



## Service Activity One Grid Infrastructure

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## Outline

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- What is SA1?
- What are SA1 Objectives?
- Who are we?
- What about Operations?
- How to talk with us?
- Conclusion



What is SA1?

## What is SA1? - Resource Centres



## What is SA1? - Capacity

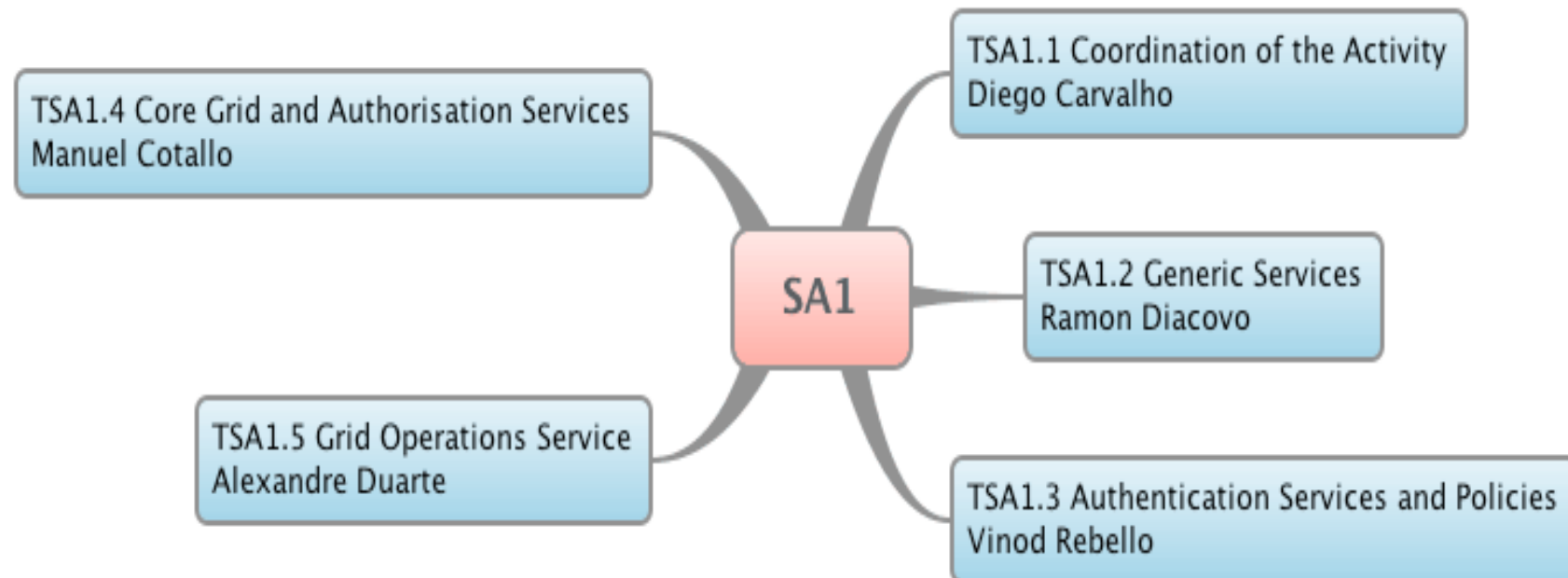
Partner ID	ROLE	Institution	Country	# Cores	Storage (TB)
1	Spanish JRU	CIEMAT	Spain	650	139.45
2		CUBAENERGIA	Cuba	40	1.2
3		CLARA	International		
4		CMRC	Ireland		
5		HLP	France		
6	French JRU	IN2P3	France	516	500
7		IN2P3	France	302	5.5
8	Argentinean JRU	CONICET	Argentina	322	2.5
9	Chilean JRU	CONICYT	Chile	116	3
10	Peruvian JRU	SENAMHI	Peru	28	3.75
11	Venezuelan JRU	ULA	Venezuela	48	3.5
12	Colombian JRU	UNIANDES	Colombia	40	1.6
13		UNAM	Mexico	60	2
14	Portuguese JRU	Uporto	Portugal	18	0.32
15	Brazilian JRU	UFRJ	Brazil	843	27.09
16		UTPL	Ecuador	24	0.5
<b>TOTAL</b>				<b>3007</b>	<b>690.41</b>

~ 50% EU / 50% LA

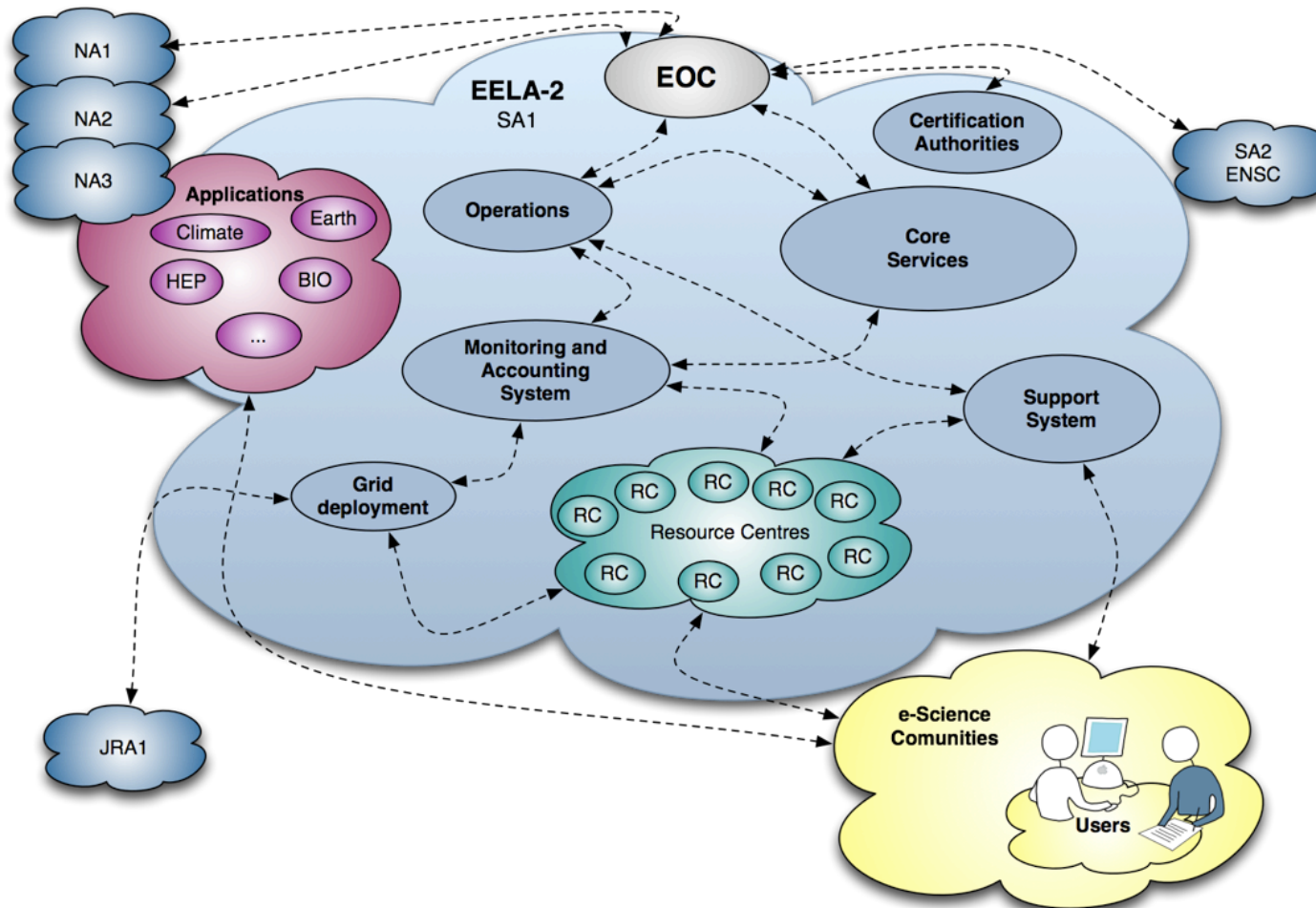
Source: EELA-2 Editorial Board from Application/Partner Survey

## What is SA1? - WBS

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# What is SA1? - Structure





## SA 1 Objectives



## SA1 Objectives

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- Operate the EELA grid infrastructure
- Provide support to the EELA community
  - Users (infrastructure)
  - Resource Centre managers
  - Application developers (infrastructure)
- Pave the way for a sustainable infrastructure:
  - Promoting and expanding the Latin American Public Key Infrastructure
  - Unifying Protocols and Procedures
  - Consolidating the knowledge about Grid Operations in Latin America fostering the creation of Regional Operations Centres and the Latin American Grid Coordination Centre



