



Grid Initiative for e-Science virtual communities in
Europe and Latin America

GISELA Project

(Nb=261487)

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CLARA representative to GISELA

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European partners

- **France** (Participation in EGI and Collaborating Projects e.g. EUMed, EDGeS)
 - o **WP1:HLP** - Project Office; Administrative and Financial management; Relations with the EC for administrative, financial and policy matters
 - o **WP2:** o **WP3:** o **WP6:HLP** - Organisation of Workshops, Conferences, Tutorials, Grid schools CNRS / IPGP - Experience with large VRCs (Earth Science) CNRS / CPPM - Developer of DIRAC (Generic Community Grid Solution)
- **Italy** (Participation in EGI and Collaborating projects, e.g. CHAIN)
 - o **WP1:INFN-Catania** - Experience in technical management
 - o **WP2:INFN-Catania** - Development and support of GILDA; Expertise in Dissemination events
 - o **WP3:INFN-Catania** - Experience with large VRCs: HEP (ALICE Experiment); User Support (e.g. OGF User Forum)
 - o **WP4:INFN-Catania** - Outstanding expertise (e.g. VOMS Server)
 - o **WP6:INFN-Catania** - Contribution to several EELA-2 new services
- **Portugal** (Participation in EGI and Collaborating projects)
 - o **WP3:UPORTO** - LS, Engineering, Civil protection applications
- **Spain** (Participation in EGI and Collaborating projects, e.g. CHAIN, EDGeS)
 - o **WP1:CIEMAT** - Project coordination and Project Office (PO) experience
 - o **WP2:CIEMAT** - Organisation of workshops, conferences: Production of printed, video documents
 - o **WP3:CIEMAT, UPV, UC** - Experience of large VRCs: LS, ES and HEP (ATLAS, ALICE experiments); User Support
 - o **WP4:CETA-CIEMAT, CESGA**- Outstanding expertise

Latin American partners

- **Argentina**

WP3: UNLP - Experience of large VRCs: HEP (ATLAS experiment)

WP5: INNOVA-T - NREN operator

- **Brazil**

WP3:UFRJ - Experience of large VRCs: ES, LS and HEP (LHCb experiment)o UFCG - ES applications

WP4:UFRJ - Activity Manager; out-standing expertise since EELA and EELA-2, hosts one of the OOD teams in EELA-2UFCG - Outstanding expertise on the deployment, management and support of desktop Grids; hosts one of the OOD teams in EELA-2

WP6:UFCG - Activity Manager; Pole of e-Infrastructure and Application- oriented new Services

- **Chile**

WP2:REUNA - Outreach, press interface, bulletins, dissemination material

WP3:UTFSM - Experience with large VRCs: Earth Science, HEP (ATLAS experiment)

- **Colombia**

WP2:UNIANDES - Organisation of Workshops, Conferences, Tutorials

WP3:UNIANDES - Experience of large VRCs: HEP (CMS experiment)

WP4:UNIANDES - Hosts one of the OOD teams in EELA-2

WP6: UNIANDES - Experience with research and development on distributed systems with focus on Grid computing

- **Cuba**

WP3:CUBAENERGIA – ES and e-Learning applications



Latin American partners

- *Ecuador*

WP3: UTPL ES-Applications

WP5: CEDIA – NREN operator

- *Mexico*

WP3: UNAM - Experience of large VRCs, HEP (ALICE experiment)

WP5: CUDI NREN operator

- *Panama*

WP4: CIDETYS / UTP – RC deployment

- *Peru*

WP3: IGP – ES Applications

WP5: RAAP - NREN operators

- *Venezuela*

WP2: ULA - Activity Manager; 4-year of Dissemination & Training experience

WP3: ULA - Earth Science Applications

WP4: ULA - Hosts one of the OOD teams in EELA-2

- *CLARA: International Organisation*

WP1: Participation in the GISELA management

WP2: Experience in event organisation, outreach actions

WP3: Experience in surveying VRCs

WP5: Activity manager; Major contributor, with LA NRENs, of Network Resource Provision; Network Support Centre (NSC); Network monitoring (perfSONAR)

- **2'629 518 Euros**
 - LA1 317 120 €, 50%
 - EU;1 312 398 €; 50%
- **The total GISELA Manpower Effort amounts to 913 PMs**
 - It breaks down into:
 - 801 PMs composed of 275 (EC funded) and 526 (matching contribution)
 - 112 PMs funded by the special CETA-CIEMAT fund



Objectives and Challenges (1)

The GISELA objective is to guarantee the long-term sustainability of the European – Latin American e-Infrastructure and thus ensure the continuity and enhancement of the Virtual Research Communities (VRC) using it. The project will focus on:

- **Implementing the Latin American Grid Initiative (LGI) sustainability model rooted on National Grid Initiatives (NGI) or Equivalent Domestic Grid Structures (EDGS), in association with CLARA and collaborating with EGI.**
- **Providing VRCs with the e-Infrastructure and Application-related Services required to improve the effectiveness of their research, addressing both:**
 - Current EELA-2 small User Communities;
 - Larger VRCs through “Specialised Support Centres” (SSCs).



