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Grid4All

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D6.2b: Dissemination Standards document and Technology Transfer plan

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RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Grid4All list of participants

Role	Participant N°	Participant name	Participant short name	Country
CO	1	France Telecom	FT	FR
CR	2	Institut National de Recherche en Informatique en Automatique	INRIA	FR
CR	3	The Royal Institute of technology	KTH	SWE
CR	4	Swedish Institute of Computer Science	SICS	SWE
CR	5	Institute of Communication and Computer Systems	ICCS	GR
CR	6	University of Piraeus Research Center	UPRC	GR
CR	7	Universitat Politècnica de Catalunya	UPC	ES
CR	8	ANTARES Produccion & Distribution S.L.	ANTARES	ES

1. Executive Summary

The Grid4All project aims to enable domestic users, non-profit organizations such as schools and small enterprises to share their resources and to access Grid resources when needed, envisioning a future in which access to resources is democratized, readily available, cooperative and inexpensive. Spreading this idea of “Grid democratization” entails appropriate dissemination in order to reach the user groups targeted by the project including not only the scientific community (in the field of Grid/P2P systems or beyond) but also the end user community (notably in the education sector).

This document describes the dissemination standards document and technology transfer plan.

[Note that the dissemination standards document and technology transfer plan will be dynamic all along the project life and will be regularly updated with the new achievements reached.]

2. Overview of dissemination and exploitation plan

The target audiences for the Grid4All dissemination and use plans can be classified as follows:

- a. **Scientific and technical audiences.** Grid4All will share and promote results with the scientific community and receive useful technical feedback.
- b. **Standardisation bodies.** Grid4All will monitor and influence the development of standards within bodies such as GGF, W3C, OASIS, and IETF in order to encourage industrial acceptance of Grid4All middleware and services.
- c. **Collaborative projects.** We aim to establish a synergy in technical and dissemination activities with other IST projects with objectives to optimise the resource usage in case of shared interests and increase impact.
- d. **Potential end market segment**
- e. **Business and marketing units, opinion makers**
- f. **Value added resellers, software industries, developers, and service providers:** promote usage of Grid4All middleware to encourage development/enhancement/integration of value added tools and services and also deployment of Grid4All middleware components. Grid4All documentation will address these audiences to train them with Grid4All solutions, show them of the benefits of the developed middleware, and present deployment opportunities.

The exploitation and dissemination plans for Grid4All productions can be classified in the following categories:

- **Communication:** Regular communication of Grid4All use and applicability to different target audiences. Participation and demonstration of Grid4All in public events. Communication activities will give a public relations focus to Grid4All. Different target communities of interest to Grid4All have been identified and classified. The main approach is to:
 - (a) leverage each partner's public relations channels to help write documentation promoting Grid4All (simple information and synthetic presentation for non-expert people)
 - (b) identify meaningful public events (e.g. local and regional science fairs) where Grid4All can be promoted through posters and demonstrations.

The main tools used to communicate on Grid4All will be:

- Website
- Electronic newsletter
- Organisation of a common workshop
- **Exploitation:**
 - Business and marketing: The exploitation manager will guide Grid4All from the point of view of marketing and business.
 - IPR management: Open source based development of middleware with well chosen licensing models protecting permitting the protection of specific partner IPR provides a compromise between acceptance of Grid4All middleware in the large technical and user community and also the commercial interests of the partners.
 - Evaluation within realistic test bed: WP4 will provide representative use scenarios which will be taken into account in the architecture and specification of Grid4All technical modules. Validation of software on realistic test beds will provide a high degree of confidence on the feasibility of the Grid4All technical approach.
- **Standardisation:** Monitoring and influencing relevant standards is a key objective of Grid4All. Standardisation is important to encourage industrial acceptance of middleware and service platforms.
- **Collaboration:** The reader is invited to refer to the Grid4All collaboration plan (Deliverable D8.2) for more details about collaborations planned with other European projects and about standardization activities.

The table below reports the main support for dissemination actions at project level and the exploitable knowledge and results developed by the single partners.

Dissemination at project level		
<i>What</i>	<i>Description</i>	<i>To whom (target audience/market)</i>
Website	Project website including some sections addressed to a general public and some more technical descriptions.	Scientific and technical audience, targeted end-users
Electronic Newsletter	6-monthly electronic newsletter diffused through Grid4All website, grids platforms, mailings...	Scientific and technical audience, targeted end-users
Grid4All workshop	The consortium is preparing the organisation of a workshop. The first initiative to host it at the next EuroSys conference (April 2008) had not been accepted. We are currently examining other possibilities. The theme of the workshop is 'Self-* and decentralized mechanisms for collaborative applications'.	Scientific and technical audience
Exploitable knowledge/result		
<i>Who</i>	<i>What</i>	<i>To whom (target audience/market)</i>
FT	Telex and telex based applications such as shared calendar.	PME, schools, or other social networks
FT	Niche and extended Jade as tools and services for VO management	Grid platform operators
FT	Tools for open resource market places (WP2)	Grid platform operators
FT	VO aware distributed file services	Schools, Internet communities, application and service providers, ISPs
INRIA	Distributed key-based timestamping mechanism (KTS) for reconciliation and currency management in DHTS	Schools, universities, companies which need fast and cheap distributed collaboration on the Web 2.0
INRIA	Telex semantic storage middleware for collaborative applications	Application providers
INRIA	Desktop Grid Simulation Platform	Desktop Grids Providers
KTH	A distributed component model and components management framework for developing self-managing applications and services in/for volatile Grids with dynamic VOs. A Virtual-Organization file system for volatile (ad-hoc) Grids with dynamic VOs. Grid4All infrastructure.	End-user communities: university (KTH) students; schools; Research communities on Grid and P2P computing, software developers, possibly service providers.
ICCS	Make laboratory/university infrastructure available to university students, through Grid4All.	University students, Organization Personnel

Exploitable knowledge/result		
UPC	Market based mechanisms for resource allocation (MIS, CMS, kDA)	Real end users: schools (iEARN network), universities (UPC, the Spanish academic network, among other), non-profit communities (Association for Progressive Communications). Service providers: upcnet.
ANTARES	Development of a range of qualified products oriented to run whether in centralized or decentralized environments	End-users

Figure 1: Overview of dissemination actions and exploitable knowledge and results developed

2.1 Website

A dedicated project web-site was set up at <http://www.grid4all.eu>, in which publishable results of the Grid4All project should be available.