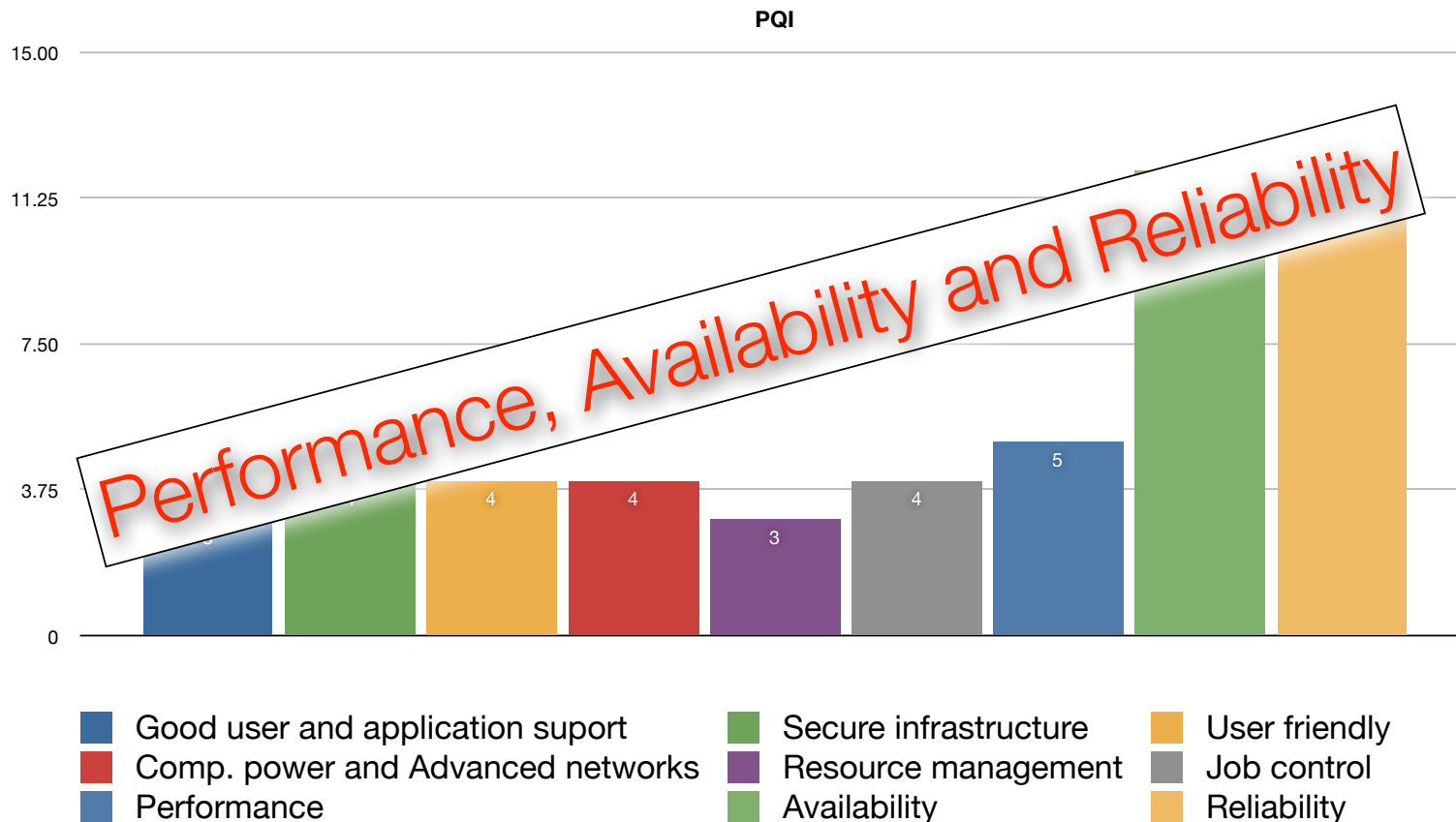
Who are we?

## EELA-2 SA1 Survey

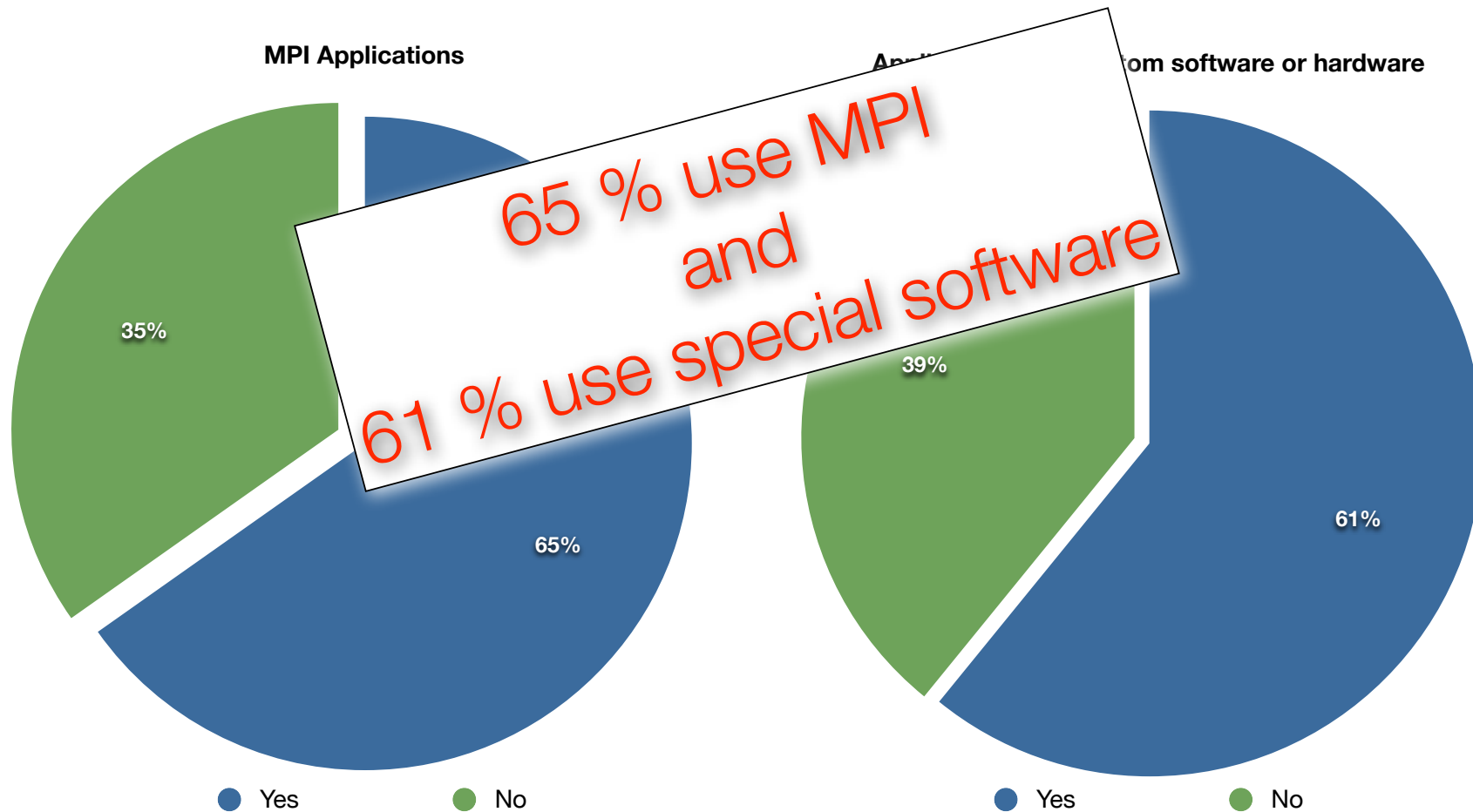
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- Two phases:
  - Member Survey:
    - Completed 36 /42
  - Resource Centre Candidate Survey
    - Completed 24 / 36