Objectives and Challenges (2)

The GISELA mission is twofold:

Ensure the sustainability of the EU-LA e-Infrastructure

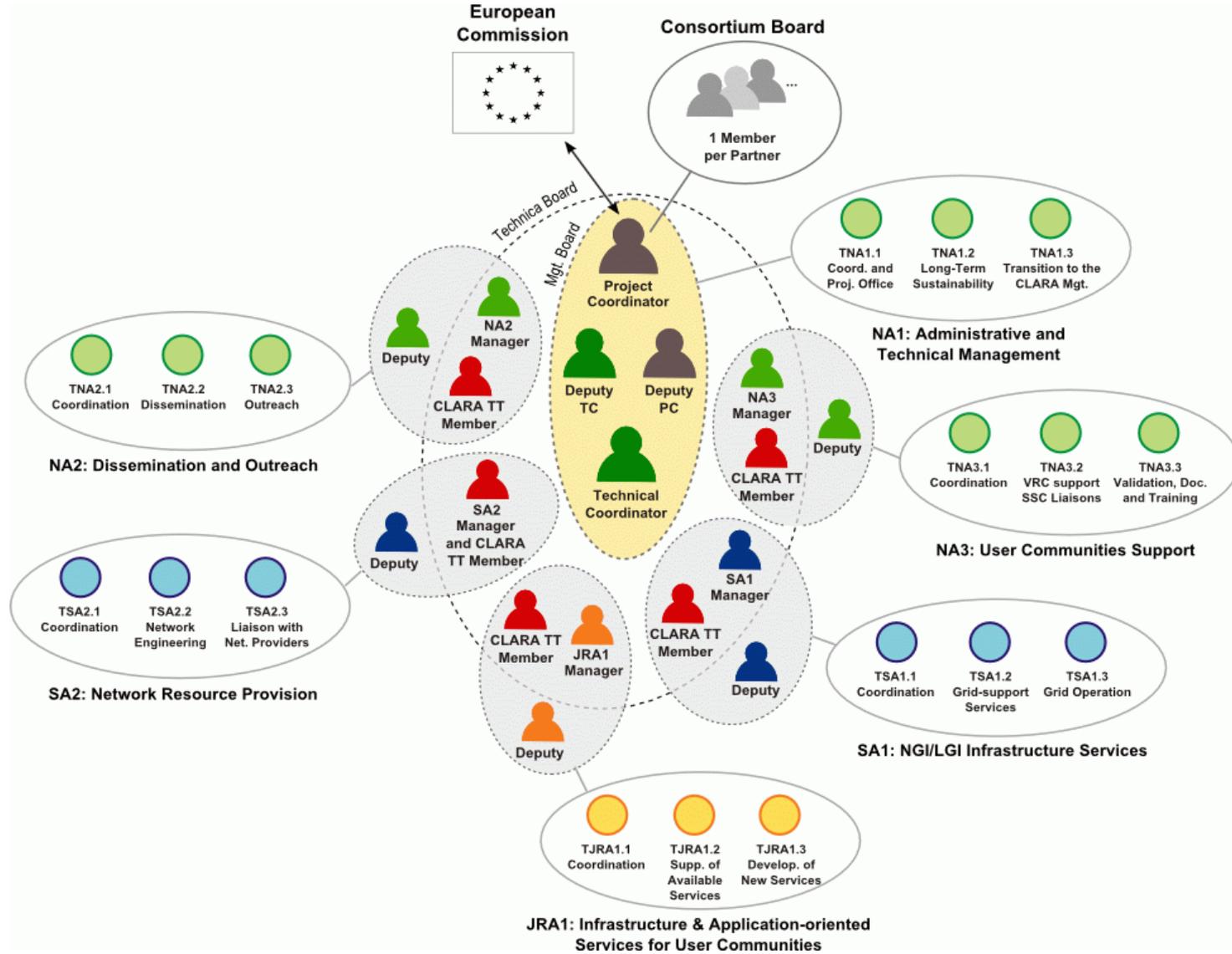
The tasks, at each level of the e-Infrastructure are:

- **Institution:** Get all Services fully operational in the Resource Centre (RC);
- **Country:** Implement all Grid Operation Centre (GOC) Services;
- **Continent:** Implement all Grid & Network Support Centres (GSC, NSC) Services;
- Support a catchall GOC.

