

# Regional Advanced Computing Services: *An update*

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and GISELA-CLARA TT

ALICE2 Meeting  
Jul 5th & 6th, 2012  
Lima, Perú



This project is funded  
by the European Union

A project implemented  
by CLARA

- **LA Communities**
- **Evaluation of the user perspective**
- **Implementing Science Gateway approach**
- **Plenty of Advanced Computing Service Information**
- **Profiting of Community Model**
- **Sustainability Commitments**

# RedCLARA Communities



1. LACXSER (Latinoamerican Colaboratory of eXperimental Software Engineering Research)
2. ReLANS (Red Latinoamericana de Nanotecnología y Sociedad)
3. MAYA (Red de Microorganismos, Agricultura y Alimentos)
4. MCISur (Manejo Costero Integrado del Cono Sur)
5. LAGO (Large Aperture Gamma Ray Burst Observatory)
6. MAPA D2 (Mapa e Programa de artes em danza digital)
7. LACLO (Latin American Community of Learning Objects)
8. CoLaBoRa (Comunidad Latinoamericana de Bibliotecas y Repositorios Digitales)
9. URDIMBRE (Research of the impact of TIC in education)



## ComCLARA2010



## ComCLARA2011

1. LAGO (Large Aperture Gamma Ray Burst Observatory)
2. MAPA D2 (Mapa e Programa de artes em danza digital)
3. LACLO (Latin American Community of Learning Objects)
4. CoLaBoRa (Comunidad Latinoamericana de Bibliotecas y Repositorios Digitales)
5. TIC en FID Formación Docente Inicial
6. ACHALAI Red internacional de recuperación del patrimonio inmaterial de tradiciones musicales
7. Grid Computación Científica y de Alto Rendimiento
8. IPOL-LA Image Processing Online Latin America
9. CLARISE Comunidad Latinoamericana Abierta Regional de Investigación Social y Educativa
10. Latin IDE Comunidad Latinoamericana de Infraestructura de Datos Espaciales
11. IDB Tropical Diseases
12. IDB Disaster Mitigation
13. IDB BioFuels

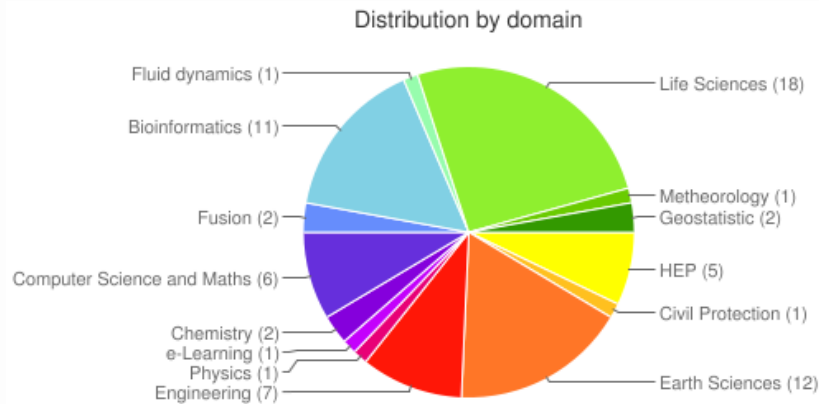
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# User perception evaluation



## Questions about:

- The gridification of the application
- Usage of the application on the Grid
- Grid and their features
- Potential uses of the tool

## Purpose:

- Find out about the degree of satisfaction given the experience of using applications in the Grid environment..



Interviews were conducted via e-mail to a group of 33 users. Life Sciences, Earth Sciences and Bioinformatics. Applications status.