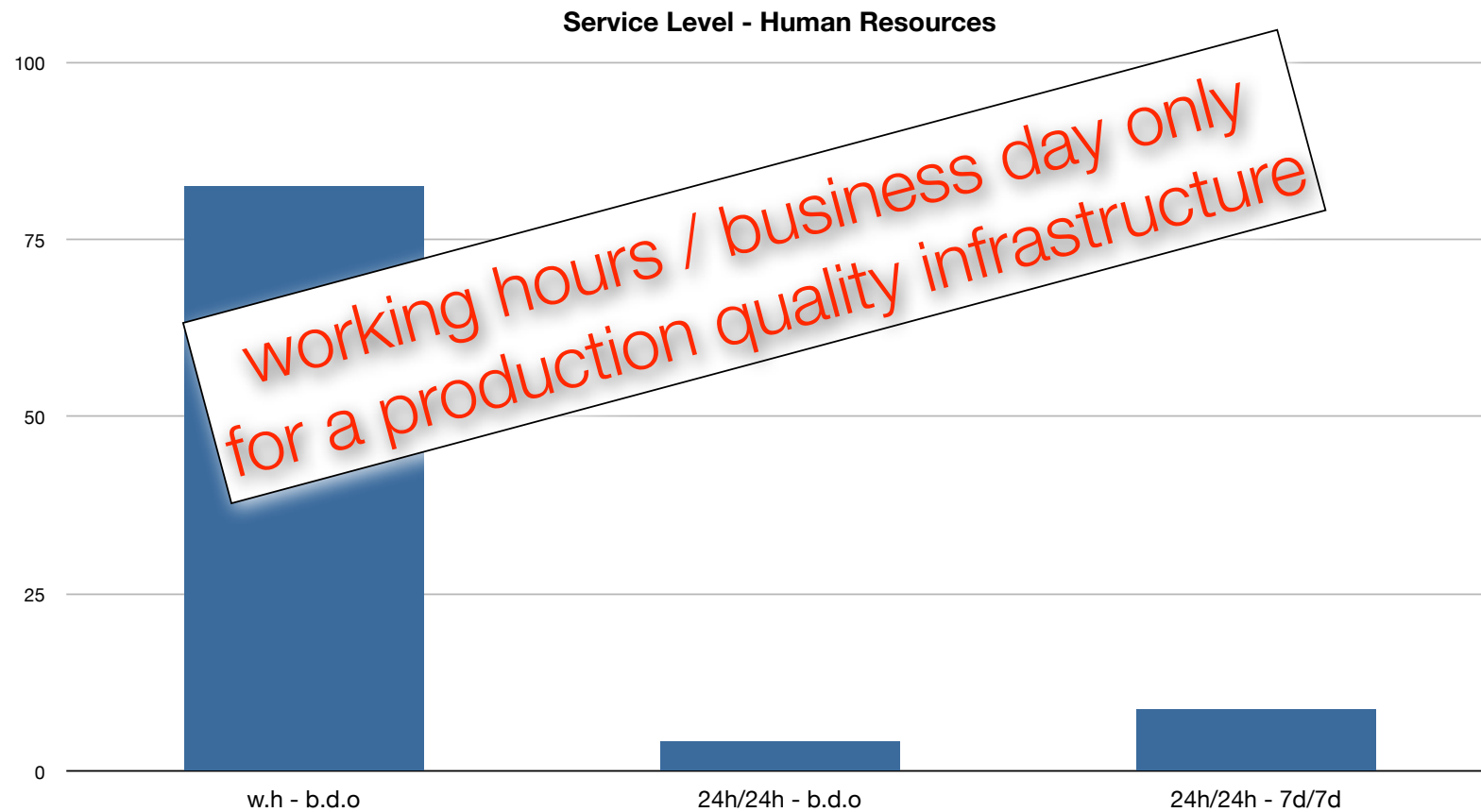
# Who are we? - PQI understanding



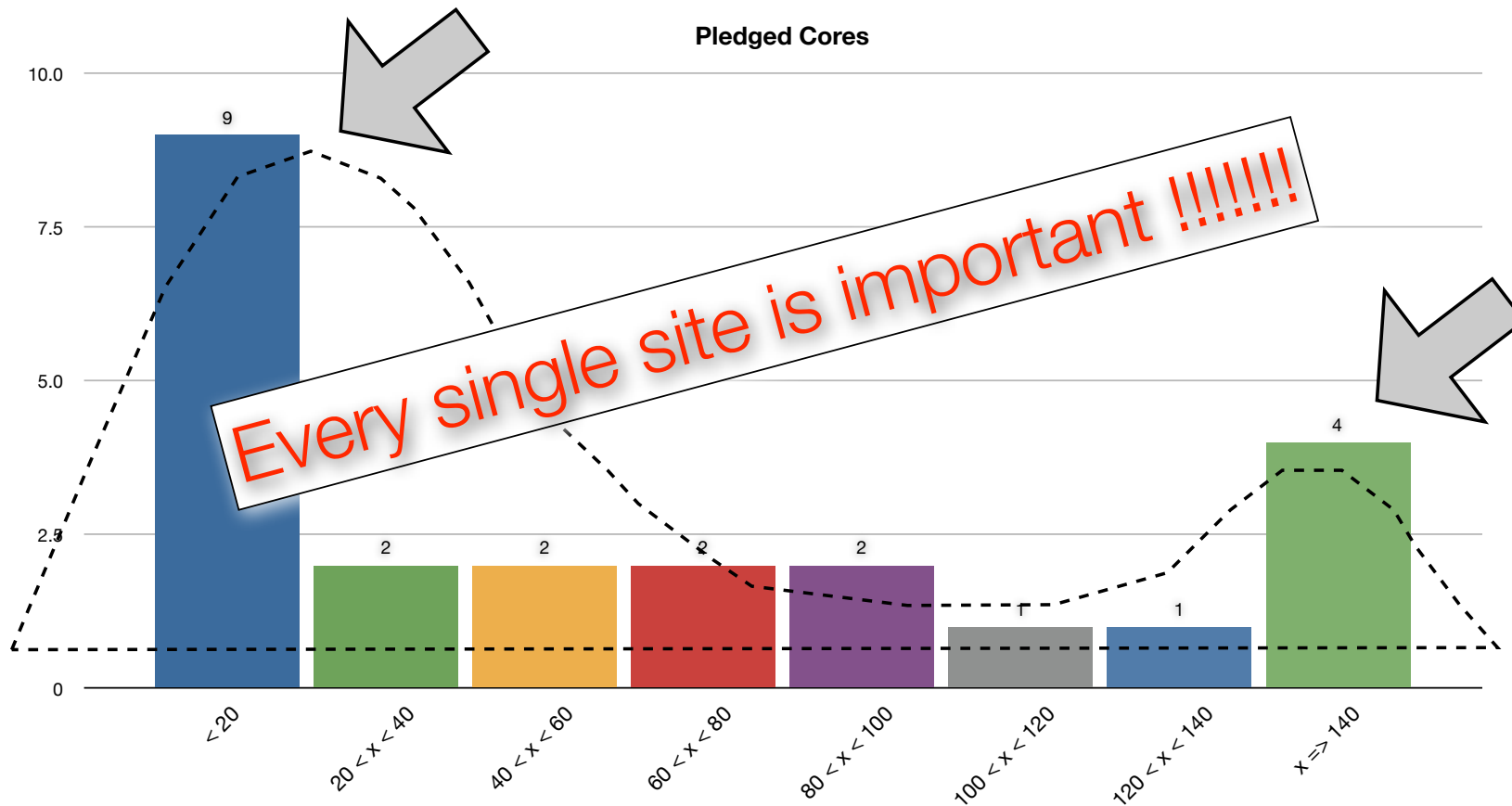
## Who are we/you? - Applications



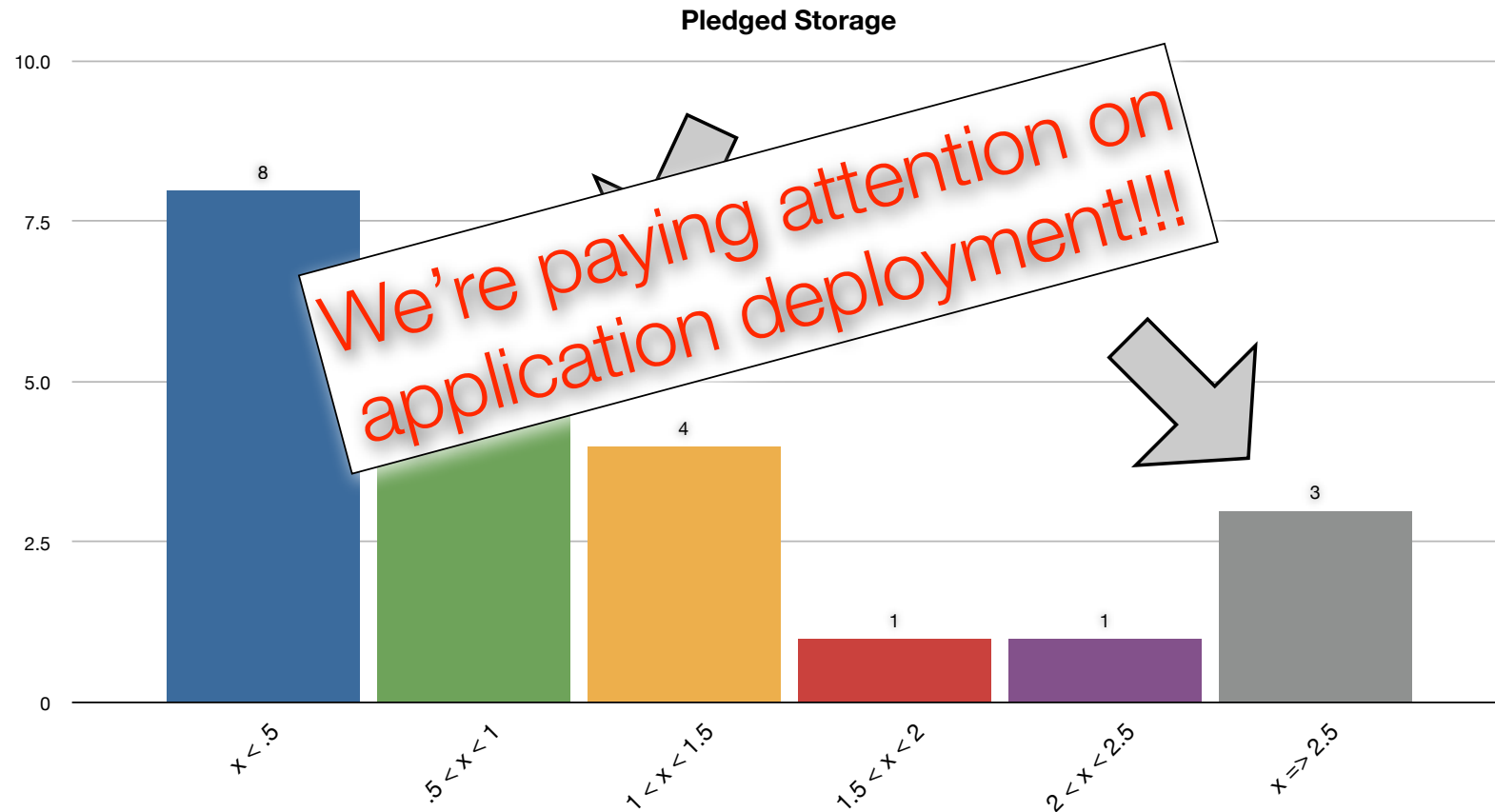
# Who we are/you? - Resource Centre Service Level