Since December 2007 the Consortium decided to implement a new website resolving deficiencies of the content manager used and improving usability both in updating processes and users' facilities. Antares is developing the new website (available on February 2008) and focuses its work on:

- Make easier updating processes by the adaptation of an easy-to-use content manager.
- Design and implementation of new corporate brand image.
- Addressing contents to all targeted audiences with 2 objectives:
 - Give information about the project & partners.
 - Receive feedback from visitors through a questionnaire.

The sitemap of the website is shown below:

- Home page: Grid4All project presentation (addressed to all visitors, concise).
- Consortium: Description of the contractors involved in the project including their role within Grid4All.
- Publications: All relevant publications will be referred.
- Deliverables: Deliverables that can be publicized will be available here.
- Technical: Architecture + Results (demos).
- Contact: Information for contacting the people involved in the project.
- Grid4All Events: Grid4All newsletters. Link to newsletters published.
- Questionnaire: Oriented to test how the project is perceived by targeted end-users.

2.2 Electronic Newsletter

In the objective to inform a large public on Grid4All objectives, advancements and events, the consortium has developed an electronic newsletter. The choice of an electronic version seemed to be the most appropriate as it can be diffuse rapidly and to different type of audiences depending on the support chosen for the diffusion of this newsletter. The electronic version will allow the diffusion of this document on our project website and as well on other specific support (other grid websites, diffusion through mailing lists, and distribution in the different partners' organization).

As described in the overview of dissemination and exploitation plan, the target audiences of Grid4All are very wide (scientific and technical audiences, standardisation bodies, collaborative projects, potential end market

segment, business and marketing units, opinion makers and value added resellers, software industries, developers, and service providers). This implicates different level of description and information to be reported in the newsletter. Antares (identified as editorial responsible for the edition of the newsletter) has therefore to develop a final document readable by these different potential audiences.

The consortium identified four main topics to implement a logical structure of the newsletter:

a) Technical results

The technical results reported in the newsletter can come from a single partner achievement or results obtained at project level. The newsletter being a public document only completely achieved results and properly protected can be presented. The information reported has in addition to be understandable by the different potential audiences receiving the newsletter. Therefore a technical description of the achievement for expert audiences and a more general description for potential end market audiences are both included in this section.

b) Events

Main grid domain events are reported in this section for the following year. It also reports the information concerning the organization of the Grid4All workshop that will take place in 2008.

c) Collaborations

One important topic to report on concerns the collaboration with other R&D projects or with other research groups. All collaborations developed by Grid4All are reported in it in order to communicate on the research themes covered by these collaborations.

d) Standards

This section reports on potential standardization indicating the kind of standardization bodies and the actions undertaken.

All the topics reported in the newsletter require of course the contributions from all partners. The collection and organization of all information is managed by Antares who was identified as editorial responsible for the newsletter.

The first newsletter will be edited on February 2008 (the first edition was postponed in order to allow the consortium to present some concrete technical achievements).

2.3 Grid4All workshop

Collectively the Grid4All consortium is planning a concrete dissemination event that will soon be finalized. This is the organization of a workshop to be co-located with the EuroSys 2008. EuroSys is the European Chapter of SIGOPS, sponsored by ACM SIGOPS, in co-operation with the British Computer Society (BCS). The EuroSys 2008 will be held in April 2008 at Glasgow. The Grid4All consortium has responded to a call for Affiliated Workshops by proposing a workshop in the theme of decentralized mechanisms and self-management for implementation and deployment of collaborative applications. The consortium will sponsor this workshop along with the Selfman FP6 project.

3. Individual dissemination plans

The tables below report the events and working meetings the partners attended or intend to attend in the next months, as well as the individual papers published by each partner.

3.1 FT

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
NESSI General Assembly	Brussels, Belgium	11/12 December 2007	Technical community		FTRD
(Planned) participation at OGF-23	Barcelona, Spain	June 2008	Technical community, users		FTRD participant to be decided

Publication Title	Authors	Journal	Su/Pu*	Date
The Grid4All ontology for the retrieval of traded resources in a market-oriented Grid	K. Kotis, G. A. Vouros, A. Valarakos, A. Papasalouros (UPRC), X. Vilajosana (UOC), R. Krishnaswamy, N. Amara-Hachmi (FT)	Proceedings of the Workshops published by IEEE Computer Society Press	Pu	To be announced
Bidding support for computational resources	Xavier Vilajosana, Joan Manuel Marques, Ruby Krishnaswamy, Angel A. Juan, Nejla Amara-Hachmi, Leandro Navarro	The International Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2008) http://www.ares-conference.eu/3PIG-2008/ IEEE Computer Society.	Su	March 4, 2008

3.2 INRIA

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
HPDgrid workshop	Rio de Janeiro, Brazil	2006/07/13	scientific	Talk on top-k query processing in P2P. Proceedings. A special issue in JOGC 2007	Akbarinia, Pacitti, Valduriez

* Su= Submitted, Pu= Published

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
CoopIS conference	Montpellier, France	2006/11/02	scientific	Talk on query load balancing in P2P. Proceedings.	Quiane, Pacitti, Valduriez
SIGMOD conference	Beijing, China	2007/06/12	scientific	Talk on Data currency in DHT. Proceedings.	Akbarinia, Valduriez
Respire workshop	Le Croisic, France	2007/06/21-22	scientific	Talks on data replication. Slide copies.	Pacitti, Shapiro, Sutra, Benmouffok, Valduriez
Europar conference	Rennes, France	2007/08/28-30	scientific	Talks on reconciliation and top-k query processing in DHT. Proceedings.	Akbarinia, Pacitti, Valduriez
VLDB conference	Vienna, Austria	2007/09/23-27	scientific	Talks on top-k BPA and satisfaction-based load balancing. Proceedings.	Akbarinia, Pacitti, Quiane, Shapiro, Valduriez
CIKM conference	Lisboa, Portugal	2007/11/6-9	scientific	Talk on Mediation case study. Proceedings.	Quiane
HPDgrid workshop	Toulouse, France	2008/06/24	scientific	Proceedings.	Pacitti
Respire/Recall workshop	Paris, France	02/2007	Scientific	Talks on semantic replication, cooperative work	Pacitti, Shapiro, Sutra, Benmouffok, Valduriez
Mobile Data Mgt Conf	Mannheim, Germany	05/2007	Academia and industry	Talk, proceedings	Shapiro
CoopIS Conference	Vilamoura, Portugal	11/2007	Academia and industry	Talk, Proceedings	Sutra
BDA Conference	Marseille, France	10/2007	Scientific	Talk, Proceedings	Sutra
CollaborateCom Conference	White Plains NY, USA	11/2007	Academia and industry	Talk, Proceedings	Sutra, Shapiro, Benmouffok, Busca
30 Years of replication seminar	Monte Verità, Switzerland	11/2007	Scientific	Talk on semantic replication, slides	Pacitti, Shapiro, Sutra