Results:

# User perception evaluation

- Applications gridified during the EELA - EELA-2 period are not used under the platform offered; only in two cases the application kept being used, but off the shelf, with local resources. 😞
- In bulk, users expressed satisfaction with the training experience to gridify applications in EELA - EELA-2, but several reasons led to suspend their use. 😊

Reasons for suspending the use of applications



- Logistical:**
  - Expiration of the certificate
- Technical:**
  - Updates of the versions or software where they were installed
    - Development of a new platform
  - Dissatisfaction with infrastructure: response delayed
- Organization, community (inherent to users):**
  - People in charge of the project changed
  - Lack of demand



Results:

# User perception evaluation

## Logistical:

- Expiration of the certificate

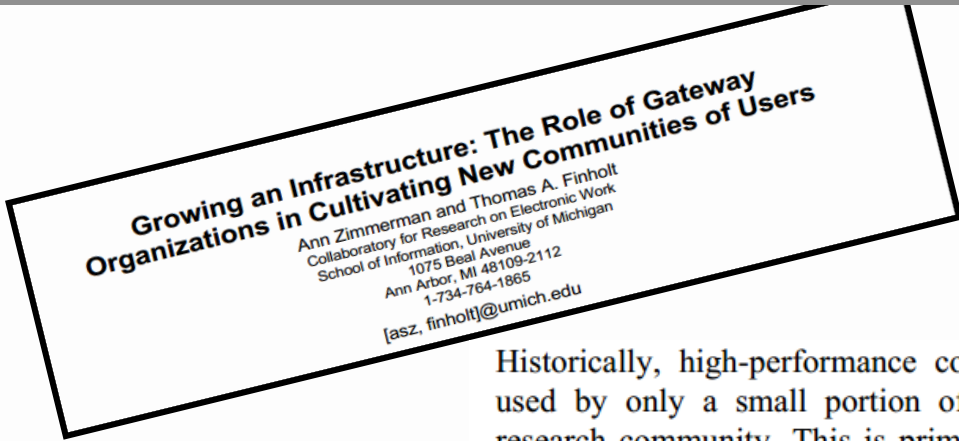
## Technical:

- Updates of the versions or software where they were installed
  - Development of a new platform
- Dissatisfaction with infrastructure: response delayed

## Organization, community (inherent to users):

- People in charge of the project changed
- Lack of demand

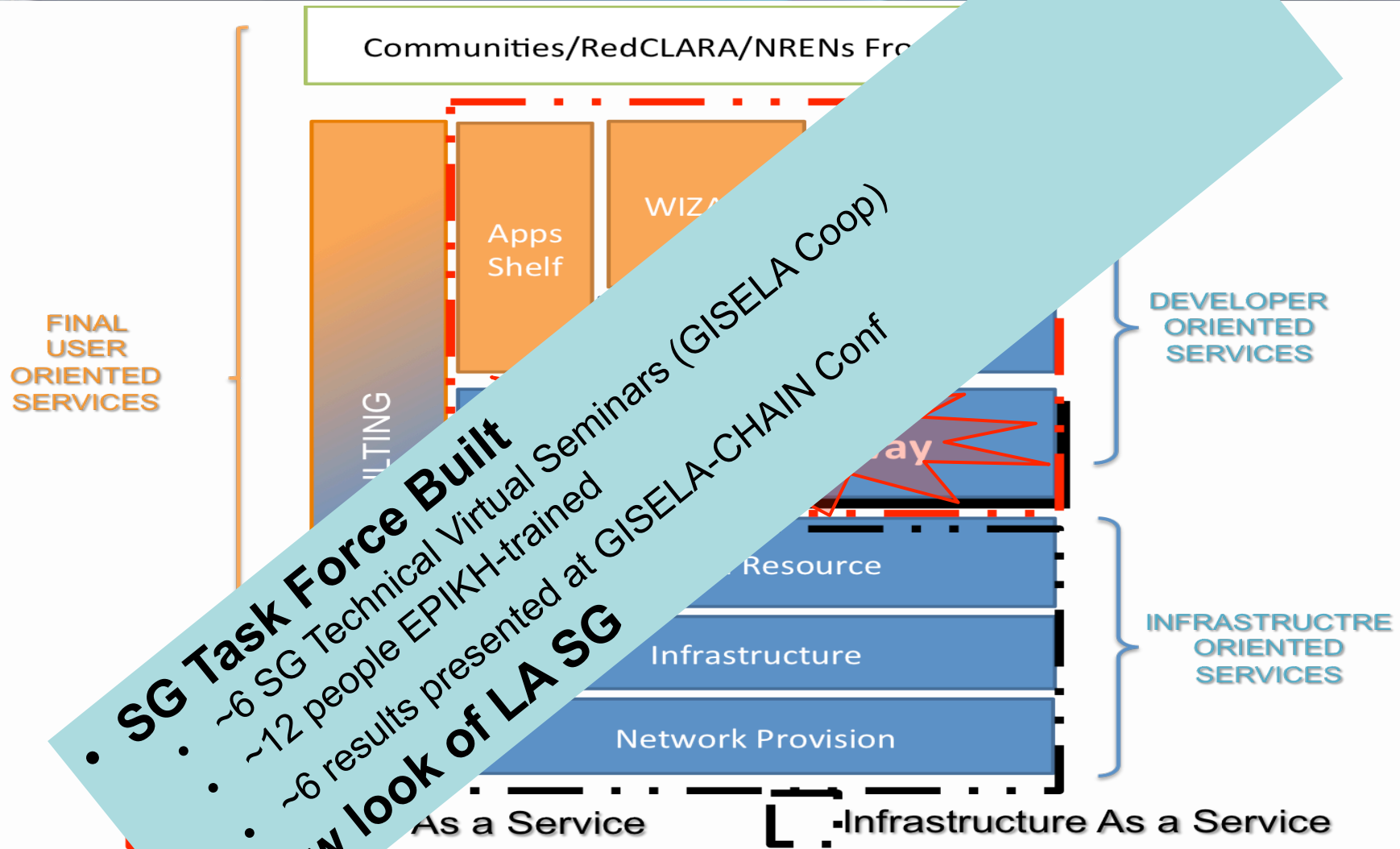
Reasons for suspending the use of applications



