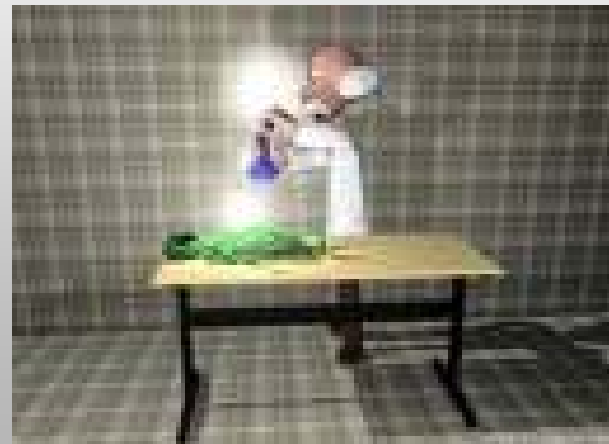


gLite Open Consortium

Mirco Mazzucato



New Consortium Task Force

- Francesco Giacomini (JRA1/INFN)
 - Steven Newhouse(EGEE/CERN)
 - Ales Krenek (CESNET)
 - Markus Schulz (LCG/CERN)
 - Antonio Candiello (INFN)
- Phone conferences: 10/1/9, 19/1/9, ...



Summary



- Goal & Scope
- Potential Benefits
- UMD, gLite & mware components
- Membership
- Organization
- Funding Model



Goal



- **maintain** and **evolve** a **generic, production-quality** grid **software environment**
- To be deployed in **Grid Infrastructures for science and research**,
- having as its baseline the **gLite Middleware** deployed in **EGEE**, the **world largest e-Infrastructure**
- ensuring **continuity** of gLite within **EGI** once EGEE-III ends from April 2010



Scope/Activities



- provide a **long-term sustainable roadmap** for the gLite software to meet the **needs** of its diverse **user community**
- coordinate the **maintenance** and **evolution** of the software provided by the Consortium in response to **requirements** from its **communities**
- consolidate the **interoperability** with other Grid infrastructures, preferably through the adoption of **established standards**, (es. OGF)
- contribute software within **production infrastructures**, such as the **Unified Middleware Distribution (UMD)** that will be deployed by the EGI
- support gLite **community** through **mailing lists**, **discussion forums**, **help**, **training**, **documentation**, etc.



Potential benefits



- ensure the **support** and **maintenance** of the **gLite middleware** **independently** of *unsecured, short-term funding cycles*,
- reassure existing and potential **users** of the **long-terms viability** of the gLite middleware
- be in a position to **be a credible competitor** in the **open source middleware** arena
- be an **independent legal entity** to which companies and individuals can **donate** resources and use resources for the **public benefit**
- provide a means for **individual volunteers** to be **sheltered from legal suits** directed at the Consortium projects
- protect the **gLite brand**, as applied to the software products of the Consortium, *from being abused* by other organizations



Components ↔ Members



Security

- VOMS and VOMSAdmin (INFN)
- Proxy and attribute certificate renewal (CESNET)
- Shibboleth interop: SLCS, VASH, STS (SWITCH)
- LCAS/LCMAPS (NIKHEF)
- gLExec (NIKHEF)
- Delegation Framework (CERN, HIP, STFC)
- CGSI_gSOAP (CERN)
- gsoap-plugin (CESNET)
- Trustmanager (HIP)
- Util-java (HIP)
- Gridsite (STFC)
- Auth. Framework (HIP, INFN, NIKHEF, SWITCH)