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Workshop on Data Mgt in Grids	Seoul, Korea	07/2006	Scientific	Talk on Data replication, slides	Shapiro
Middleware for Network Eccentric and Mobile Applications workshop	Magdeburg, Germany	09/2007	Scientific	Talk on Telex for mobile applications	Benmouffok
Invited talk	SICS, Stockholm, Sweden	09/2006	Academic	Talk on Decentralised commitment	Sutra
Invited talk	USI, Lugano, Switzerland	06/2007	Academic	Talk on Decentralised commitment	Sutra
PariSTIC, Grand Colloque STIC 2007	Paris, France	11/2007	Mixed academic + industrial	Talk on Collaborative Applications in P2P Environment	Busca
"Fête de la Science"	Orsay, France	2007/10/12-13	end-user	Talk, lab. visit.	Malécot
"Fête de la Science"	Orsay, France	2006/10/13-14	end-user	Talk, lab. visit.	Malécot
6th International Symposium on Cluster Computing and the Grid (CCGRID'06)	Singapore, USA	2006/05	academic	Talk on Soft Real-Time Applications scheduling. Talk on Computational and Storage Potential of Volunteer Computing. Proceedings.	Fedak, Kondo
2nd IEEE International Conference on e-Science and Grid Computing (eScience'06)	Amsterdam, Netherlands	2006/12	academic	Talk. Proceedings.	Kondo, Fedak
International Symposium on High Performance Distributed Computing HPDC'06	Paris, France	2006/06	academic	Poster	Malécot, Kondo, Fedak

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Rencontres francophones du parallélisme (Renpar'06)	Perpignan, France	2006/10	academic	Talk on Desktop Grid traces / characterization. Proceedings.	Malécot, Kondo, Fedak
XtremWeb Users Group Workshop	Hammamet, Tunisie	2007/02	academic	Talk about Data-Intensive Applications on XtremWeb Talk about Desktop Grid Characterization	Fedak, Malécot
Colloque ANR JCJC	Montpellier	2007	academic	Talk	Fedak
EuroPar'07	Rennes, France	2007/08	academic	Talk on characterization of result error in Desktop Grid.	Kondo
CCGRID'07	Brazil	2007	academic	"Towards Computer Science Grid" Keynote	Cappello
GCP'2007	Paris	2007	academic	Towards 3 rd generation Desktop Grids keynote	Cappello
SC'2007	Reno	2007	Academic, industrial	BitDew Scheduling demonstration	Fedak, Haiwu He
European Services, Software and Grid Technology Days	Brussels, Belgium	01/2007	Mixed academic + industrial	Talk on manageability of virtual organisations	Parlavantzas

Publication Title	Authors	Journal	Su/Pu [†]	Date
Reducing Network Traffic in Unstructured P2P Systems Using Top-K Queries	R. Akbarinia, E. Pacitti, P. Valduriez	<i>Distributed and Parallel Databases</i> , 19(2), 67-86	Pu	2006
A Flexible Mediation Process for Large Distributed Information Systems	P. Lamarre, S. Lemp, S. Cazalens, P. Valduriez	<i>Int. Journal of Cooperative Information Systems</i> , 16(2), 299-332	Pu	2007

† Su= Submitted, Pu= Published

Publication Title	Authors	Journal	Su/Pu [†]	Date
Grid Data Management: open problems and new issues	E. Pacitti, P. Valduriez, M. Mattoso.	<i>Journal of Grid Computing</i> , 5(3), 273-281	Pu	2007
Exploiting our computational surroundings for better mobile collaboration	Barreto, Ferreira, Shapiro	Int Conf on Mobile Data Mgt (MDM 07)	Pu	05/2007
Decentralised Commitment for Optimistic Semantic Replication	Sutra, Barreto, Shapiro	Int. Conf. Cooperative Information Systems (CoopIS)	Pu	11/2007
Comparing Optimistic Database Replication Techniques	Sutra, Shapiro	Bases de données avancées	Pu	11/2007
A Comparison of Optimistic Approaches to Collaborative Editing of Wiki Pages	Ignat, Oster, Molli, Cart, Ferrié, Kermarrec, Sutra, Shapiro, Benmouffok, Busca, Guerraoui	CollaborateCom	Pu	11/2007
Designing a commutative replicated data type	Shapiro, Preguiça	ICDCS	Su	10/2007
Resource Availability in Enterprise Desktop Grids,	Kondo, Fedak, Cappello, Chien, Casanova	Future Generation Computer Systems	Pu	2006
The Computational and Storage Potential of Volunteer Computing	Anderson, Fedak	6th International Symposium on Cluster Computing and the Grid (CCGRID'06)	Pu	05/2006
On Resource Volatility in Enterprise Desktop Grids	Kondo, Fedak, Cappello, Chien, Casanova	2nd IEEE International Conference on e-Science and Grid Computing (eScience'06)	Pu	12/2006
Towards Soft Real-Time Applications on Enterprise Desktop Grids	Kondo, Kindarji, Fedak, Cappello	6th IEEE Symposium on Cluster Computing and the Grid (CCGRID '06)	Pu	05/2006

Publication Title	Authors	Journal	Su/Pu [†]	Date
XtremLab: A System for Characterizing Internet Desktop Grids	Malécot, Kondo, Fedak	Poster in International Symposium on High Performance Distributed Computing HPDC'06	Pu	06/2006
XtremLab: Une plateforme pour l'observation et la caractérisation des grilles de PC sur Internet	Malécot, Kondo, Fedak	Rencontres francophones du parallélisme (Renpar'06)	Pu	10/2006
Towards Efficient Data Distribution on Computational Desktop Grids with BitTorrent	Wei, Fedak, Cappello	FGCS	Pu	08/2007
Characterizing Result Errors in Internet Desktop Grids	Kondo, Araujo, Malecot, Domingues, Silva, Fedak, Cappello	EuroPar'07	Pu	08/2007
The Role of Overlay Services in a Self-managing Framework for Dynamic Virtual Organizations	Brand, Höglund, Popov, De Palma, Boyer, Parlavantzas, Vlassov, Al-Shishtawy	CoreGRID Workshop	Pu	06/2007
A P2P-Based Management Framework for Volatile Virtual Organizations	Brand, Höglund, Popov, De Palma, Vlassov, Al-Shishtawy, Parlavantzas	International Conference on Autonomic Computing 2008	Su	12/2007
Design of a self-* application using a P2P-based management infrastructure	Popov, Höglund, Brand, Al-Shishtawy, Vlassov, Parlavantzas	CoreGRID Integration Workshop	Su	11/2007