Historically, high-performance computing resources have been used by only a small portion of the science and engineering research community. This is primarily for two reasons. First, as we describe in greater detail in Section 6.3.2, supercomputers are not easy to use.<sup>1</sup> Thus, their use has been limited to researchers who required them to conduct their work and/or have been willing to surmount the barriers to use. Second, many researchers have



# Science Gateway Service Model



**SG Task Force Built**

- ~6 SG Technical Virtual Seminars (GISELA Coop)
- ~12 people EPIKH-trained
- ~6 results presented at GISELA-CHAIN Conf

**New look of LA SG**

# Plenty of Advanced Computing Services information

Science Gateway Portal de aplicaciones avanzadas para la investigación en América Latina

Inicio Sobre el SG Documentación y Ayuda Science Gateways Modelo SCA Home Gisela Register Acceder

Regístrese en el Science Gateway Ingrese en el Science Gateway Seleccione y use aplicaciones Integre una nueva aplicación

¿Qué es el Science Gateway? El Science Gateway (SG) es un ambiente que agrupa un conjunto de herramientas, datos y aplicaciones de computación avanzada disponible a las comunidades de investigación de América Latina.

Patrimonio Cultural Herramientas para reconstrucción y preservación del patrimonio cultural read more

Ciencias de la Vida Sistemas estadísticos Patrimonio Cultural Sistemas Industriales

Aprenda sobre el SG

- ¿Cómo comienzo a usar el SG?
- ¿Cuáles son los servicios de computación avanzada?
- ¿Cómo formar parte de una comunidad Virtual de Investigación

Noticias desde Gisela

- Modelando el pasado climático para mejorar el futuro
- El google de imágenes sobre el cerebro
- América Latina debe movilizarse hacia la nueva forma de hacer conocimiento
- E-Infraestructura y sus usos para la Ciencia y la Educación: temas para debatir
- México listo para discutir sobre e-Infraestructura

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Co-ordination & Harmonisation of Advanced e-Infrastructures

Welcome Home Project Area Knowledge Base Applications Events News

Multimedia Contact

## Application Registry

The list below contains the applications deployed on regional Grid infrastructures available outside Europe and developed in the context of projects funded by the European Commission.

