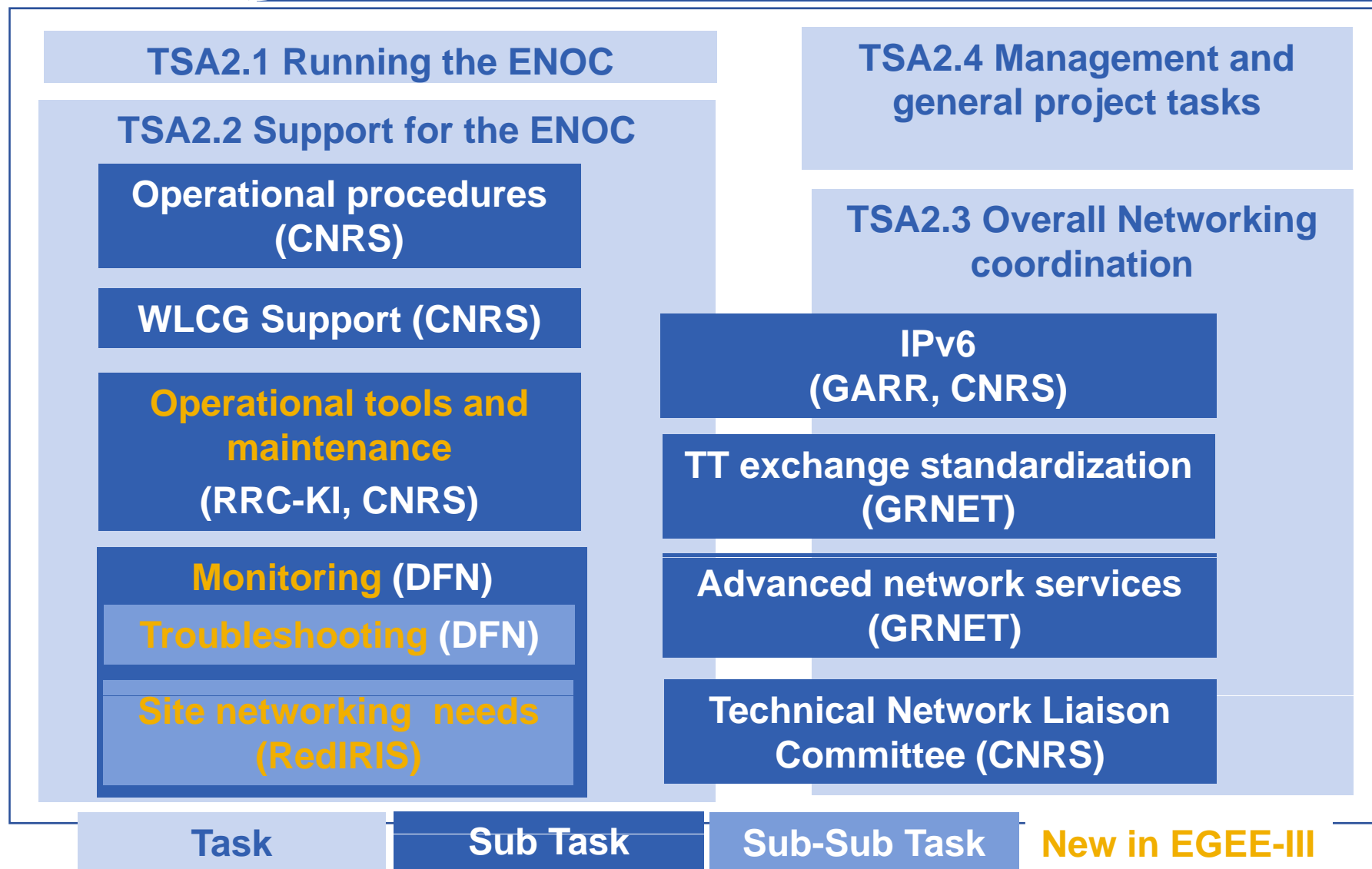# SA1 & SA2-ENOC
Interactions status and plans

Guillaume Cessieux (FR IN2P3-CC, EGEE SA2)

SA1 coordination meeting, Catania, 2009-03-04

# SA2 current overview

TSA2.1 Running the ENOC

TSA2.2 Support for the ENOC

Operational procedures (CNRS)

WLCG Support (CNRS)

Operational tools and maintenance (RRC-KI, CNRS)

Monitoring (DFN)

Troubleshooting (DFN)

Site networking needs (RedIRIS)

TSA2.4 Management and general project tasks

TSA2.3 Overall Networking coordination

IPv6 (GARR, CNRS)

TT exchange standardization (GRNET)

Advanced network services (GRNET)

Technical Network Liaison Committee (CNRS)