# Who are we/you? - Resources

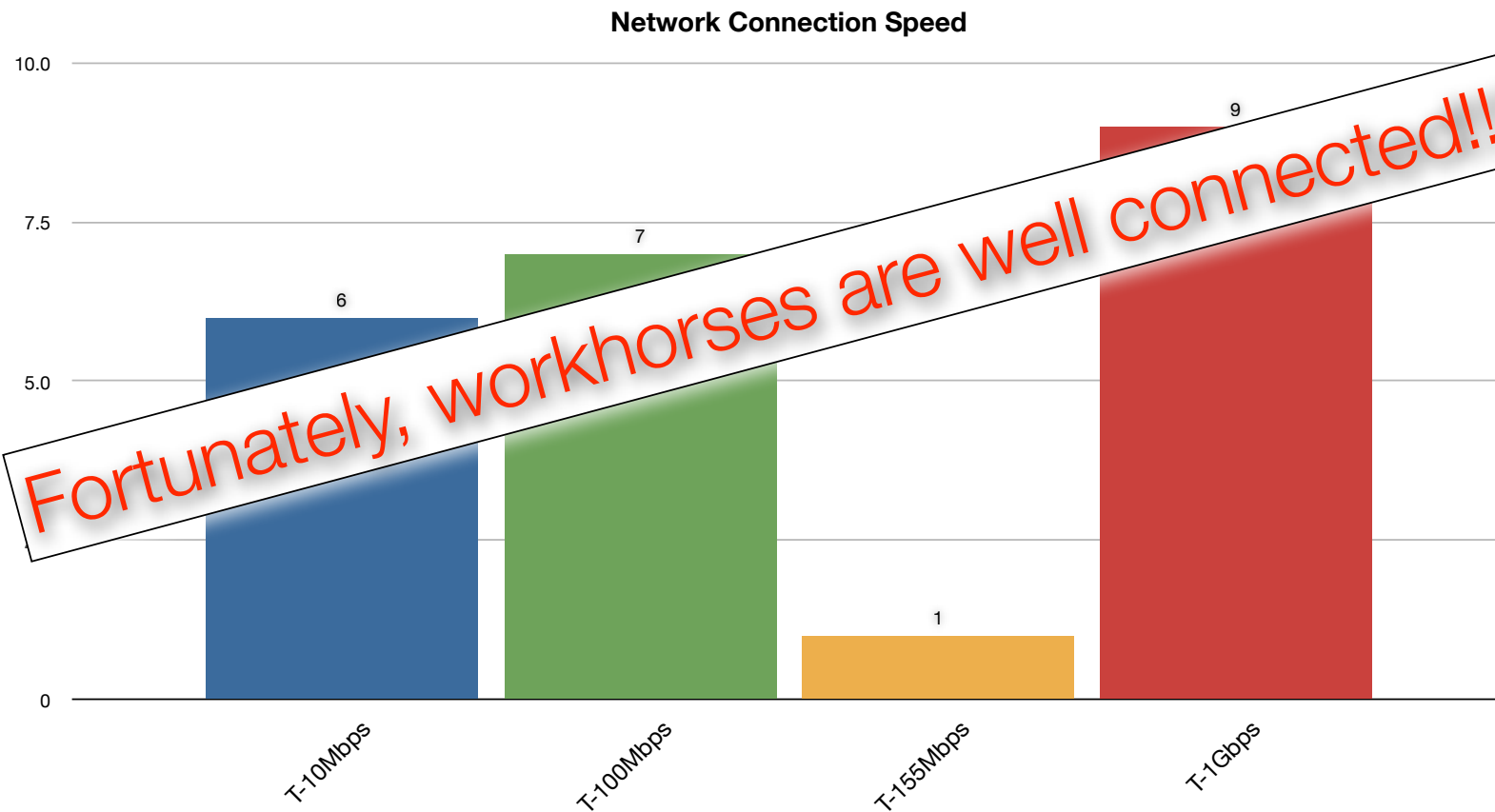


# Who we are/you? - Resources

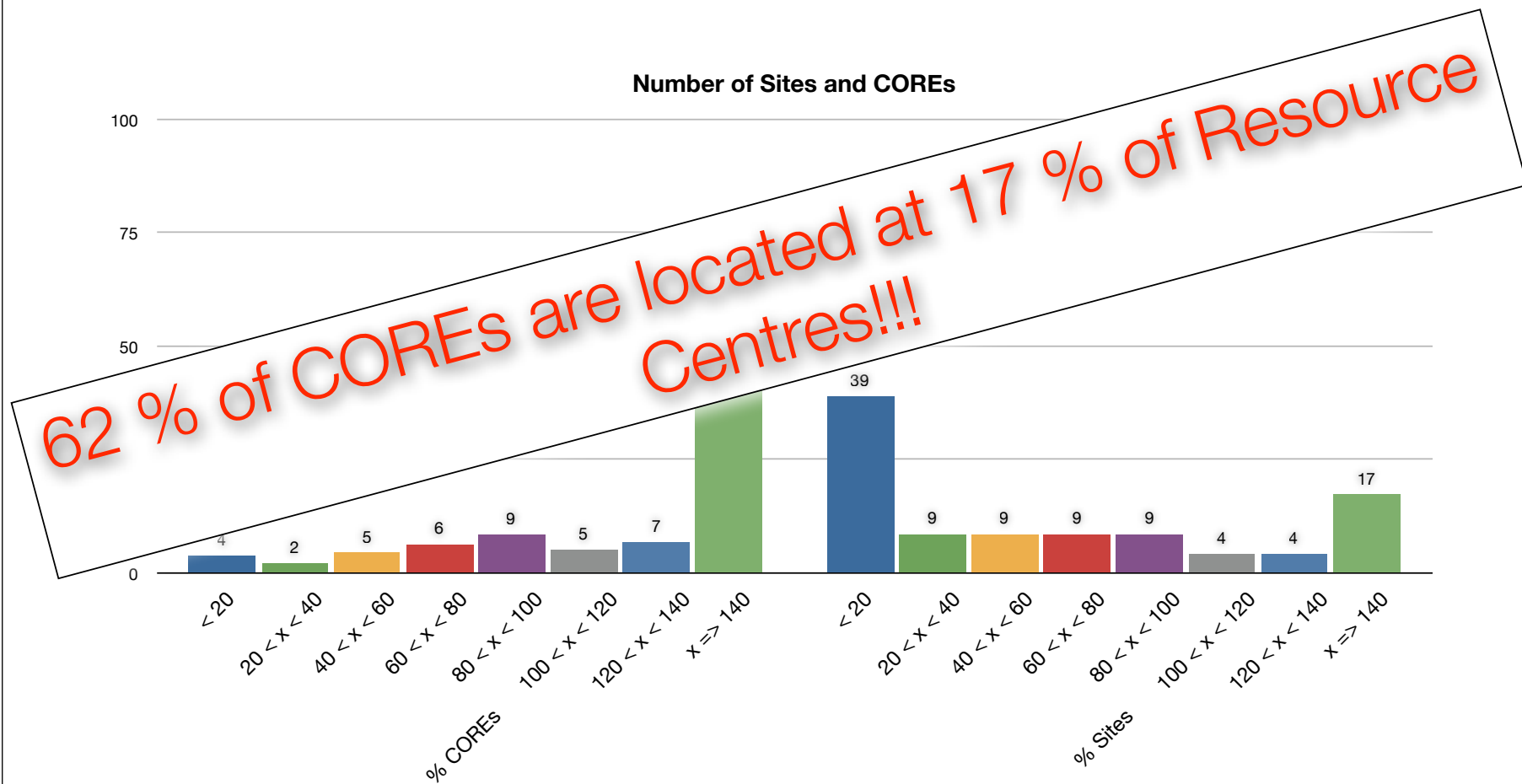




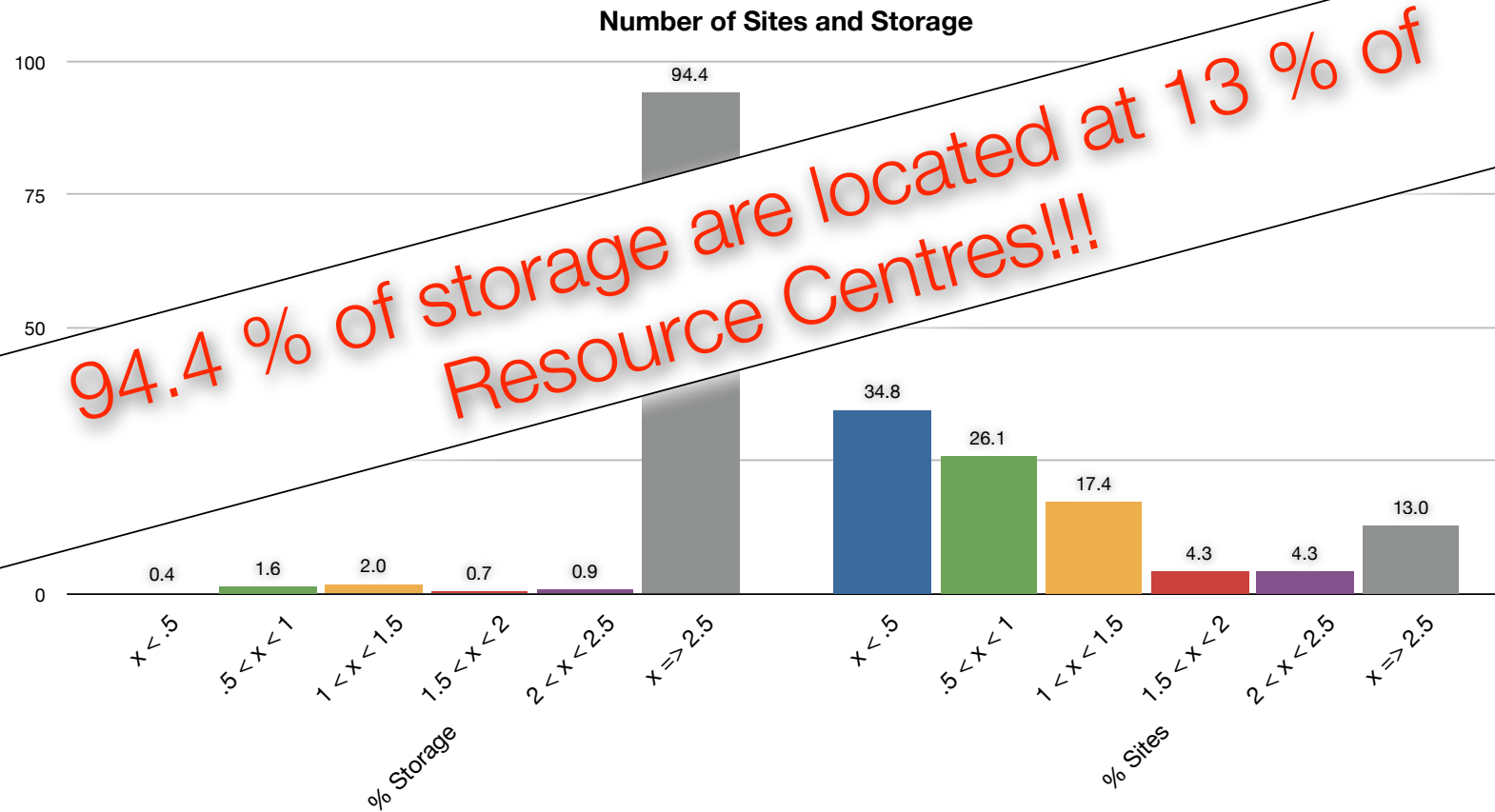