To get more information on a given application, click on its name.

For the applications deployed on the [European Grid Infrastructure](#), visit the [EGI Application Database](#)

## Knowledge Base

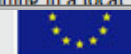
Copy Print Save Search:

Show 10 entries First Previous 1 2 3 4 5 Next Last

NAME	RUN PAGE	DOMAIN	STATUS	INSTITUTION
3D_Simulps		Earth Sciences	In production	CNRST
Ab initio Calc		Others	Ready for gLite middleware	GRINM
AERMOD		Earth Sciences	In production	CUBAENERGIA CITMATEL
AeroVANT		Others	In production	UNRC and UNC UNC UNRC
AFP3DFace		Computer Science and	Ready for standalone use/running in a local	CCK

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# LA ROC Cooperation

**ROC-IA**  
Regional Operation Center Latin America

ALICE ATLAS CMS LHCb CERN AUGER

Home  
History ROC-IA  
Funcions and objectives  
Members  
First ROC-IA Workshop 2010  
Second ROC-IA Workshop 2011  
Related Projects  
Wiki Roc-La  
Contacts  
Duties and responsibilities  
VODCAST  
Logo roc-ia  
People roc-ia  
Available Resources

**Who's Online**

Pathway Home

**ROC-IA**

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BRASIL  
[Centro Brasileiro de Pesquisas Físicas](#)

COLOMBIA  
[Universidad de los Andes](#)

MEXICO  
[Instituto de Ciencias Nucleares UNAM](#)

