in Quito, Ecuador
http://www.walc2006.ula.ve/