



ETSI and GRID Standardisation

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Standards for Business

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ETSI and GRID

- GRID#2: 2nd ETSI TC GRID Meeting, 1 Dec 2006 (Sophia-Antipolis)**
- 3rd ETSI GRID Plugtests, 27 Nov – 1 Dec 2006 (Sophia-Antipolis)**
- GRID#1: 1st ETSI TC GRID Meeting, 18 Sep 2006 (Brussels – with NESSI-GRID)**

- 2 Plugtests events in 2004 and 2005**

Focus of ETSI TC GRID

- ❑ **NOT trying to duplicate standards development already underway in other bodies**
 - Aim is to complement progress being made with more formal standards and test specifications so we can achieve levels of interoperability needed in next generation networks and Grids
- ❑ **ETSI uniquely placed to do this:**
 - Focus on “the big picture”
 - Ability to address IT and networking convergence
 - Experience in interoperability specification, testing and certification (e.g. GSM/UMTS, DVB, WiMAX, IPv6, Parlay)
 - Global organisation with extensive cooperation agreements
 - Clear IPR policies
 - Formal recognition by the EC
 - One of 3 ESOs



Resources Available to ETSI Technical Bodies

❑ TC MTS (Methods for Testing and Specification)

- Develops specification methodologies and techniques
 - e.g., this is where TTCN-3 was defined and is further evolving with significant contribution of PTCC
 - testing methodology (e.g., IPv6 Testing Framework)
- <http://portal.etsi.org>
- <http://portal.etsi.org/mbs/>

❑ ETSI PTCC (Protocol and Testing Competence Centre)

- Supports ETSI Technical Bodies with the development of:
 - Protocol and service standards (Standards Engineering)
 - Test specifications
- <http://www.etsi.org/ptcc>

❑ ETSI Plugtests Service

- Organises interoperability events
- <http://www.etsi.plugtests>

Plugtests™ : a professional ETSI service

- ❑ Created in 1999, specialized in the organization of test events
- ❑ Cost neutral
- ❑ Skilled ETSI Staff managing test events
- ❑ Experts from ETSI and other technical communities
- ❑ Neutral and open to all organisations
- ❑ Synergy Conformance & Interoperability in close cooperation with ETSI Committees and PTCC

- >60 events in 5 years, 3000 engineers, 900 Companies
- 1600 participants surveyed ranked usefulness at 4.3/5 and Service satisfaction 4.35/5



Grid Plugtests

- ❑ Engineering events – active participation by teams
- ❑ 1st Grid Plugtest (2004)
 - 80 participants
 - Heterogeneous Grid over 20 sites, 12 countries, 800 processors
 - N-Queens, 6 teams
- ❑ 2nd Grid Plugtest (2005)
 - 240 participants
 - Heterogeneous Grid over >40 sites, 13 countries, 2700 processors
 - N-Queens (5 teams) and Flowshop (5 teams), 8 teams in all
- ❑ Considerable effort to set up all sites before the events
- ❑ Valuable experience in deploying applications to a global Grid
 - Reports available on ETSI website (<http://www.etsi.org>)



Next Steps

- ❑ **Proposal with the EC (DG ENTR) for a Specialist Task Force (STF) on Grid**
 - Under 2006 ICT Standardisation Work Programme
 - Study of GRID interoperability and validation of standards
 - Inventory of ICT stakeholders
 - Identification of interoperability gaps
 - ICT GRID Interoperability Testing Framework
- ❑ **Collaboration**
 - International standards bodies (ITU-T, IETF, W3C, OASIS,...)
 - Community and industry fora (OGF, DMTF, WS-I, NESSI, ...)
 - EC funded research programme (GSCG, UniGrids, CoreGRID, NextGRID, GridCoord, COPRAS etc)