Information & Monitoring

13. BDII (CERN)
14. GLUE Schema (CERN)
15. RGMA (STFC)

Job Management

16. CREAM (INFN)
17. CEMon (INFN)
18. BLAH (INFN)
19. WMS (INFN, ElsigDatamat)
20. LB (CESNET)

Data Management

21. DPM (CERN)
22. GFAL (CERN)
23. LFC (CERN)
24. FTS (CERN)
25. lcg_utils (CERN)
26. EDS and Hydra (HIP)
27. StoRM?

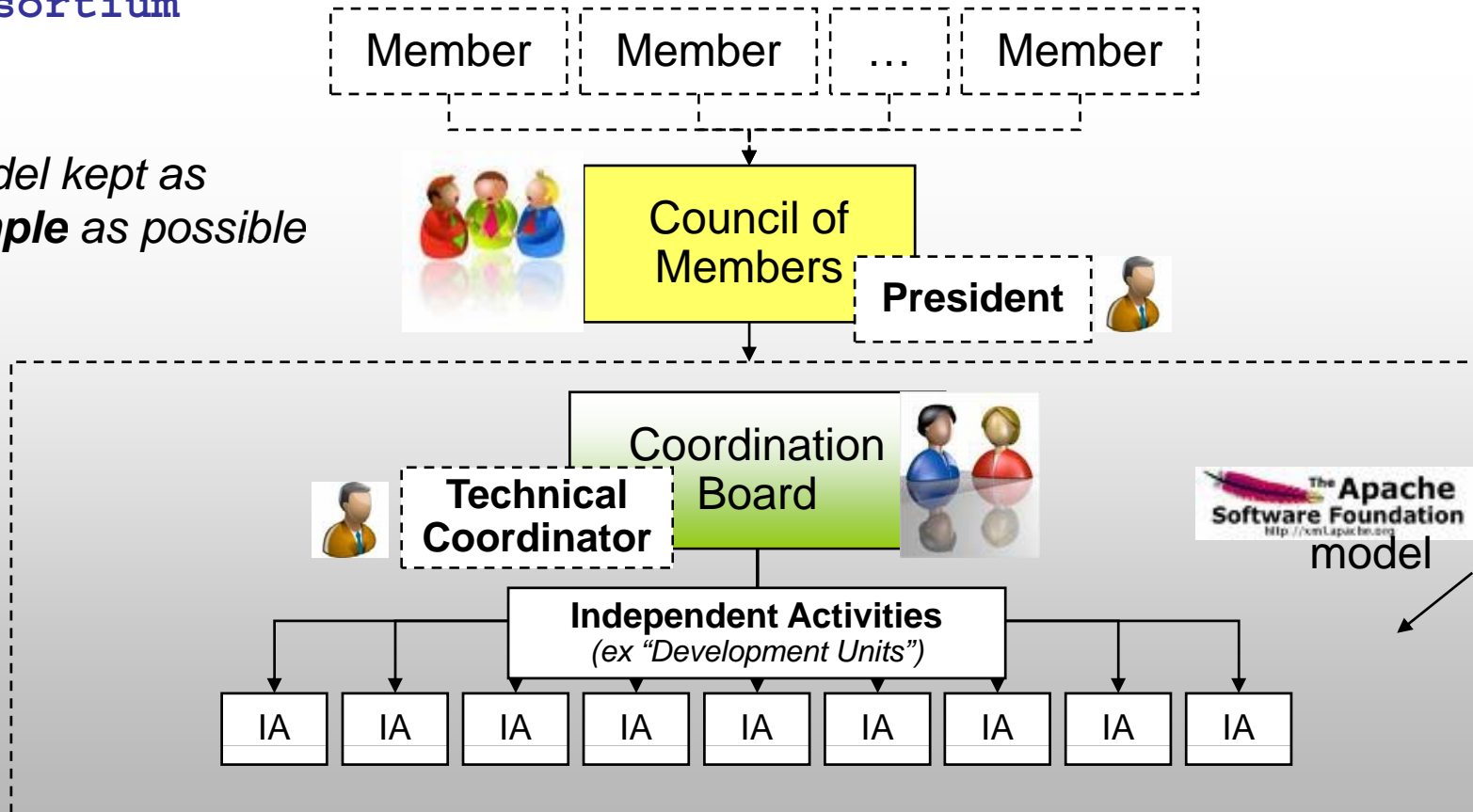
Accounting

28. Apel?
29. DGAS?



the suggested Consortium Organization

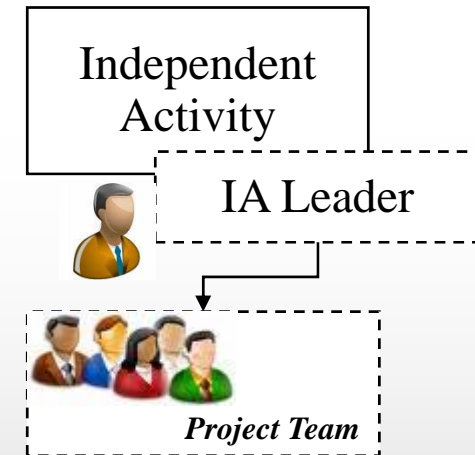
model kept as *simple* as possible



Independent Activity (IA)