# Who are we/you? - Resource Centre Network



# Who are we/you? - Resource Distribution



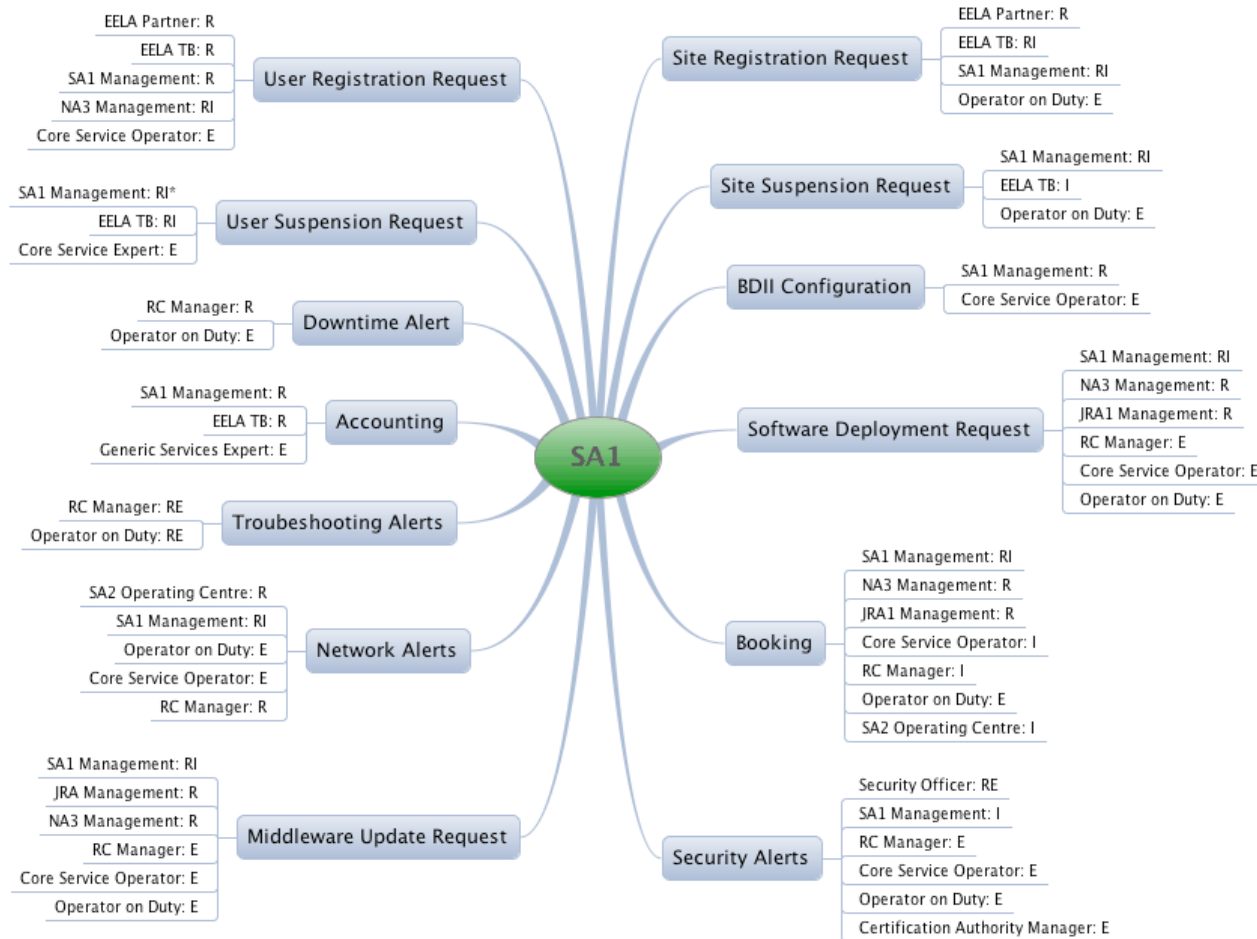
# Who are we/you? - Resource Distribution