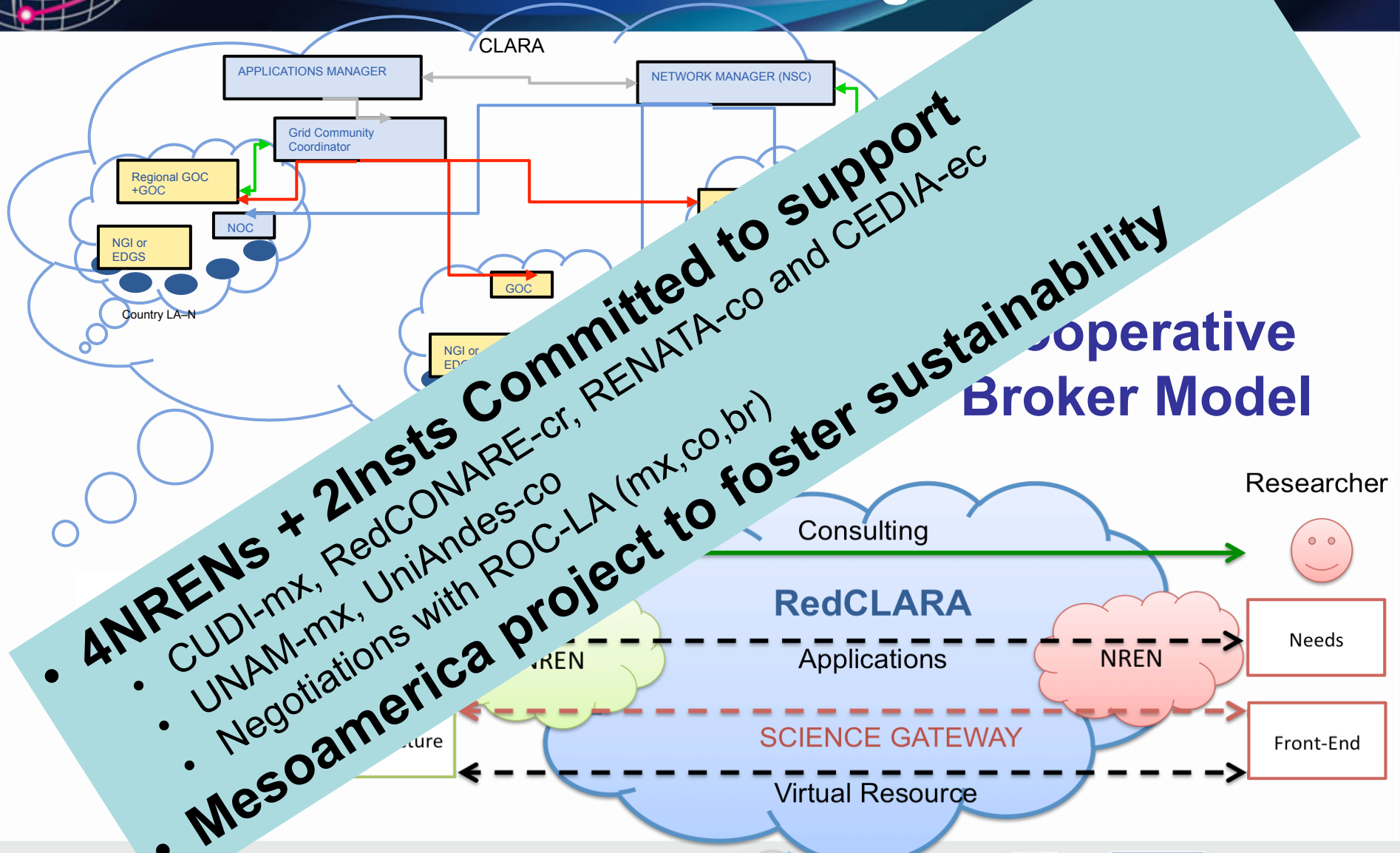
**First ROC-IA Workshop 2010**

A ROC (Regional Operation Center) is a group of resources (people, software and hardware) which has the mission to give support to a group of sites, within a regional area, in order to allow these sites to be part of the grid. Some of its objectives are: Site certification (for new sites), monitoring (continuous tests can be done on sites), tickets follow up.

- [IGALC](#)
- [What's IGALC?](#)
- [Resource Center Reference](#)
- [User Reference](#)
- [Contacts](#)



# RedCLARA advanced computing VRC organisational model



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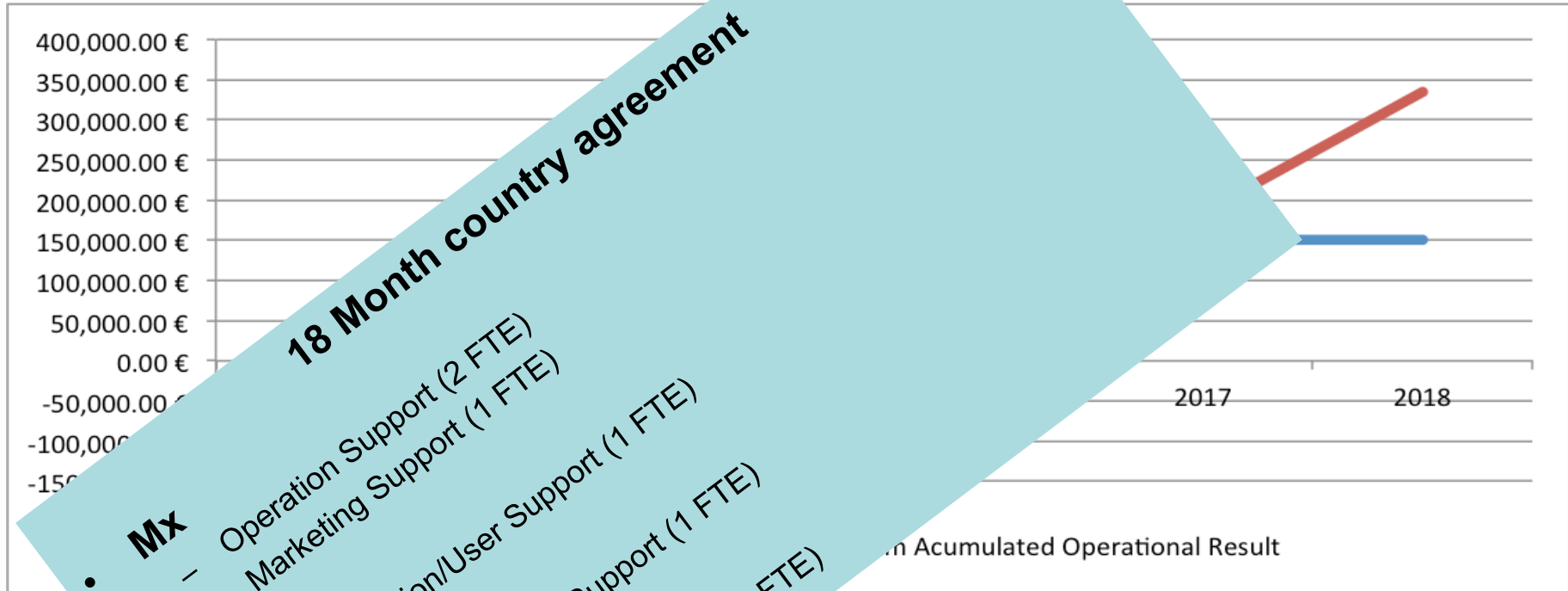
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CLARA 10