(or “*Development Unit*”)

- manage **component** development, test, validation, maintenance, documentation
- each **IA** has the faculty of establishing its own set of **rules** and **procedures** for day-to-day *project management*
- some “global” IA for **common activity** es: *web/twiki, release, integration test ...*



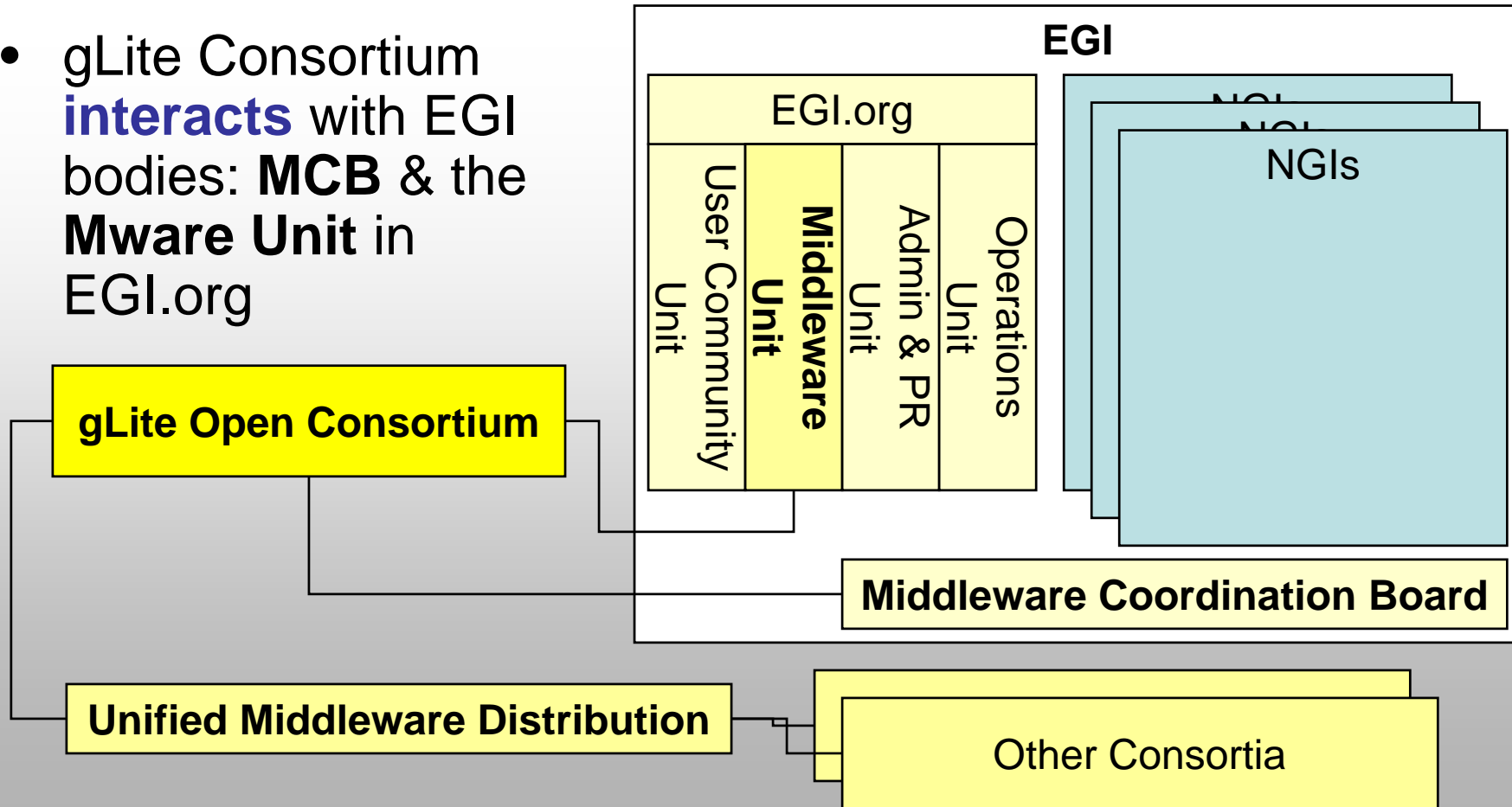
Responsibilities

- *development (ex JRA1)*
- *validation/test (ex SA3)*
- *documentation (wiki, cms, docs, papers)*
- *support & maintenance*