3.3 KTH

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
CT1 Technical Collaboration Steering Committee Meeting	Amsterdam, Netherlands	2006-06-12—13	Technical community	Presentation on objectives of Grid4All	Vladimir Vlassov (KTH)

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Grid projects Concertation Meeting	Brussels, Belgium	2006-09-20—21	Technical community	Presentation at several technical groups, e.g. TG5 Data Management	Vladimir Vlassov (KTH), Ruby Krishnaswamy (FT), Konstatin Popov (SICS)
The 5th meeting of CoreGrid WP4 (Grid Architecture)	Sophia-Antipolis, France	1006-11-28	Technical community	Presentation on Grid4All architectural principles	Vladimir Vlassov (KTH)
Joint with the SELFMAN project seminar on (distributed) systems with collective behaviour	Berlin, Germany	2007-02-15	Technical community	A short presentation on Grid4All	Vladimir Vlassov (KTH), Ahmad Al Shishtawy (KTH), Seif Haridi (KTH)
NESSI-SOI Grid workshop	Brussels, Belgium	2007-06-21	Technical community	Short presentation on Grid4All architectural principles	Vladimir Vlassov (KTH)
Working meeting with researchers of the NextGrid project	Stockholm, Sweden	2007-10	Technical community	Presentation of Grid4All architecture, in particular VO file system and security; discussion on policy-based security architecture as seen in NextGrid and Grid4All. NextGrid researchers has given suggestions for security in Grid4All	Vladimir Vlassov (KTH); Shahab Mekarizade (KTH); Mandus Elfving (KTH)
Future plans: meetings with end users in some of schools in Stockholm, e.g. Engelska Skolan, at KTH, and possibly some SMEs	Stockholm, Sweden	January-March 2008	End-users		KTH, SICS

Publication Title	Authors	Journal	Su/Pu [‡]	Date
The Role of Overlay Services in a Self-Managing Framework for Dynamic Virtual Organizations	P. Brand, J. Hoglund, K. Popov, N. de Palma, F. Boyer, N. Parlvanzas, V.Vlassov, A. Al-Shishtawy	CoreGRID Workshop on Grid Programming Model, Grid and P2P Systems Architecture, Grid Systems, Tools and Environments, Heraklion - Crete, Greece, 2007	To appear in the Springer CoreGRID series.	June, 2007
A P2P-Based Management Framework for Volatile Virtual Organizations	P. Brand, J. Hoglund, K. Popov, N. de Palma, V.Vlassov, A. Al-Shishtawy, N. Parlvanzas,	The 5th IEEE International Conference on Autonomic Computing	Su	December, 2007

3.4 SICS

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
SICS Open House "Industrial day"	Stockholm, Sweden	2007-04-18	Mainly industry	Poster, informal presentations	SICS/KTH
CoreGrid Workshop	Heraklion, Greece	2007-06-12	Scientific	Presentation	SICS

Publication Title	Authors	Journal	Su/Pu [§]	Date
The Role of Overlay Services in a Self-Managing Framework for Dynamic Virtual Organizations	SICS, KTH, INRIA-Grenoble	Springer Lecture notes	Pu	
Design of a Self-* Application using P2P-based Management Infrastructure	SICS, KTH, INRIA-Grenoble		Su	

[‡] Su= Submitted, Pu= Published

[§] Su= Submitted, Pu= Published

3.5 ICCS

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
8th IEEE/ACM International Conference on Grid Computing	Austin, Texas	21 September 2007	Scientific Community	Talk/Presentation (http://www.cslab.ece.ntua.gr/~verigak/grid2007.pdf)	Georgios Verigakis, Kornilios Kourtis
(planned) 9th IEEE/ACM International Conference on Grid Computing	Tsukuba, Japan	29 September 2008	Scientific Community	Talk/Presentation	

Publication Title	Authors	Journal	Su/Pu**	Date
Global-scale peer-to-peer file services with DFS	Antony Chazapis, Georgios Tsoukalas, Georgios Verigakis, Kornilios Kourtis, Aristidis Sotiropoulos, Nectarios Koziris	Proceedings of the 8th IEEE/ACM International Conference on Grid Computing (Grid 2007) - ISBN 1-4244-1560-8	Published	21 September 2007

3.6 UPRC

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Web/Grid Information and Services Discovery (WGISD-2008) Workshop at CISIS-08 conference (http://wgisd08.unina2.it/)	Barcelona	4-7 March 2008	Scientific community	Paper presentation	Dr. Konstantinos Kotis

Publication Title	Authors	Journal	Su/Pu ^{††}	Date
The Grid4All ontology for the retrieval of traded resources in a market-oriented Grid	K. Kotis, G. A. Vouros, A. Valarakos, A. Papasalouros (UPRC), X. Vilajosana (UOC), R. Krishnaswamy, N. Amara-Hachmi (FT)	Proceedings of the Workshops published by IEEE Computer Society Press	Pu	To be announced

** Su= Submitted, Pu= Published

†† Su= Submitted, Pu= Published

3.7 UPC

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Working meeting with Andes University	Bogotá, Colombia	2008/01/09	Scientific community	working meeting, Web site	UPC
Working meeting with Colnodo.apc.org	Bogotá, Colombia	2008/01/08	End users community	working meeting, Web site	UPC
Jornadas de concurrencia 2008	Albacete, Spain	2008/06	Scientific community	Talk, Slides	UPC
Grid4All presentation, P2PGrid kick-off meeting (National project),	Tarragona, Spain	2008/01/30	Scientific community	Slides	UPC