# Sustainability forecast



**18 Month country agreement**

- **Mx** – Operation Support (2 FTE)  
– Marketing Support (1 FTE)
- **Cr** – Application/User Support (1 FTE)
- **Co** – Application/User Support (1 FTE)
- **Ec** – Application/User Support (1 FTE)
- **Administrative, 1 FTE - Technical and 1 FTE – sales)**

• **First year** – **Co** – Application/User Support (1 FTE)  
 1/2 FTE for **Ec** – Application/User Support (1 FTE)  
 1/2 FTE for **Co** – Application/User Support (1 FTE)  
 1 FTE for **Ec** – Application/User Support (1 FTE)  
 Third year

# Six month planning

Aug-  
Sep

- ROC Handover
- Platform Testing
- SG Application Testing
- User Support (Tutorial)
- SG Community Marketing



Oct-  
Nov

- ROC Operation
- New SG Application
- User Support (Tutorial)
- SG Community Marketing



Dec-  
Jan

- ROC Operation
- New SG Application
- User Support
- End user training
- SG Community Marketing



# Services for Researcher & Student Communities

**Science Gateway**  
Portal de aplicaciones avanzadas para la investigación en América Latina

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**GISELA Science Gateway** Inicio

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Sistemas estadísticos  
Patrimonio Cultural  
Sistemas Industriales

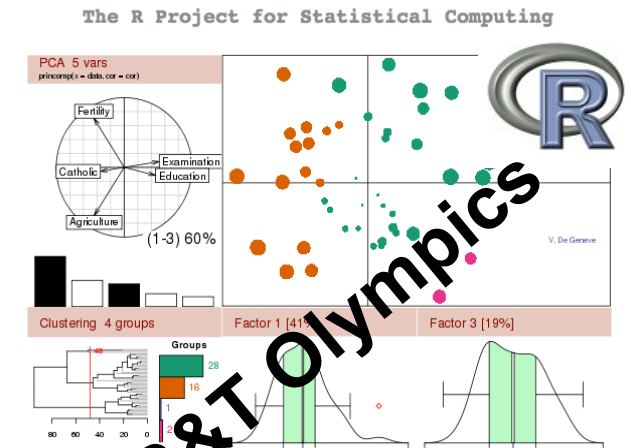
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**GNU Octave**