Support Virtual Research Communities

The support will encompass:

- **User Support:**
 - Provide access to the EU-LA Infrastructure to VOs represented in GISELA (HEP, Life Sciences, Earth Sciences, etc.);
 - Publicise and support the GISELA e-Infrastructure and Application Services;
 - Collaborate with VRCs or Specialised Support Centres (SSC) to the development of integrated services (e.g. gateways).
- **Training & Dissemination activities**
 - Organisation of tutorials for single users and VRCs;
 - Coordinate dissemination actions, workshops, Conferences;
 - Produce dissemination material.



Bottom-up evaluation of the Manpower Effort (From EELA-2 experience)

PERSON MONTHS PER PARTNER AND (ACTIVITY / TASK) (Source of Table 31: Project Staff Effort)

■ Total PMs
 ■ CIEMAT Funds
 ■ Activity Leader
 ■ Major involvement

- The PM contribution of each Partner to each Task of each Activity has been estimated according to its competence, interest and commitment

- The funded component has been deduced, taking into account the job competence profile for each Task and the corresponding mean PM monthly cost for each Partner in its country

- The Partners have added a (large) amount of unfunded effort in each task as personal contribution

	TOTALS	MA1. Admin. and Tech. Mgm.	TNA1.1 Admin. and Tech. Mgm.	TNA1.2 Sustainability - Policy & Int. Coop.	TNA1.3 Transition to CLARA Mgm.	MA2. Dissemination and Outreach	TNA2.1 Coordination	TNA2.2 Dissemination	TNA2.3 Outreach	MA3. User Communities Support	TNA3.1 Coordination	TNA3.2 VRC Support - Liaison EGI & SSCs	TNA3.3 Validation, Doc. & Training	SA1. NG/LGI Infrastructure Services	TSA1.1 Coordination	TSA1.2 Grid Support Services	TSA1.3 Grid Operation	SA2. Network Resource Provision	TSA2.1 Coordination	TSA2.2 Network Engineering / Operations	TSA2.3 Liaison with Network Providers	JPA1. New Services for User Communities	TJA1.1 Coordination	TJA1.2 Support / Custom. of Services	TJA1.3 Dev. and Support of New Services	
TOTALS	913	48	30	2	16	75	4	42	29	320	16	142	162	302	16	44	242	70	12	35	23	98	8	38	52	
EU-FUNDED	275	23	16	1	6	38	0	31	7	108	5	48	55	56	2	6	48	29	4	13	12	21	1	10	10	
UNFUNDED	526	25	14	1	10	24	2	5	17	191	11	88	92	182	6	24	152	41	8	22	11	63	7	24	32	
CIEMAT-FUND	112	0	0	0	0	13	2	6	5	21	0	6	15	64	8	14	42	0	0	0	0	14	0	4	10	
CIEMAT	68	20	18	0	2	4	0	2	2	20	4	8	8	24	0	12	12	0	0	0	0	0	0	0	0	0
EU-FUNDED	22	5	4	1	2	2	1	1	1	7	1	3	3	8	4	4	4	0	0	0	0	0	0	0	0	
UNFUNDED	46	15	14	1	2	2	1	1	1	13	3	5	5	16	8	8	8	0	0	0	0	0	0	0	0	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CEAIA (NREN)	24	0	0	0	0	6	0	4	2	14	0	7	7	0	0	0	0	4	0	3	1	0	0	0	0	
EU-FUNDED	12	0	0	0	0	3	0	3	0	8	0	4	4	0	0	0	0	1	0	0	1	0	0	0	0	
UNFUNDED	12	0	0	0	0	3	0	1	2	6	0	3	3	0	0	0	0	3	0	3	0	0	0	0	0	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CLARA (NREN's Fed.)	130	12	0	0	12	10	0	6	4	44	8	24	12	24	8	8	8	36	12	12	12	4	4	0	0	
EU-FUNDED	40	4	0	0	4	3	0	2	1	14	2	8	4	6	2	2	2	12	4	4	4	1	1	0	0	
UNFUNDED	65	8	0	0	8	7	0	4	3	30	6	16	8	18	6	6	6	24	8	8	8	3	3	0	0	
CIEMAT-FUND	25	0	0	0	0	7	0	4	3	0	0	0	0	18	6	6	6	0	0	0	0	0	0	0	0	
CNRS	53	0	0	0	0	2	0	1	1	27	0	9	18	0	0	0	0	0	0	0	0	24	0	14	10	
EU-FUNDED	20	0	0	0	0	2	0	1	1	11	0	5	6	0	0	0	0	0	0	0	0	7	4	3	3	
UNFUNDED	33	0	0	0	0	0	0	0	0	16	0	4	12	0	0	0	0	0	0	0	0	17	10	7	7	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CUBAENERGIA	26	0	0	0	0	2	0	1	1	24	0	2	22	0	0	0	0	0	0	0	0	0	0	0	0	
EU-FUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UNFUNDED	17	0	0	0	0	0	0	0	0	17	0	2	15	0	0	0	0	0	0	0	0	0	0	0	0	
CIEMAT-FUND	9	0	0	0	0	2	0	1	1	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	
CUDI (NREN)	70	0	0	0	0	2	0	1	1	10	0	6	4	54	0	0	54	4	0	3	1	0	0	0	0	
EU-FUNDED	16	0	0	0	0	2	0	1	1	2	0	2	2	10	0	0	10	2	0	2	0	0	0	0	0	
UNFUNDED	44	0	0	0	0	0	0	0	0	8	0	6	2	34	0	0	34	2	0	1	1	0	0	0	0	
CIEMAT-FUND	10	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	
CIDETYS	24	0	0	0	0	7	0	4	3	17	0	10	7	0	0	0	0	0	0	0	0	0	0	0	0	
EU-FUNDED	12	0	0	0	0	3	0	2	1	9	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	
UNFUNDED	12	0	0	0	0	4	0	2	2	8	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HLP	16	12	12	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EU-FUNDED	16	12	12	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UNFUNDED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
INFN	24	4	0	2	2	2	0	1	1	12	0	6	6	0	0	0	0	0	0	0	0	6	0	6	0	
EU-FUNDED	12	2	0	1	1	1	0	1	1	6	0	3	3	0	0	0	0	0	0	0	0	3	0	3	0	
UNFUNDED	12	2	0	1	1	1	0	0	0	6	0	3	3	0	0	0	0	0	0	0	0	3	0	3	0	
CIEMAT-FUND	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