Publication Title	Authors	Journal	Su/Pu ^{##}	Date
Bidding support for computational resources	Xavier Vilajosana, Joan Manuel Marques, Ruby Krishnaswamy, Angel A. Juan, Nejla Amara-Hachmi, Leandro Navarro	The International Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2008) http://www.ares-conference.eu/3PIG-2008/ IEEE Computer Society.	Su	March 4, 2008
Towards an Open Grid Marketplace Framework for Resources Trade.	Nejla Amara-Hachmi, Xavier Vilajosana, Ruby Krishnaswamy, Leandro Navarro-Moldes, Joan Manuel Marques	OTM Conferences (2) 2007: 1322-1330	Pu	November 25-30, 2007
Elaborating a Decentralized Market Information System.	Rene Brunner, Felix Freitag	OTM Workshops (1) 2007: 245-254	Pu	November 25-30, 2007
Towards decentralized resource allocation for collaborative peer to peer learning environments	Xavier Vilajosana, Daniel Lázaro, Angel A. Juan, Leandro Navarro.	CESA2008: International Workshop on Collaborative e-Learning Systems and Applications held in conjunction with CISIS -2008 International conference. IEEE Proceedings.	Su	March 4th-7th, 2008

^{##} Su= Submitted, Pu= Published

Publication Title	Authors	Journal	Su/Pu ⁺⁺	Date
Bidding support for computational resources. In proceedings of Second International	Xavier Vilajosana, Joan Manuel Marquès, Ruby Krishnaswamy, Angel A. Juan, Nejla Amara-Hachmi, Leandro Navarro	Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2008) held in conjunction with CISIS -2008 International conference. IEEE Proceedings	Su	March 4th-7 th , 2008
The Grid4All ontology for the retrieval of traded resources in a market-oriented Grid.	Konstantinos Kotis, George A. Vouros, Alexandros Valarakos, Andreas Papasalouros, Xavier Vilajosana, Ruby Krishnaswamy, Nejla Amara-Hachmi	Web/Grid Information and Services Discovery (WGISD-2008) workshop held in conjunction with CISIS -2008 International conference.. IEEE Proceedings.	Su	March, 4th-7 th , 2008
Towards an Open Grid Marketplace Framework for Resources Trade	Nejla Amara-Hachmi, Xavier Vilajosana, Ruby Krishnaswamy, Leandro Navarro-Moldes, Joan Manuel Marquès	OTM Conferences (2) 2007,1322-1330		
DyMRA: Dynamic Market Deployment for Decentralized Resource Allocation.	Daniel Lázaro, Xavier Vilajosana, Joan Manuel Marquès	OTM Workshops (1) 2007: 53-63		

3.8 ANTARES

Event or working meetings	Place	Date	Audience	Material	Grid4All participants
Work meeting with VAESA (Volkswagen Audi Spain)	Barcelona, Spain	February 2008	End-users	Common presentation (PPT) + Newsletter Flyer	Antares
Work meeting with Linguactive	Barcelona, Spain	February 2008	End-users	Common presentation (PPT) + Newsletter Flyer	Antares
Work meeting with Universidad Corporativa Asepeyo	Barcelona, Spain	March 2008	End-users	Common presentation (PPT) + Newsletter Flyer	Antares

Publication Title	Authors	Journal	Su/Pu^{§§}	Date
Grid4All Press note	G4A Consortium	ESADE Magazine	Su (future)	2008/February
Grid4All Press note	G4A Consortium	Capital Humano	Su (future)	2008/February

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4. Exploitation plans

4.1 Technical results

4.1.1 WP1 – Overlay Infrastructure and Programming Model

The first version of the programming model for self-managing applications has been specified. This is suited to applications which will execute in dynamic environments such as proposed in Grid4All. The prototype Distributed Component Management Service (DCMS) implements this programming model. This implementation uses the underlying Overlay Services which has been enhanced to provide low level support for building sensor-actuator event-drive control loops and name based component bindings and communications. This is the basis for self-management. These two major software are used by higher level layers in particular to implement the core VO deployment, monitoring, and membership management services.

Our results are demonstrated by our first demo application, and are also reflected in a technical paper to appear on Springer and two more submitted papers.

4.1.2 WP2 – Virtual Organization and Resource Management

Currently we are assembling prototypes of the different components for the management of virtual organizations. A core functionality available is the deployment service built over the overlay services provided by Niche (WP1). Simple component binding support (one-to-one) is currently supported. Main elements of the Grid4All Market Place that we will soon be releasing are the market information service (overlay based service allowing queries on aggregated values), decentralized, reliable and transaction based banking service, and a Fractal based configurable auction server implementing a novel extension to the K-pricing double auction mechanism. Resource reservation agents within the virtual organization may query the Semantic Information Service for which a prototype is currently being terminated to select suitable markets. Once resources are leased and have joined the virtual organization execution of different instances of the simulators will be planned using the off-line scheduler. This scheduler which reuses parts of XtremWeb desk top computing platform will provide an execution plan. Inputs to the scheduler are the descriptions of the leased resources and the descriptions of tasks (deadlines, laxity, average execution time etc.). The next steps are to integrate these different pieces to demonstrate allocation of resources for the execution of the network simulator of the collaborative virtual class room scenario.

4.1.3 WP3 – Data Storage

The development of the security infrastructure of the VOFS has begun and the development of the DFS prototype has been carried on. We have developed an initial prototype of Telex; its code and its API are publically available at <http://gforge.inria.fr/projects/telex2>. This prototype allows WP4 application developers to start developing Telex-based applications, like the Collaborative File System (CFS). We also have developed an initial prototype of the Shared Calendar application on top of Telex. The integration of the Shared Calendar / Telex / DFS stack is almost completed and it will be demonstrated during February's review in Brussels.

4.1.4 WP4 - Applications

The work on the Collaborative File Sharing (CFS) has produced a prototype extension of the Firefox browser that any end user can install. This extension adds Firefox the capacity to become an interface for CFS and thus for the Grid4All environment. It contains the CFS graphical user interface, CFS code that will interface to Grid4All data

services: distributed virtual storage (VOFS) and a library (Telex) that enables remote sharing of documents and remote collaboration with semantic reconciliation. All this is encapsulated as an XPCOM software

component. With it Grid4All becomes Firefox enabled, and Firefox becomes Grid-enabled (of a decentralized grid).

4.1.5 WP8 - Collaboration

18 collaborations with other grid projects or research groups were developed by the Grid4All consortium. Partners also take part to the works developed through the following Technical Groups (TG): TG1 Basic Grid Architecture, TG2 Ontologies, TG5 Data Management, TG7 Grid Economics and Business Models and TG 8 Virtual Organizations. For additional information on the contributions of Grid4All in these different collaborative activities, please refer to the relevant deliverable D8.2 Grid4All Collaboration Report and Collaboration Plan.