Interactions with EGI

- gLite Consortium **interacts** with EGI bodies: **MCB** & the **Mware Unit** in EGI.org



EGI.org Middleware Unit

Tasks managed by the Middleware Unit in EGI.org	FTEs
Maintain and document processes and quality criteria common to all the middleware providers	1
Provide and support tools to enable and monitor the processes (such as configuration management system, bug and task tracker, wiki)	1
Define quality and conformance criteria that UMD components need to satisfy in areas such as security, performance, scalability, functionality, usability, interoperability, adherence to standards. Verify that accepted components are certified according to the agreed process and satisfy the quality and conformance criteria, specifically aimed also against security vulnerabilities	3
Maintain a repository of certified middleware components or references thereto	1
Follow the daily execution of the strategic plan endorsed by the MCB. Promote the EGI participation to standardization bodies	1
Total Resources in the Middleware Unit for Coordination Tasks	8



Middleware Coordination Board

MCB **sets technical priorities** and **makes all decisions** concerning the **maintenance, support** and **evolution** of the middleware deployed on the EGI e-Infrastructure.

MCB **has representatives** from:

- the main **middleware developers** of the **components** in use in the EGI e-Infrastructure as the three European Middleware **Consortia**;
- the **operation** function representing globally the operational requirements of EGI.org, NGIs and Resource providers;
- the **User Community** Services (UCS) teams on behalf of the Specialised Support Centres, representing the various user communities organised in **thematic disciplines**.



Funding Model: Costs

- Operation of the **Consortium Infrastructure**
 - *website, servers, legal costs, admin costs, management expenses, etc*
 - to be covered through **small fees**
- Operation of the **Independent Activities**
 - to be covered via other sources



Funding Model: Incomes

- from **customers** (including EGI.org, EC, user communities, resource providers, ...): **funds** for the provision of services
- from **members**: members **staff efforts**
- from **members**: **fees** / direct funding
- from **research institutions & EC**: **funds** via **dedicated projects**
- from any **organization**: **donations**



Mware maintenance in EGI financial model

	NGI International tasks		Middleware	EGI.org	Total [M€year]
	Operations	User services			
EGI Man Power (FTEs)	225	110	70	51	
EGI costs (M€year)	20.25	9.90	6.30	4.59	41
NGI membership fees (M€year)				1.0	1
EC Contribution (M€year)	10.125	4.95	3.15	1.80	20
NGI, EIRO. <i>Middleware Consortia</i> etc. Contribution (M€year)	10.125	4.95	3.15	1.80	20

- 70 FTEs → 6,3 ml€



EGI Mware Consortia

EGI Middleware Consortia	# CONS	FTEs		Resulting FTEs		Transition	MW €/FTE	€ 90.000
		x CON	CON	EC	TOT	CONS	EC	Total
gLite	1	38,00	19,0	19,0	38,0	€ 1.710.000	€ 1.710.000	€ 3.420.000
ARC	1	21,00	10,5	10,5	21,0	€ 945.000	€ 945.000	€ 1.890.000
Unicore	1	11,00	5,5	5,5	11,0	€ 495.000	€ 495.000	€ 990.000
Total Consortia	3		35,0	35,0	70,0	€ 3.150.000	€ 3.150.000	€ 6.300.000
EGI.org	1		4,0	4,0	8,0	€ 360.000	€ 360.000	€ 720.000
Total Middleware			39,0	39,0	78,0	€ 3.510.000	€ 3.510.000	€ 7.020.000

EGI gLite Cons: 38 FTEs, less than current EGEE III efforts

- EGEE/JRA1: 19,2 FTEs (461 PMs / 2 years)
- EGEE/SA3: 33 FTEs (792 PMs / 2 years)
- EGEE/MWare: **52,2 FTEs** (1253 PMs / 2 years)



EC funds for EGI

- **EC calls dedicated** to EGI (NGIs and EGI.org), like NRENs, DANTE and TERENA.
- Specific **EC competitive programs** co-funding intl activities in **collaboration with grids outside Europe** (like eu-china, etc)
- Specific **EC competitive programs** for EGI production grid **middleware development**
- EC competitive calls for **application porting & development** dedicated to **support of new user communities** willing to use the EU e-infrastructure