**TEO**  
Texas Environmental Observatory

**Citizen Science**

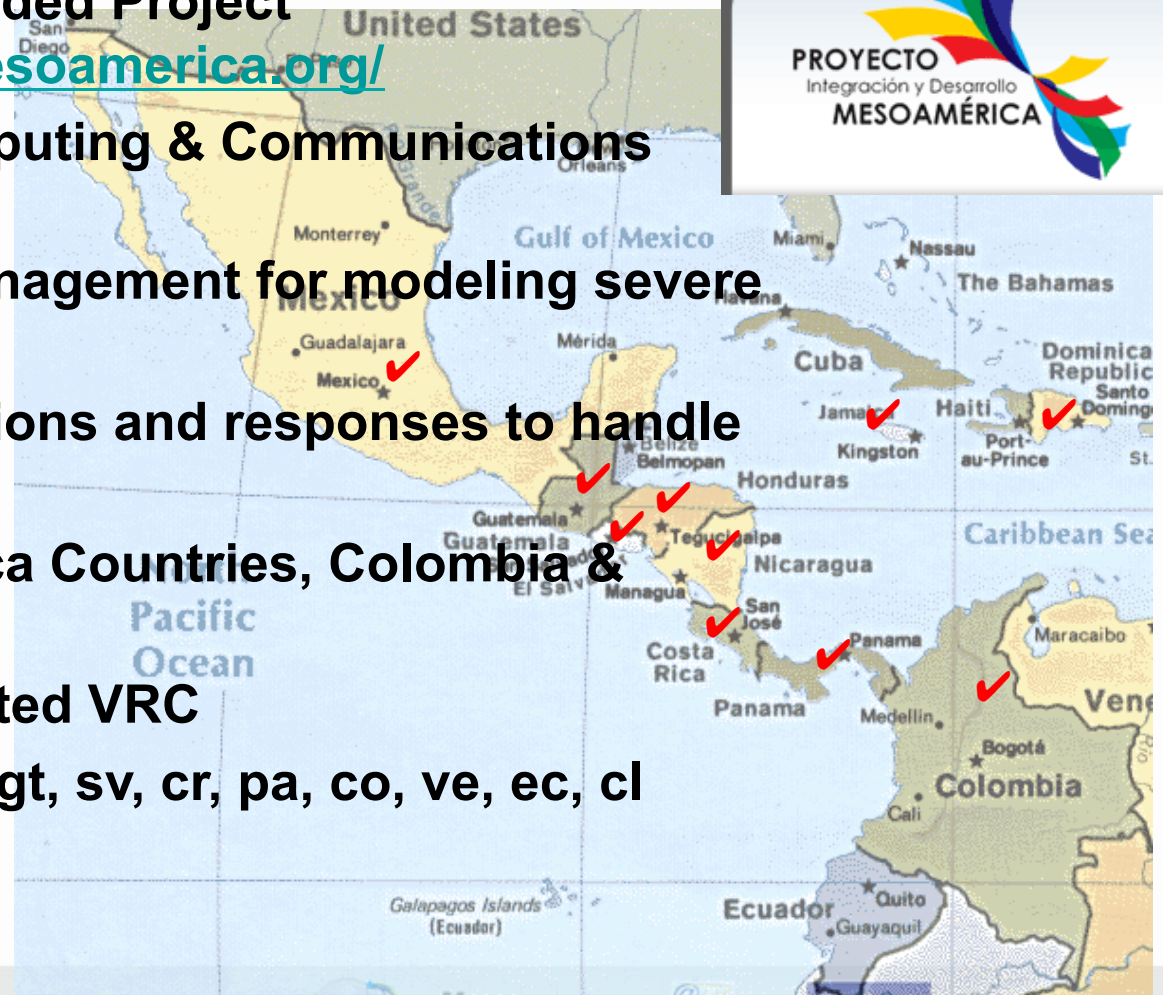
UNT UNIVERSITY OF NORTH TEXAS  
DENTON TEXAS  
TEXAS PARKS & WILDLIFE  
National Science Foundation  
LISD Lewisville Independent School District  
Texas Higher Education Coordinating Board

# Profiting from Community Model

- Under Mesoamerican Integration and Development Project (MIDP) IDB Funded Project

<http://www.proyectomesoamerica.org/>

- Sharing Sensors, Computing & Communications Resources
- Profiting from Data Management for modeling severe climate events
- Defining Mitigation actions and responses to handle severe climate events
- Mexico, Central America Countries, Colombia & Caribbean Countries
- RedCLARA IDB Promoted VRC
- Researchers from: mx,gt, sv, cr, pa, co, ve, ec, cl