4.2 Exploitable knowledge and results

4.2.1 France Telecom

Exploitable Knowledge/Result #1	
Telex and telex based applications such as shared calendar. Telex is an innovative middleware to develop innovative collaborative applications. Complex application independent aspects such as replication, conflict management are resolved through Telex.	
Specific innovation of the exploitable result	Allow disconnected operations. Avoid mandatory locking by sharing participants. Decentralized commit protocol avoiding centralized servers.
Necessary steps before exploitation of the result	Within FTRD we are in the process of examining candidate applications/servers that could be constructed over the Telex middleware that could be offered as services.
Sector(s) of application	Collaborative application
Timetable for commercial use	N.A.
Patents or other IPR protection	
Owner & Other Partner(s) involved	INRIA
Industries/organisations potentially interested	This will be determined after initial proof-of-concept implementations and analysis of potential
Type of end-user potentially interested	Real end users such as PME, schools, or other social networks.
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	N.A.

Exploitable Knowledge/Result #2	
Niche and extended Jade as tools and services for VO management.	
Specific innovation of the exploitable result	Deployment in wide area and metropolitan networks; Monitoring. Support to write self-managing applications such as distributed storage based applications.

Necessary steps before exploitation of the result	Maturity of implementation. Proof-of-concept self-managing applications and evaluation. Solution for security (isolation, firewall)
Sector(s) of application	Virtual community formation in a number of sectors including education, leisure activities.
Timetable for commercial use	N/A
Patents or other IPR protection	
Owner & Other Partner(s) involved	SICS, INRIA, KTH
Industries/organisations potentially interested	N/A
Type of end-user potentially interested	Grid platform operators, such as Telco operators to offer bundled services for virtual community formation. Platform may be tailored to different end-user communities.
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Commercial channels

Exploitable Knowledge/Result #3	
Tools for open resource market places (WP2)	
Specific innovation of the exploitable result	Flexible and configurable component based auction server: rapid development of new market mechanisms. Combinatorial auction mechanism to trade resource bundles. Open APIs and a flexible bidding support.
Necessary steps before exploitation of the result	Identify other use cases that will benefit of market based allocation. Evaluation through proof-of-concept implementation. Viability study. Validate concept with marketing and business units before proceeding to robust industrial development.
Sector(s) of application	System service for resource allocation.
Timetable for commercial use	N/A
Patents or other IPR protection	
Owner & Other Partner(s) involved	FT, UPC
Industries/organisations potentially interested	N/A
Type of end-user potentially interested	Grid platform operators, such as Telco operators who may exploit to offer mediator services to allocate resources.
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Commercial channels

Exploitable Knowledge/Result #4	
VO aware distributed file services	
Specific innovation of the exploitable result	Ease of use and rapid development of applications.
Necessary steps before exploitation of the result	Prototype of use case applications and evaluation of performance and scalability. Replica management to improve response time. Robustness of implementation to be improved.
Sector(s) of application	Community applications such as shared photo albums (between communities of users forming groups in Internet). To build eLearning tools.
Timetable for commercial use	N/A
Patents or other IPR protection	
Owner & Other Partner(s) involved	ICCS, KTH
Industries/organisations potentially interested	N/A
Type of end-user potentially interested	Real end users such as schools, Internet communities. Application and service providers to develop value added services. ISPs to offer value added services
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Commercial channels

4.2.2 INRIA

Exploitable Knowledge/Result #1	
Distributed key-based timestamping mechanism (KTS) for reconciliation and currency management in DHTS Collaboration between INRIA-Atlas (R. Akbarinia, E. Pacitti, P. Valduriez) and ECOO team at LORIA, Nancy to combine the SO6 prototype (reconciler based on operational transforms) developed by the ECOO team at LORIA with the KTS prototype (distributed timestamper) developed by the Atlas team to demonstrate reconciliation for the P2P Xwiki application.	
Specific innovation of the exploitable result	KTS is fully distributed and generates monotonically increasing timestamps in DHTs, despite peers' dynamicity and failures
Necessary steps before exploitation of the result	Full implementation and testing on the Xwiki product
Sector(s) of application	Wiki collaboration
Timetable for commercial use	2009
Patents or other IPR protection	

Owner & Other Partner(s) involved	INRIA-Atlas
Industries/organisations potentially interested	Xwiki, an Open Source wiki software company
Type of end-user potentially interested	Real end users such as schools, universities, companies which need fast and cheap distributed collaboration on the Web 2.0
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	

Exploitable Knowledge/Result #2	
Telex semantic storage middleware for collaborative applications	
Specific innovation of the exploitable result	Telex is a middleware for implementing collaborative applications in a P2P environment. It mechanises the common, difficult issues of replication, consistency and conflict resolution. Developers may focus on their application's specific semantics.
Necessary steps before exploitation of the result	Productization; developing a few more applications
Sector(s) of application	Collaborative tools (e.g. wikis, decision tools, shared editors, group management, etc.)
Timetable for commercial use	2010
Patents or other IPR protection	
Owner & Other Partner(s) involved	INRIA-Regal
Industries/organisations potentially interested	To be defined
Type of end-user potentially interested	Application providers
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	

Exploitable Knowledge/Result #3	
Desktop Grid Simulation Platform	
Specific innovation of the exploitable result	It will be possible to simulate, in a reproducible way, a real Desktop Grid made of a large number of nodes. This platform will use real traces collected from real platforms.
Necessary steps before exploitation of the result	Finishing implementation. Testing and Validation.
Sector(s) of application	Research Application Testing

Timetable for commercial use	2008/2009
Patents or other IPR protection	
Owner & Other Partner(s) involved	INRIA - Grand-Large
Industries/organisations potentially interested	AlmereGrid (Nederlands company)
Type of end-user potentially interested	Desktop Grids Providers. (For testing changes made to their platform)
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	

4.2.3 KTH

Exploitable Knowledge/Result	
<p>A distributed component model and components management framework for developing self-managing applications and services in/for volatile Grids with dynamic VOs. A Virtual-Organization file system for volatile (ad-hoc) Grids with dynamic VOs. Grid4All infrastructure.</p>	
Specific innovation of the exploitable result	Aggressive support for self-management in dynamic Grids that enables developing self-managing (easy to use) Grids, Grid services and applications, including collaborative applications in dynamic VOs, e.g. schools, SMEs.
Necessary steps before exploitation of the result	Development of a Grid4All prototype (including some demo applications); testing of the prototype at KTH, SICS and a school.
Sector(s) of application	E-learning; collaborative applications, e.g. content sharing – the demo applications developed in Grid4All WP4
Timetable for commercial use	No commercial use is planned.
Patents or other IPR protection	No patents are planned (yet).
Owner & Other Partner(s) involved	SICS, INRIA, UPC, Antares, FT, ICCS
Industries/organisations potentially interested	
Type of end-user potentially interested	End-user communities: university (KTH) students; schools; Research communities on Grid and P2P computing, software developers, possibly service providers.
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	