- Preparation phase (**M01 to M20**)

- Define the Strategy towards long-term sustainability (See Reference Documentation in next slide,) starting with the LGI model to transit to CLARA sustainability model, and carefully estimate the manpower needs
- Associate, from the very beginning, CLARA and Latin American NRENs to
 - ✓ *Naturally integrate Network & Computing Services, thus creating synergies*
 - ✓ *Optimise both administrative & technical efforts*
- Collaborate with EGEE-III & related projects and interact with Decision Makers and User Communities (e.g. **eResearch2020 Survey**) to explore common approaches to sustainable e-Infrastructures
- **Assert a special funding of 500 k€ from CIEMAT for the sustainability of the Latin American e-Infrastructure beyond EELA-2**

- Transition phase (**M21 to M24**)

- Create a transitional Regional Operation Centre (ROC,) called "Iniciativa de Grid de America Latina - Caribe" (IGALC - www.igalc.org), to provide e-Infrastructure Operation, User Support and Coordination.
- Make a Survey of all EELA-2 Members (78) to assess the status of the e-Infrastructure, the possible sources of further funding and the commitment of resources by members after the end of the project
- Establish a MoU (<http://documents.eu-eela.org/record/1335/files/>), currently under signature by all Members, to assess their support to IGALC



Sustainability Beyond the End (2)

Interim period between EELA-2 and GISELA

- **Secure the e-Infrastructure Members and Resources from the Survey and MoU outcomes**
- **Run & Support the IGALC in**
 - **Operating the core Grid services, redundantly in LA and EU, and VO services for the users communities**
 - **Handling the Latin American Public Key Infrastructure**
 - **Monitoring e-Infrastructure Resources and helping Resource Providers to solve infrastructure problems**
- **Elaborate the CLARA Business Plan and sustainability model, based on its Life Cycle Product Management (LCPM) process. This concerns:**
 - **The Service Structure strategy for the long-term Users Community support**
 - **The outsourcing of the ROC services to NRENs**



Sustainability Beyond the End (2)

- **CLARA Transition Team will be acquainted with NA1, NA2, NA3 and SA1 Activities**
- **CLARA Business Plan and sustainability model will be refined with experience gained in each Activity**
- **Eventually, the Business Plan will be approved by the CLARA Management and the NRENs, and the funding will be secured**
- **From M18 on, under the auspices of the GISELA Management, CLARA will take over the control of the infrastructure and of the User Communities support, attributing the corresponding services to the NRENs according to their offers.**
- *Quarterly reporting is foreseen to monitor the progress of the handover to CLARA and NRENs. Therefore any deviation or delay will be detected on time and proper recovery action will be taken as necessary*