| **Task** | **Sub Task** | **Sub-Sub Task** | **New in EGEE-III** |

This talk is focused on **network support provided to SA1 – SA2 is wider**

- **Network support for SA1 is from the EGEE Network Operating Centre (ENOC)**

- **Place where EGEE and networks exchange operational information**

- **Network support unit in GGUS**
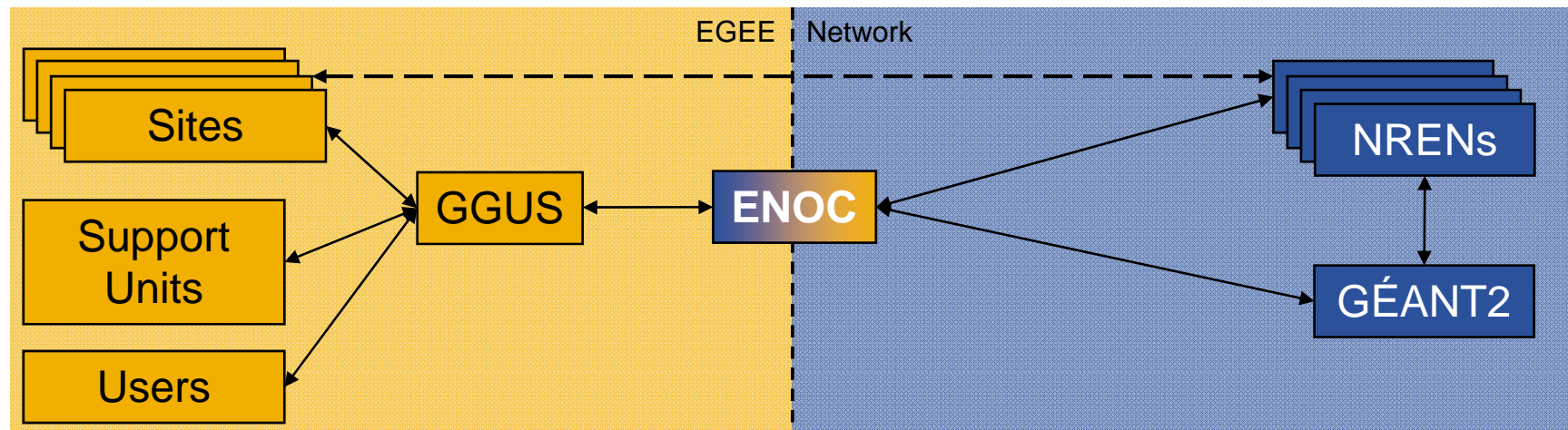
~ **Currently 2 FTEs**

  ~ Around 0.5 foreseen in EGI

- **ENOC fully implemented since end of EGEE-II**

  – Insufficiently used

- **Now real-life background with better vision**

  – We started from scratch

  – Need to quickly converge to something **useful** and **streamlined** for EGI

Enabling Grids for E-sciencE

- **ENOC is the network support unit within GGUS**
  - This is in place but not used – Few incoming tickets

- **Interface with network providers**
  - This is in place: Tickets are received from 19 NRENs
  - Only incoming tickets, no tickets from Grid to NRENs

- **Automation was really necessary**
  - EGEE relies on more than 50 NRENs
    - 19 NRENs = 2800 e-mails for 900 tickets/month
  - Tickets management & impact assessment cannot be manual

eGee

Enabling Grids for E-sciencE

- **Many home made tools released**
  - Monitoring, tickets handling, map rendering, topology and ticket databases, statistics, web interfaces… [https://ccenoc.in2p3.fr]

- **Three mains emerged**
  1. DownCollector
     - « Ping » service of all Grid hosts
       - **Successful Nagios integration**
  2. ASPDrawer - Monitoring LHC optical private network
  3. TTdrawlight - Network tickets repository

- **Only interfaced with Grid operations through CIC portal**
  - Previously and historically focused on COD

- **Processes**
  - ENOC is bypassed: Standard well established site-NRENs communication channel preferred
  - Something different needed? Enable tickets visibility?

- **Tools**
  - Interesting concepts but not so successful implementation
  - Ticket's automating handling is not enough accurate
  - DownCollector is really fine [https://ccenoc.in2p3.fr/DownCollector/]

- **Networks**
  - DownCollector confirmed they work quite fine

- **Main issues**
  - Lack of homogeneous **monitoring** (and troubleshooting) tools
    - **Complex** topic being investigated with NRENs
  - Centralisation, accuracy and exposure of **network trouble tickets**

- **Network support organised around DownCollector**
  - Improve DownCollector trouble localisation (ON-SITE/OFF-SITE)
  - Integration of results into CIC's dashboard
  - Notifications to site admin for outages > 30 min

- **Highlight us troubles to be followed**

	Site	Current status
★	RO-07-NIPNE	UNREACHED
☆	INFN-GENOVA	UNREACHED
★	RO-11-NIPNE	UNREACHED
☆	PPS-RAL	UNREACHED
★	UKI-LT2-IC-HEP-PPS	UNREACHED

  - Cannot accurately follow everything
  - Maybe also automatic thresholds
    - >1 hours?
  - Through webinterface

- **Upcoming new troubleshooting software**
  - perfSONAR lite distribution for EGEE - **Usable by sites and ROCs**

Enabling Grids for E-sciencE

- **Better use GGUS to exchange with Grid Ops**
  - For big issues and highlighted troubles
  - Put only relevant validated things into
  - Be more transparent on what and how we follow issues

- **Work around network trouble tickets**
  - Build a central database of network trouble tickets and share it
    - Webinterface with search fields
    - **Being discussed with network providers**
  - Try to rank tickets about their relevance on impacting EGEE
    - Maybe both manually and automatically
  - Used to link and reference root cause of some problems

- **EGI Network Support Center (ENSC)** – *visible part for Ops*
  - Implement tools and processes for trouble exchange and management
  - Troubleshoot and accurately follow big or tricky issues
  - Be linked with Grid operations

- **'Coordination' between network providers and Grid**
  - Global liaison for interactions and view at project level
    - Dedicated networks, ensure homogeneous operations, Grid requirements, central information repositories…

- **Network quality**
  - Monitor, assess, report, follow

- **Foster deployment of network services**
  - Monitoring, SLA, bandwidth on demand...

Enabling Grids for E-sciencE

- **We are focusing on tools more than extra processes**

- **What do you think of our workplan and how can it be improved for you?**

- **What is the network support needed?**

  – At project level

    ▪ For you as ROCs

    ▪ For sites you represent

- **Short round tables with ROCs**

  – Asia-Pacific, Central-Europe, France, Germany-Switzerland, Italy, Northern Europe, Russia, South-West Europe, South-East Europe, UK-Ireland