4.2.4 ICCS

Exploitable Knowledge/Result	
Make laboratory/university infrastructure available to university students, through Grid4All.	
Specific innovation of the exploitable result	Create infrastructure from distributed resources and make them easily accessible by university students.
Necessary steps before exploitation of the result	All necessary software infrastructures should be complete and incorporated in our university facilities.
Sector(s) of application	Education
Timetable for commercial use	No plan for commercial use by ICCS
Patents or other IPR protection	
Owner & Other Partner(s) involved	
Industries/organisations potentially interested	Other Universities or Organization that offer CPU and storage access to their students or personnel
Type of end-user potentially interested	University students, Organization Personnel
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Non-commercial

4.2.5 UPC

Exploitable Knowledge/Result	
Market based mechanisms for resource allocation (MIS, CMS, kDA)	
Specific innovation of the exploitable result	A decentralized mechanism for the regulation of decentralized grid systems.
Necessary steps before exploitation of the result	Development of production-quality components and integration with existing grid reference implementations.
Sector(s) of application	Any sector where Grid applies and a medium to large scale grid is needed.
Timetable for commercial use	2010
Patents or other IPR protection	
Owner & Other Partner(s) involved	UPC
Industries/organisations potentially interested	Companies: Upcnet, Telefonica R+D, RedIRIS
Type of end-user potentially interested	Real end users: schools (iEARN network), universities (UPC, the Spanish academic network, among other), non-profit communities (Association for Progressive Communications). Service providers: upcnet.

Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Non-commercial: Publication of the source code using FOSS license.
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4.2.6 ANTARES

Exploitable Knowledge/Result	
<p>The knowledge acquired through the specific research Antares is doing for the integration of E-Meeting/E-Tutor application on a decentralized environment such as Grid4All opens new perspectives for synchronous communication through the Net within organizations, making feasible the development of a range of qualified products oriented to run whether in centralized or decentralized environments.</p> <p>Most of the results of the research done will be also used on the improvement of the current E-Tutor / E-Meeting application.</p>	
Specific innovation of the exploitable result	<p>Synchronize disconnected operations on collaborative environments.</p> <p>Conflict handling on disconnected operations.</p> <p>Distributed file storage.</p>
Necessary steps before exploitation of the result	<ol style="list-style-type: none"> 1. Development of new products 2. Marketing Plan 3. Financial resourcing.
Sector(s) of application	Educational, Business
Timetable for commercial use	During 2009
Patents or other IPR protection	In study
Owner & Other Partner(s) involved	Antares
Industries/organisations potentially interested	Medium/large organizations
Type of end-user potentially interested	End-users
Exploitation made through <u>commercial</u> or <u>non-commercial</u> channels	Not yet

4.3 Exploitation plan at organisation/institution level

4.3.1 FT

Exploitation plan at organisation/institution level	
Exploitation within your organisation/institution	<p>France Telecom is interested in the Grid and utility computing technologies both for internal optimization of resources (for platforms and services) and as well to open opportunities for new innovative services. Key strategy areas are community and collaboration applications including distant learning and social networks, connecting remote users and organizations in particular in rural areas.</p>

	<p>The primary exploitation opportunities are by reuse of acquired results within either on-going projects or through prospects of new service opportunities. The path to exploitation primarily resides in reaching business units, technology centres of the Orange group and demonstrating the usability of results.</p> <ol style="list-style-type: none"> a. Using produced knowledge in exploratory projects and services that will then be promoted to Orange business units. This is with the scope of generating new services, such as on-line applications, collaborative services for client groups such as small enterprises, domestic users b. Usage of results by the operational units of Orange. Orange is itself interested in applying grid, self-management technologies to reduce operational costs.
<p>Means/channels for exploitation</p>	<p>The main channels of communication between the R&D and the exploratory and business units is through regular postings on the Intranet communication channels, participation on open research seminars and presentations, and pushing information through the organization hierarchy.</p> <p>When a research result creates interests, the research unit is contacted by other projects (either on-going or in germination) to explore the usability and ease of enhancement. The research unit may also by itself propose exploratory projects based on acquired results that may lead to pilot studies. This is the channel that we will pursue for Grid4All result exploitation. Pilot studies may also be conducted within Orange Labs to assess interest and impact.</p> <p>The recent internal communication that we have diffused on Grid4all has already generated five interest groups within the R&D which are prospecting new opportunities. We have retained two for further exploration in two domains: harnessing resources of Orange clients to offer community services (towards SMEs, schools etc.)</p>

4.3.2 INRIA

Exploitation plan at organisation/institution level	
<p>Exploitation within your organisation/institution</p>	<p>INRIA has invested heavily in grid activities and in grid hardware in the past years. INRIA's grid platforms and software are available for use by academia and industry.</p> <p>INRIA's primary exploitation avenue for Grid4All results will be scientific dissemination activities; more specifically:</p> <ul style="list-style-type: none"> • Publications: Research and experimental results to be published in leading international conferences and journals. • Teaching: scientific results are publicized in Master's courses. • Experimentation: Our prototypes, implemented within the course of Grid4All will be used in further scientific experiments, e.g. in collaborative work or mobile distributed computing. • Demos at conferences and fairs. • Open source software: Our software is open source, already available (on gforge.inria.fr) for projects in distributed systems, peer-to-peer computing, collaborative work, mobile computing. • Follow-up: Grid4All results will form a basis of future research activities of the participating teams, and in the definition of follow-up collaborative and industrial projects. <p>Over the years, INRIA has refined its strategy for exploiting joint project results. This strategy is based on the participation in standardization</p>

	committees, the dissemination of visible prototypes in open source software and high quality research publications. In particular, INRIA is an active member of the ObjectWeb consortium that develops OSS middlewares and tools. The four INRIA teams involved in Grid4All follow this general strategy.
Means/channels for exploitation	<p>Atlas has been developing the Atlas P2P Architecture prototype. APPA is a new P2P data management system and Grid4All allows us to improve it and validate it in the context of dynamic Grid environments. We plan to deliver APPA as an OSS prototype through ObjectWeb.</p> <p>INRIA regularly organises the ILIATECH research-industry meetings, to present of recent results to industry and to inform research of industrial needs. An ILIATECH meeting on Grids and VOs is planned for 2009, where Grid4All results will be presented.</p>