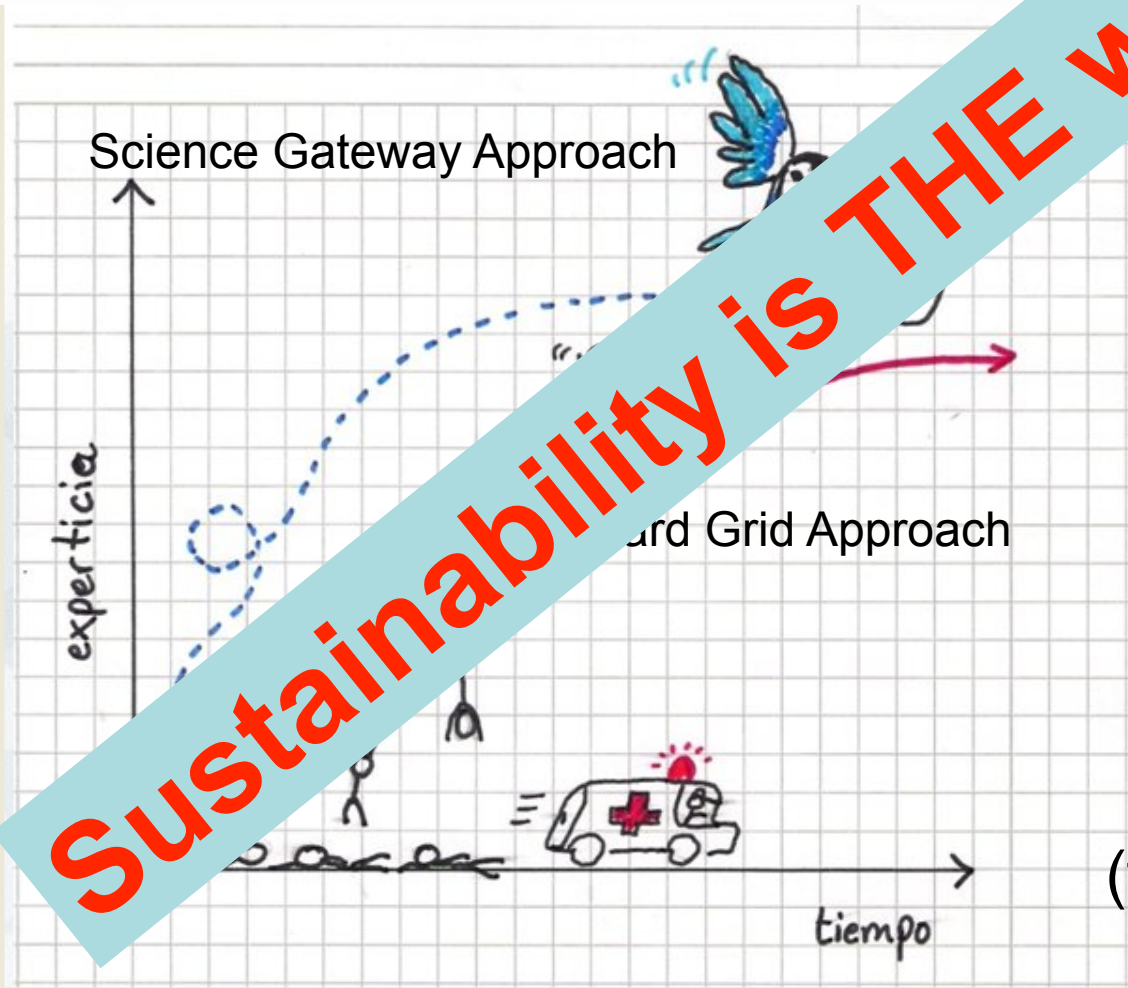




# Science Gateways vs Grid Approach



**Sustainability is THE word**



PERO SIN  
COMPROMISO  
NO ES  
POSIBLE  
MANTENER  
ESTA VAINA  
(filósofo centroamericano  
usando el lenguaje  
venezolano)



# Thanks !