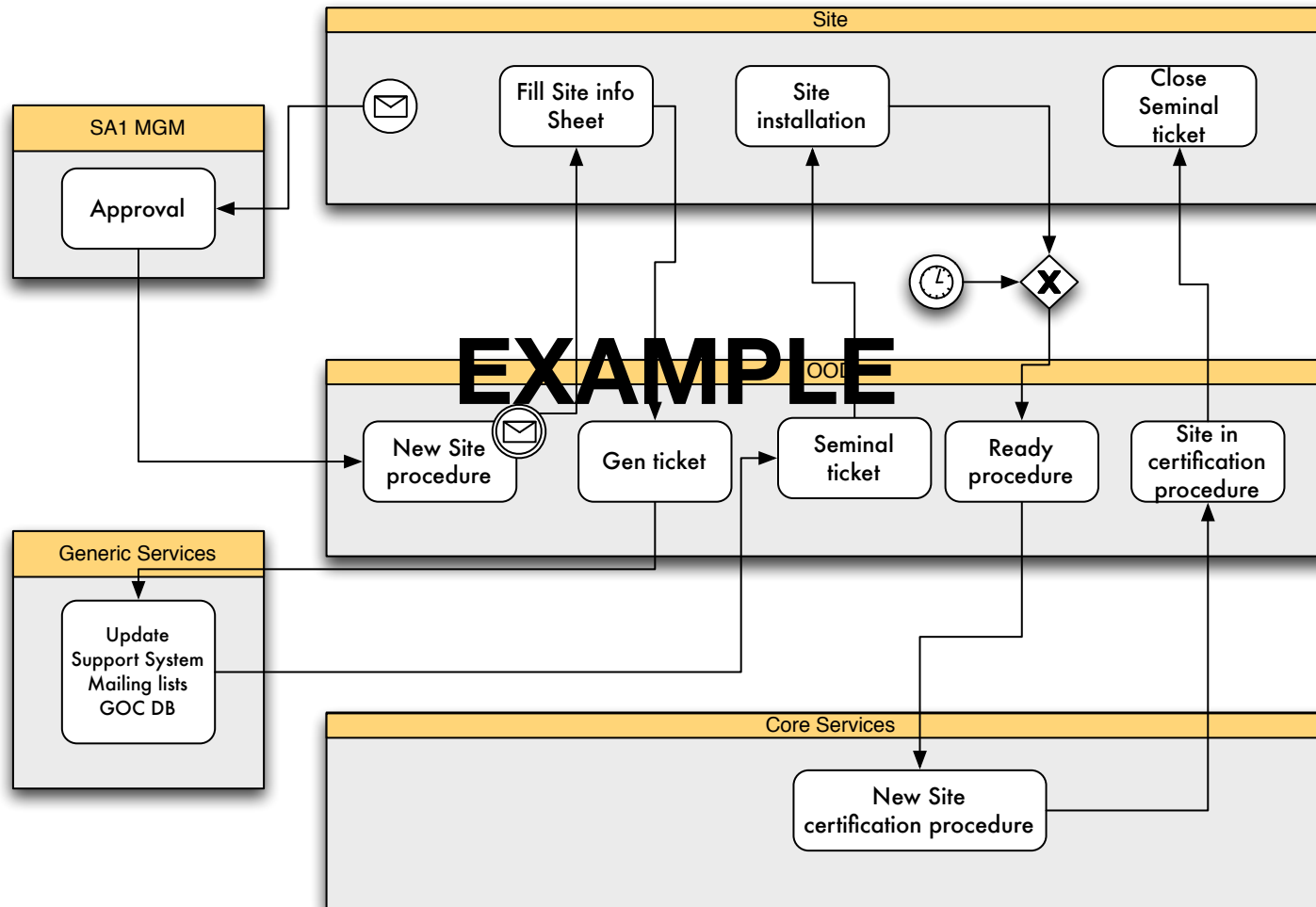


# Operations

# TSA1.1 - SA1 Planing



# TSA1.1 - Site Registration Request



## TSA1.1 - SLAs

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- EELA-2 SLA based on the SEEGRID SLA
- SLA will not be enforced on Certification Infrastructure
- Resource Centre minimum resources:
  - At least 4 worker nodes.
  - Enough connectivity to be tested by the EELA Monitoring Framework
  - Requirement from NA3 (enough bandwidth for applications)
  - Service nodes minimum requirements (CE, SE, Site BDII)
  - 1 site administrator and/or security officer 4h-5d support
  - on call during weekends for security breaches
  - Acknowledge tickets within next working day

## TSA1.1 SLA

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- Resource Centre minimum resources (continuation):
  - Provide monthly reports to EOC
  - Level of expertise (at least 1 EELA tutorial)
  - Needs to accept EELA VO (all committed resources)
- Metrics:
  - Site Availability - Percentage of time that a site passes on SAM tests
  - Site Downtime - Percentage of time that a site is on downtime state
  - Downtime kind - Emergence (one day in advance), Planned
  - Creation of the Drill Ticket in order to evaluate the Site Availability metric
    - This ticket will comprise a series of site checks and maintenance procedures

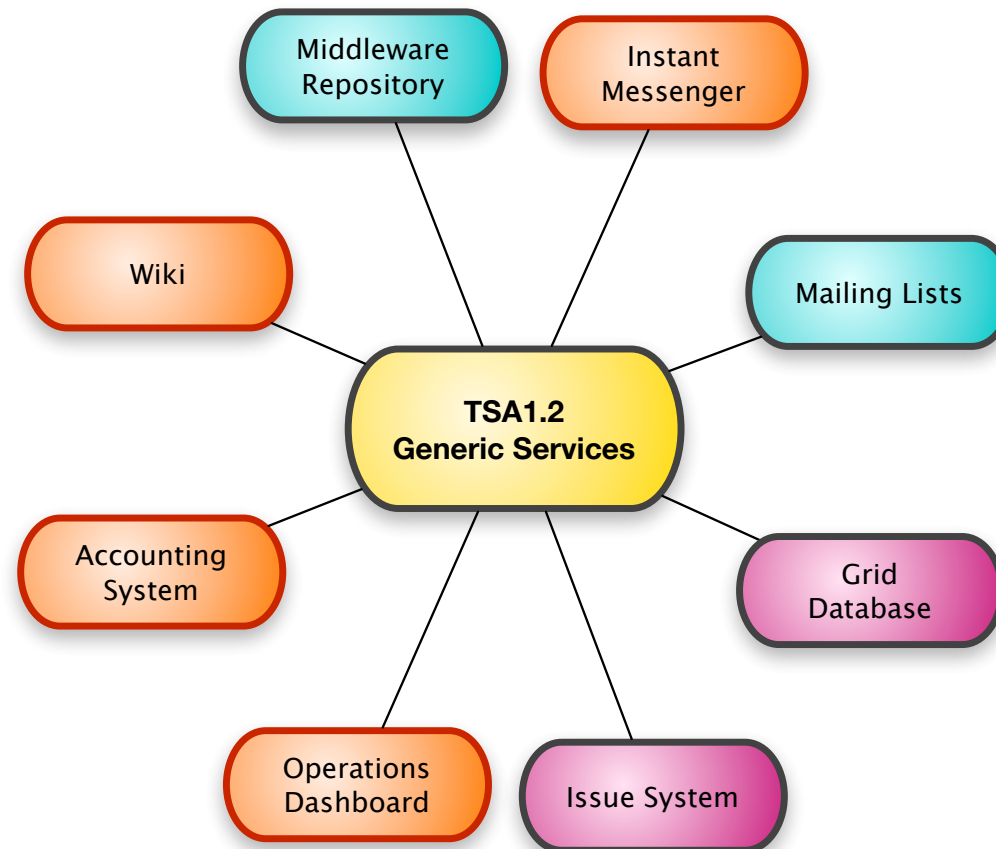


## TSA1.1 - Next Steps

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- Find synergies with EGEE, CCIN2P3 and CESGA
- Check some tools:
  - BBmSAM (from SEEGRID - Mysql SAM Version)
  - SEE-GRID-2 Standalone SAM (there is no need for a dedicated server)
  - Standard network monitoring tool in order to increase the availability of CORE services (Nagios, Ganglia, SNIPS, Zabbix)
- Extend our work on Geographical Visualisation
- Help to validate the SEEGRID Gridification Guide
- Provide a localised version of the SEEGRID Grid Certification Guide
- Provide an Accounting plan (on DSA1.2)