Opportunities for cooperation

- ❑ Can we agree on how we want to use Grid technologies?
 - Use cases, business models
- ❑ Is there sufficient consensus to start standardisation?
 - What's mature enough now?
 - Where is interoperability useful? (and achievable?)
- ❑ Implications of convergence
 - Commercial Grids, Internet scale
 - Non-trivial quality of service, across all resources
 - computing, storage, network (WAN and LAN)
- ❑ Where are the gaps?
 - Agree priorities for future work



Conclusion

- ❑ ETSI TC GRID has an important and distinctive role to play in the development of international Grid standards
 - well-established and effective way of working
 - broad membership
- ❑ Strong support from ETSI membership and significant expertise and experience in MTS, PTCC and Plugtests
- ❑ Need and opportunity to cooperate and build consensus across all relevant initiatives and organisations
 - existing standards development organisations
 - European research programme
 - NESSI, DG INFSO, DG ENTR, FP6 and FP7 projects



Backup



ETSI is...

- ❑ Recognized as Standards Development Organization
 - ❑ Created in 1988 as an independent, not-for-profit entity
 - ❑ Based in Sophia Antipolis, south of France, a technology park
 - ❑ 637 members from 56 countries
 - ❑ <http://www.etsi.org/>
- Download ETSI standards for free !



ETSI member companies...

- ❑ manufacturers, network operators, service providers, administrations, research bodies and users
- ➔ providing a forum in which all key players can contribute: GSM, UMTS, DECT, TETRA, SAT COM, DVB, NGN, VoIP, Wireless Access, Powerline, IP Cablecom, ...



The problem with GRID IT standards

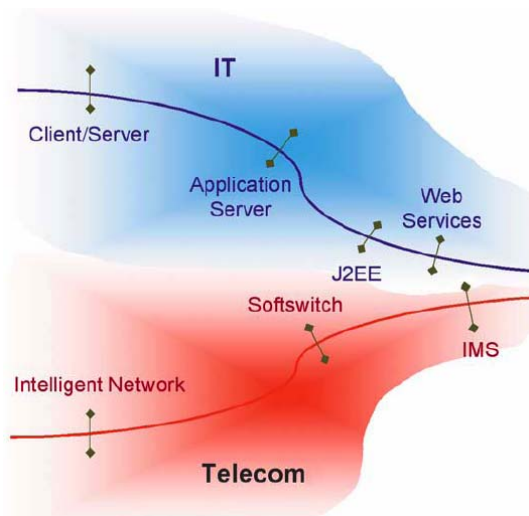
“Most Grids today are built around an early set of de facto standards and toolkits. A new generation of industrial strength global standards is required to fully exploit the Grid’s potential.”

Building Grids for Europe Brochure (IST Unit F2)

http://www.cordis.lu/ist/grids/building_grids_for_europe.htm

“Individual projects carried out to meet specific needs must interact as part of a larger Grid environment, but no international consensus exists as to which of the many ideas, proposed standards, and specifications are likely to dominate in the future.”

Emerging Grid Standards (IEEE, April 2005)



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ETSI and GRID - Chronology

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- ❑ 3rd ETSI GRID Plugtests, 27 Nov – 1 Dec 2006 (Sophia-Antipolis)
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- ❑ GGF 18: 11-14 Sep 2006, Washington DC
- ❑ NESSI Standardisation Workshop 24 July 2006
- ❑ GGF 17: ETSI GRID project presentation to GGF
- ❑ ETSI Board#57: created TC GRID, June 2006
- ❑ GRID Starter Group kick-off meeting, 24 May 2006
- ❑ ETSI Board#56: created GRID-SG, 1 Mar 2006
- ❑ DG INFISO Unit F2 Presentation to ETSI Board#53
- ❑ ETSI GA#46: Grid identified as a strategic topic
- ❑ 1st ETSI GRID Workshop, 30 Sep 2005 (with support of the EC)
- ❑ 2 GRID Plugtests organized 2004 & 2005

- ❑ GRID Starter Group: BT, Alcatel, EADS, INRIA, MINEFI/ARCEP, Telefonica, Siemens... now considerable interest from members