4.3.3 KTH

Exploitation plan at organisation/institution level	
Exploitation within your organisation/institution	Deploy the Grid4All software, e.g. the Grid4All infrastructure at KTH in collaboration with SICS; use the Grid4All software in the courses on P2P and Grid computing and on distributed systems at KTH.
Means/channels for exploitation	Courses

4.3.4 ICCS

Exploitation plan at organisation/institution level	
Exploitation within your organisation/institution	University students are often provided access to CPU and storage facilities in a traditional way (Unix account). Grid4All infrastructure will enable students to create their own VOs, use CPU time and aggregate storage in an easy and efficient way.
Means/channels for exploitation	ICCS is associated with the School of Electrical and Computer Engineering (SECE) of the National Technical University of Athens (NTUA). This association provides the mean for exploiting Grid4All results in the university infrastructure.

4.3.5 UPC

Exploitation plan at organisation/institution level	
Exploitation within your organisation/institution	The strategy is to involve institutions linked to UPC that can be interested and capable of supporting the development, the validation on a test-bed, deployment of systems and the provision of services based on these ideas to provide Grid services for educational and research networks.
Means/channels for exploitation	<p>Presentation to the office for the exploitation of research results and entrepreneurship at UPC (Innova.upc.edu) to explore the potential for creation of spin-off companies.</p> <p>Presentation to the catalan and spanish office of innovation (Catalan and spanish government): support for the development of a more mature implementation (funding or links with companies)</p>

	Presentation to the Spanish academic and educational network (Red.es): support for the validation of the ideas on a educational or university level test-bed.
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4.3.6 ANTARES

Exploitation plan at organisation/institution level	
Exploitation within your organisation/institution	Grid 4 All results deployment in the development of commercial applications based on P2P distributed technologies oriented to SMEs and educational institutions.
Means/channels for exploitation	Updating of Antares' knowledge database addressed to Development Department.

4.4 Results and knowledge produced by others

4.4.1 KTH

Result/Knowledge produced by others	
What part of Grid4All results are of interest to you	Applications developed in WP4 (UPC, Antares); distributed file system developed in WP3 (jointly by ICCS, INRIA, KTH)
Use of these results	To use as a part of Grid4All infrastructure and as demo applications. Possible develop new applications.
Interested industries	NA

4.4.2 UPC

Result/Knowledge produced by others	
What part of Grid4All results are of interest to you	All but mainly: Market factory, Telex, Niche, AMF.
Use of these results	Application demonstrators: All the Grid4All components are necessary for the development, demonstration and validation of end-user applications. Services: the market factory is needed to support markets with multiple auction types, Niche and AMF together are necessary for the development of autonomic/adaptive systems and applications.
Interested industries	Software companies, (grid) service providers, communities (educational, university and research, non-profit).

4.4.3 ANTARES

Result/Knowledge produced by others	
What part of Grid4All results are of interest to you	Any innovation on decentralized processes could be useful.
Use of these results	Development of new applications
Interested industries	Any sector could be interested on communication applications through the Net.

5. Standardisation

5.1 WP2

Standardisation	
Room for new standards	NA
Aligning to existing standards	<p>We will investigate the alignment in the following areas:</p> <ul style="list-style-type: none"> • Deployment API and interfaces • GRIMP negotiation and agreement interfaces and protocols • The currency management system proposes a banking API. There are a number of such APIs within the context of p2p systems. We will investigate rooms for alignment of APIs

5.2 WP4

Standardisation	
Room for new standards	Specifications for data and interaction in remote or disconnected mode
Aligning to existing standards	The WP4 applications are considering the use or extend standards formats for data exchange (such as iCal, MIME), invocation (Web and Grid services from the W3C and OGF), and subject specific standards such as IMS-LD (IMS Consortium) although the effort is more concentrated on the use of the Grdi4All infrastructure than on compliance with end-user standards.

6. End-user targeting

The table below presents all the means identified by the Grid4All consortium to reach end-users.

What	Description	To whom
Publication	Article to be published within the next edition of eStrategies by British Publishers. This publication has a readership of around 40,000 including the education sector, health sector and public corporations. The release of this edition will coincide with the OGF-Europe meeting in June 2008. Copies will be distributed at the meeting place.	We expect to reach a wide range of direct end-users and application developers within fields of interest such as education and distant learning.
Questionnaire	We propose to formulate a questionnaire targeting different stake-holders including end-users, application and service developers. The objective of this questionnaire is to obtain feedback on the technical proposals of Grid4All and capabilities rendered by Grid4All for the different stake-holders. We will publish this questionnaire (formulated as yes/no or multiple choice questions) on the Grid4All web site by middle of February.	Our first objective is to reach stake holders (including decision makers) within the education and learning field.
Informal surveys	Some academic partners are also realising informal surveys of system administrators, in particular those administrating academic organisations such as schools.	The objective is to prepare a check-list based on the typical difficulties encountered within such environments.
Tutorial	We are planning the preparation of a tutorial on some of the major components of Grid4All, notably the Telex middleware (WP3) and the Distributed Component Management service layer (WP4). This tutorial targets application and service developers.	We are currently investigating venues and events where this tutorial may be proposed.
Educational newtworks and foundations	Some partners (UPC) have made contacts with the iEARN educational network and the foundation "Atlas de la diversidad" to publish during 2008 in their electronic newsletters an article about the vision of the Grid4All project with a survey to collect feedback from both communities. iEARN is the world's largest non-profit global network that enables teachers and youth to use the Internet and other technologies to collaborate on projects that enhance learning and make a difference in the world. It is made up of over 20,000 schools and youth organizations in more than 115 countries. iEARN empowers teachers and young people to work together online using the Internet	Educational communities

What	Description	To whom
	<p>and other new communications technologies. Over 1,000,000 students each day are engaged in collaborative project work worldwide. Since 1988, iEARN has pioneered on-line school linkages to enable students to engage in meaningful educational projects with peers in their countries and around the world.</p> <p>The "Atlas de la Diversidad" foundation emerged from an @LIS (Alianza para la Sociedad de la Información: Information Society Alliance) project of the EU for Latin America and Europe. It currently involves 1400 institutions, 3700 instructors, 47720 pupils, 3800 working groups.</p> <p>It uses Internet for distance collaborative work focused on the production of multimedia content to show the diversity of cultures in both continents.</p>	