## TSA1.2 - Services

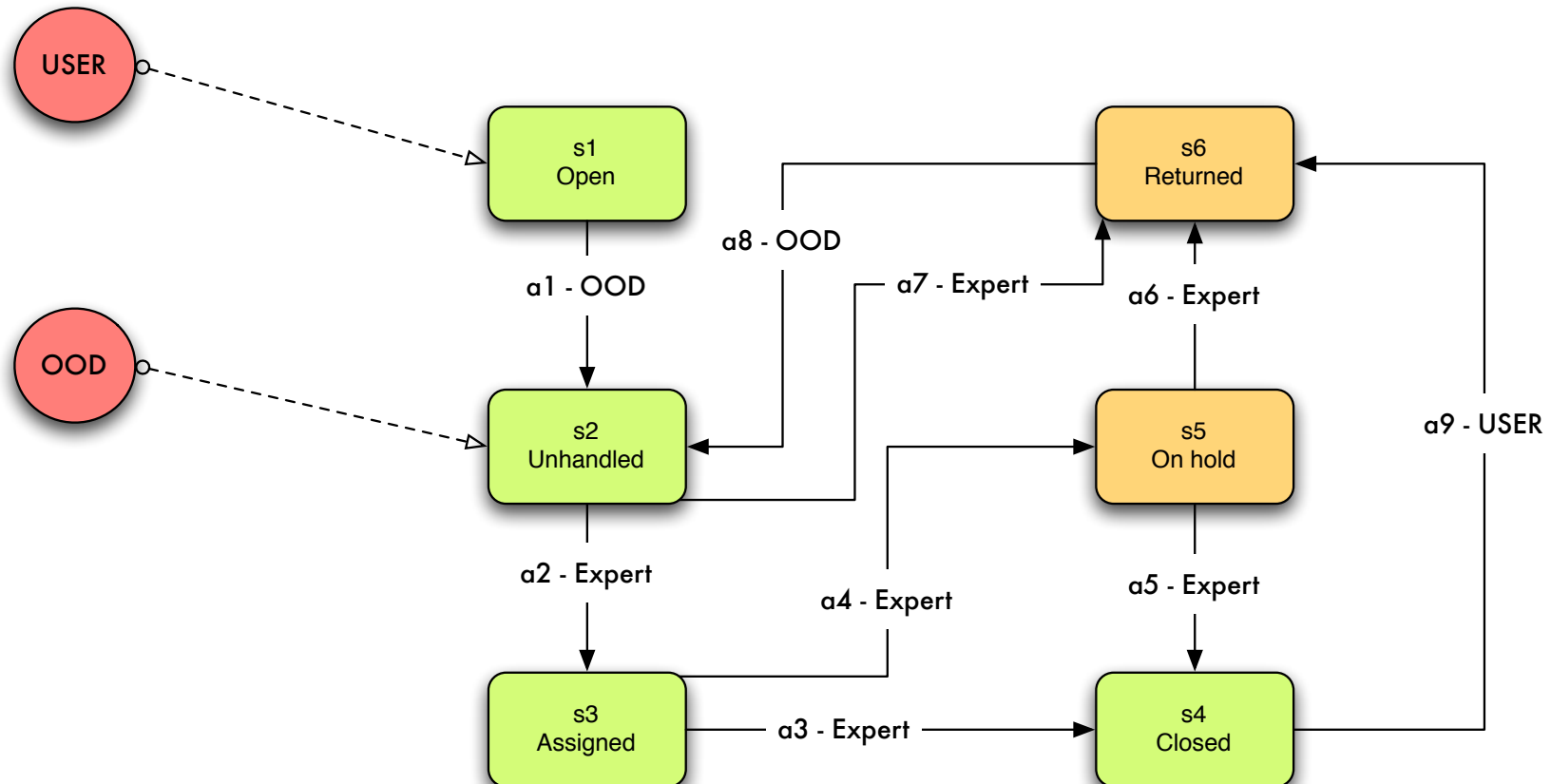


## TSA1.2 - Support System

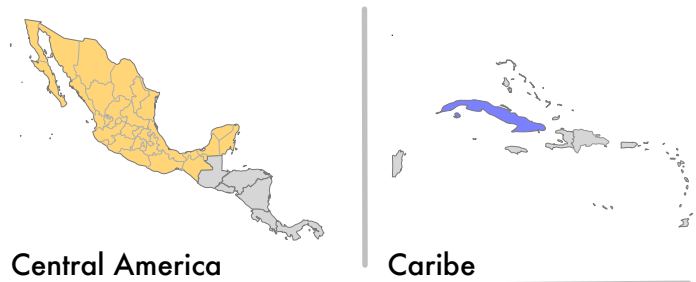
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- Operations (OP)
  - Ancilliary services, Information System Servers, Workload Management Systems, Logging and Bookkeeping servers, Logical File catalogues and metadata catalogues, File Transfer Services, VO-related Services, Accounting system, Monitoring system
- Certification Authorities (CA)
- Grid site deployment (GD)
  - New resource center, Certification infrastructure
- Middleware (MW)
  - gLite, ourGrid, Additional services, Application-oriented services
- Network (NT)
- Applications (AP)
  - Gridification support (s3,s4,s5), Application deployment (s6), Production (s7,s8)
- Training and dissemination (TD)
- NA1 Managemet

# TSA1.2 - Support System



## TSA1.3 - Certification Authority Policy Review

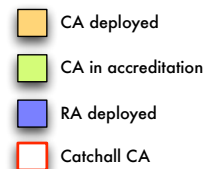


Central America

Caribe

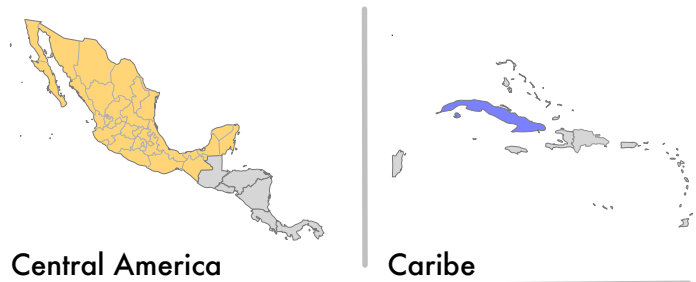


South America



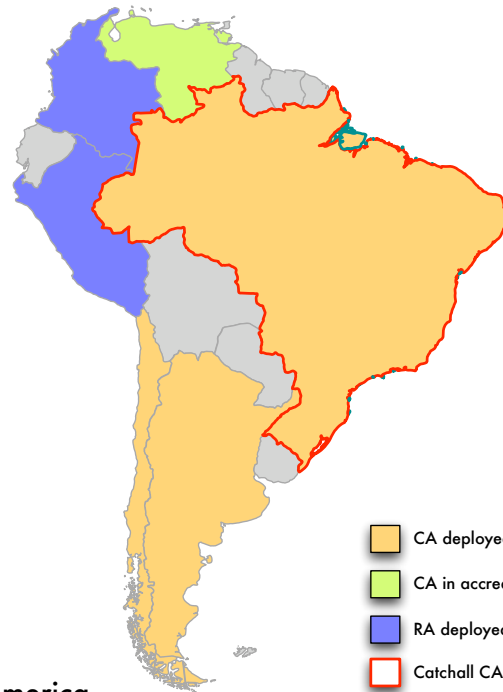
- RAs
  - Setup at least one Registration Authority of the UFF LACGrid CA in each new EELA-2 partner country – CO, CU, EC, and PE
- CAs
  - Candidates must already be operating an RA of the UFF LACGrid CA (see Section 4.1) or have previous PKI experience;
  - Obtain formal approval from their institution guaranteeing support (and funding) for the Grid PKI operations;
  - Commitment to attend TAGPMA face-to-face meeting and conference calls.

## TSA1.3 - Certification Authority Policy Review



Central America

Caribe



South America

- CAs were deployed in AR, BR, CL & MX
- CO, CU and PE (2 institutions) deployed RA of LAC-CA
- VE is waiting for accreditation
- Only PE and CO answered
- Next TAGPMA meetings:
  - 21 July 2008 (VE)
  - November 2008 (AR)

## TSA1.3 - Certification Authority Policy Review

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1. Stop hosting applications (funded or unfunded) in countries with no clear CA operation commitment or giving it up.
2. Do not sign any new MoU with Institution of a new country, without a written commitment to: deploy an RA in one month from the signature of the MoU; draft a CP/CPS in two months from the signature of the MoU. Moreover, this article should be included in the current MoU draft.
3. Include in the EELA Consortium Agreement an article imposing a clear CA operation strategy in every country hosting a Joint Research Unit. For the long-term sustainability point of view, this is clearly a fundamental step for any National Grid Initiative.

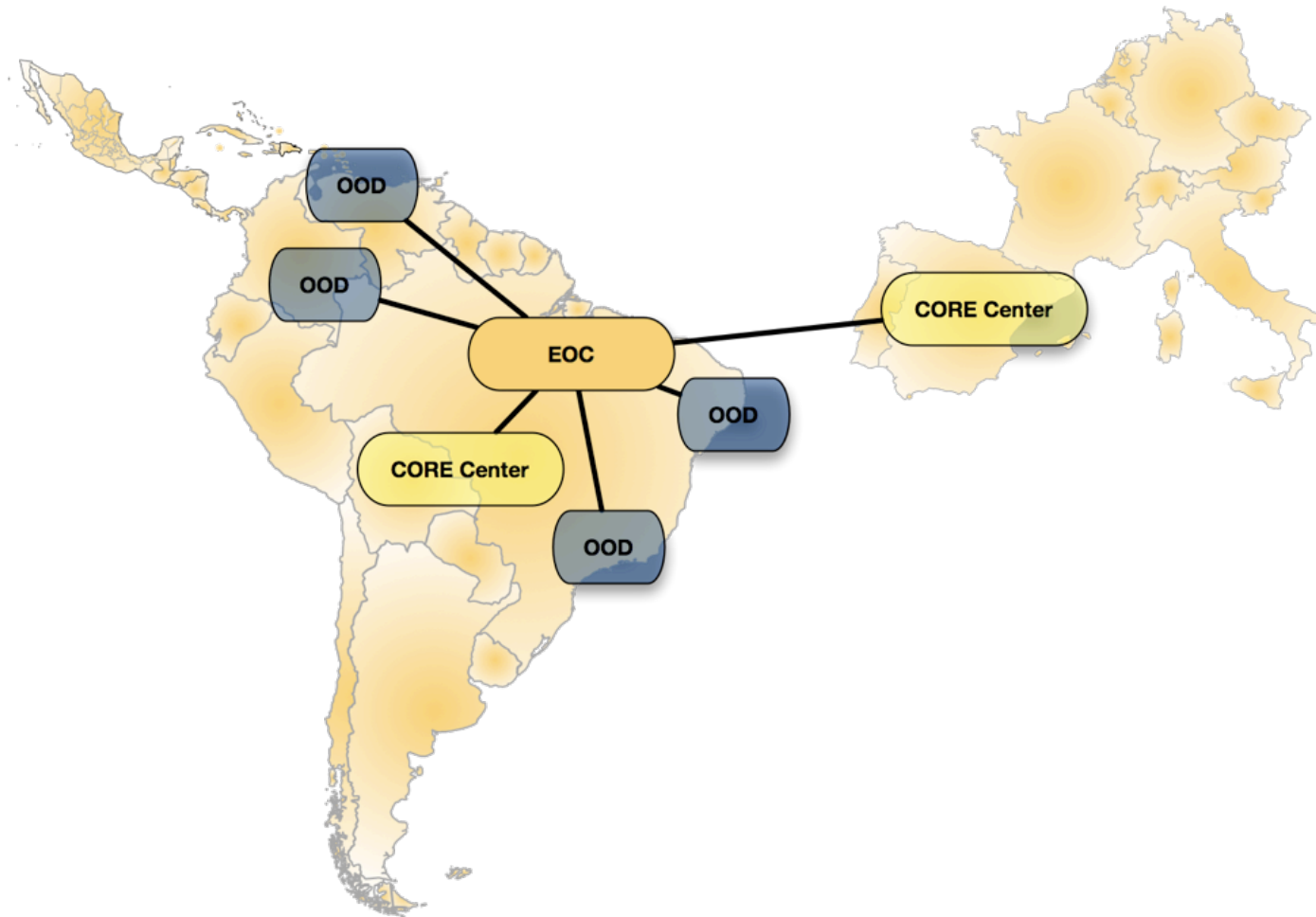
## TSA1.4 - VO Policy

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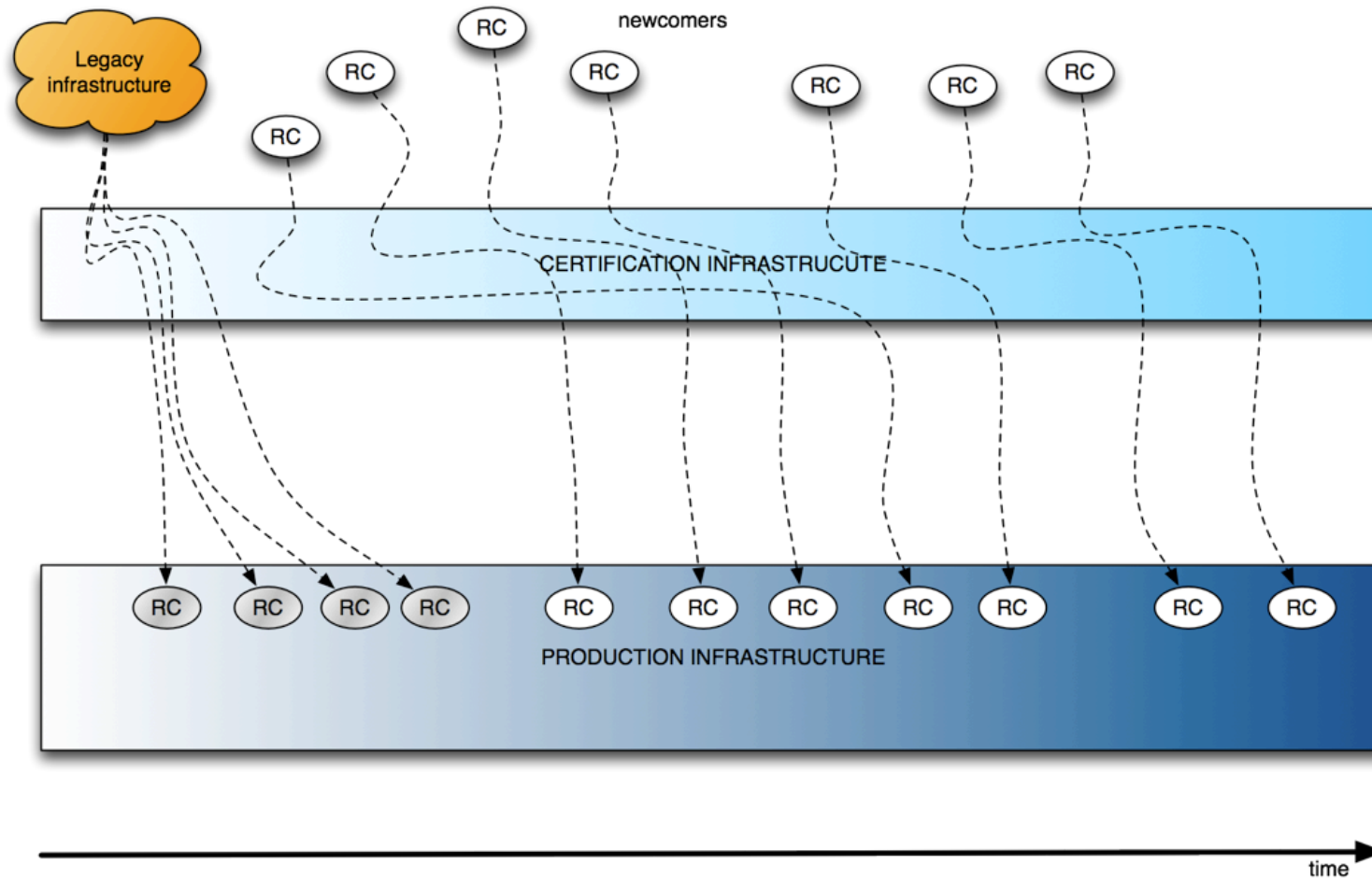
- We are initially deploying 3 VOs:
  - `prod.vo.eu-eela.eu`
  - `oper.vo.eu-eela.eu`
  - `nof.vo.eu-eela.eu`
- New VOs as needed, but the community must provide a “VO deployment plan” comprised of Manager lists, Resource list, Software Requirements. Moreover, a MoU (lighter than a SLA) should be signed.
- During the transition phase, EELA Testbed VOs are going to be supported.



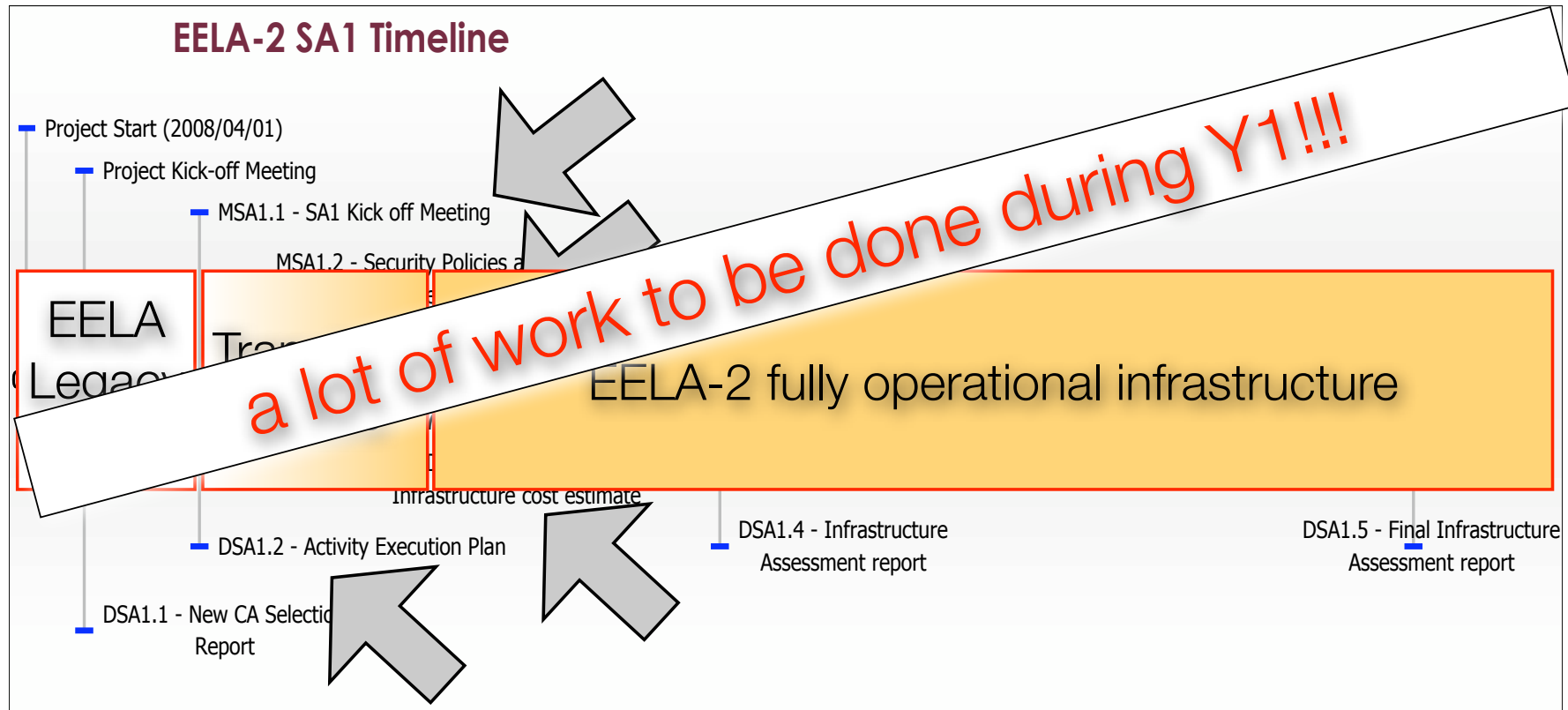
## TSA1.5 - Operations



# TSA1.5 - Operations



# Timeline





How to talk with us (SA1)?

## Points of contact

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- SA1 management - [sa1@eu-eela.eu](mailto:sa1@eu-eela.eu) (person in charge: Diego Carvalho and Alexandre Duarte)
- New sites - [sa1@eu-eela.eu](mailto:sa1@eu-eela.eu) (person in charge: Alexandre Duarte)
- New RAs and CAs - [sa1@eu-eela.eu](mailto:sa1@eu-eela.eu) (person in charge: Vinod Rebello)
- New users (VOMS registration) - [sa1@eu-eela.eu](mailto:sa1@eu-eela.eu) (person in charge: Manuel Cotallo)



**Thank you for your attention**