

## **Table of Contents**

<b>SUMMARY</b> .....	<b>2</b>
<b>B1: CONCEPT AND OBJECTIVES, QUALITY AND EFFECTIVENESS OF THE SUPPORT MECHANISMS AND ASSOCIATED WORK PLAN</b> .....	<b>3</b>
B 1.1    CONCEPT AND PROJECT OBJECTIVES.....	3
<i>B 1.1.1 Objectives for work package 1 – Policy, impact and sustainability</i> .....	7
<i>B 1.1.2 Objectives for work package 2 – GridCafé, GridCast and GridGuide</i> .....	9
<i>B 1.1.3 Objectives for work package 3 – International Science Grid This Week</i> .....	12
<i>B 1.1.4 Objectives for work package 4 – Management</i> .....	14
<i>B 1.1.5 Objectives summary table</i> .....	14
B 1.2    QUALITY AND EFFECTIVENESS OF THE SUPPORT MECHANISMS AND ASSOCIATED WORK PLAN .....	16
<i>B 1.2.1 Overall strategy and general description</i> .....	16
<i>B 1.2.1.2 Risk assessment</i> .....	17
<i>B 1.2.2 Timing of the work packages and components</i> .....	19
<i>B 1.2.3 Work package list</i> .....	21
<i>B 1.2.4 Deliverables list</i> .....	22
<i>B 1.2.5 Milestones list</i> .....	24
<i>B 1.2.6 Description of work packages</i> .....	26
<i>B 1.2.7 Efforts for the full duration of the project</i> .....	44
<b>B 2.    IMPLEMENTATION</b> .....	<b>44</b>
B 2.1    MANAGEMENT STRUCTURE AND PROCEDURES .....	44
<i>B 2.1.1 Project Manager (PM)</i> .....	45
<i>B 2.1.2 Work Package Leaders (WPL)</i> .....	45
<i>B 2.1.3 Project Management Board (PMB)</i> .....	46
<i>B 2.1.4 Escalation Process</i> .....	46
B 2.2    BENEFICIARIES .....	47
B 2.3    CONSORTIUM AS A WHOLE.....	53
B 2.4    RESOURCES TO BE COMMITTED.....	55
<b>B 3.    IMPACT</b> .....	<b>58</b>
B 3.1    STRATEGIC IMPACT.....	58
B 3.2    SPREADING EXCELLENCE, EXPLOITING RESULTS, DISSEMINATING KNOWLEDGE .....	62
<b>B 4.    ETHICAL ISSUES</b> .....	<b>66</b>
<b>ANNEX 1: LETTERS OF SUPPORT FOR E-SCIENCETALK</b> .....	<b>67</b>

## Summary

### e-ScienceTalk

E-ScienceTalk will build on the outstanding achievements of GridTalk in bringing the success stories of Europe's e-Infrastructure to policy makers in government and business, to the broader scientific community and to the general public. E-ScienceTalk will work with the European Grid Infrastructure and collaborating projects to enhance the scope of the existing GridTalk products and to report on the interactions of grid computing with e-Infrastructures such as cloud computing and supercomputing, as well to explore the long-term sustainability of e-ScienceTalk's products.

### Work Package 1 – Policy, Impact and Sustainability (led by QMUL)

There is a strong need for reporting targeted at policy makers in science and business to illustrate the scientific results and impacts from grid, distributed and high performance computing. Significant inroads have been made by the GridTalk project's series of GridBriefings, which interpret EC policy documents and reports in an accessible and attractive format. These short, full-colour policy articles illustrate the scientific results and impacts arising from grid computing. For e-ScienceTalk, GridBriefings will be aimed at policy makers in all layers of government and industry and describe for a non-technical audience how long-term investments in grid technology have led to concrete results. Additionally, this work package will assess the impact of longer running products such as iSGTW and GridCafé and explore possibilities for their sustainability. WP2 will also coordinate annual concertation meetings for the e-infrastructures area.

### Work Package 2 – GridCafé, GridCast and GridGuide (led by APO)

The GridCafé website was launched by CERN in 2003 to explain to the public “what grid computing is and what it could soon be.” E-ScienceTalk will extend the GridCafé website to keep it at the cutting edge of grid and e-Science dissemination and will add interactive materials. It will also continue the GridCast site, where scientists blog about their experiences live from grid events around the world. The GridGuide website gives a human face to e-Infrastructures, allowing users to listen to podcasts from grid sites worldwide and read interviews with researchers. During e-ScienceTalk, the GridGuide will expand to include more sites, including the National Grid Initiatives and will be integrated more closely with GridPP's Real Time Monitor, which shows the data traffic moving around the grid. Additionally, interactive online environments will be explored as well as videoconferencing facilities for EC concertation events and access to the existing contents of the BELIEF Digital Library.

### Work Package 3 – International Science Grid This Week (iSGTW) (led by CERN)

iSGTW is a free weekly online newsletter that promotes grid computing around the world by sharing stories of grid-empowered science and scientific discoveries. Now reaching over 5800 readers in more than 195 countries and territories, it is an international publication by nature, funded jointly by Open Science Grid in the US and GridTalk in Europe, with a European Editor based at CERN, a US-based editor at Fermilab, as well as several contributing writers worldwide. E-ScienceTalk will continue to fund the iSGTW European Editor and the scope of iSGTW will expand to include technologies such as supercomputing and cloud computing. The publication will be relaunched with a new name and a new website that will enable readers to interact much more closely with the publication, commenting and rating articles and taking part in polls.

### Work Package 4 – Management (led by EGI.eu)

E-ScienceTalk will be overseen by a Project Management Board, consisting of the Project Manager and representatives from each of the partners. The quality and progress of the project will be controlled by monitoring the metrics, conducting surveys of readers of iSGTW and by gathering feedback from delegates at conferences attended by e-ScienceTalk.

This focused project has five partners, all with extensive relevant experience:

EGI.eu, Amsterdam will coordinate the European Grid Initiative, the successor to EGEE.

Queen Mary and Westfield College (QMUL) is responsible for GridPP's dissemination.

André-Pierre Olivier (APO) is a French web design business that designed the GridCafé website.

Imperial College, London is closely involved with GridPP and manages the Real Time Monitor.

CERN is heavily involved in grid dissemination and managed outreach for Enabling Grids for E-scienceE.

**Length of project: 33 months      Person months: 192      EC contribution: 1.3 Million Euros**

## Proposal

# **B1: Concept and objectives, quality and effectiveness of the support mechanisms and associated work plan**

## ***B 1.1 Concept and project objectives***

The aim of e-ScienceTalk is to build on the significant achievements of the “GridTalk: co-ordinating grid reporting across Europe” project in bringing the success stories of Europe’s e-Infrastructure to policy makers in government and business, to the broader scientific community and to the general public.

The key challenges will be to work with the emerging European Grid Infrastructure (EGI) ecosystem as it becomes established, to maintain and enhance the high quality of the existing GridTalk outputs, to report on the interactions of grid computing with other e-Infrastructures, such as cloud computing and supercomputing and to explore the long-term sustainability of e-ScienceTalk’s products.

### **Background to the project**

Over the last 10 years, the European Commission and governments across Europe have invested hundreds of millions of Euros in scientific grid computing and e-Infrastructures. European scientists now have access to state-of-the-art computational and data resources located around the globe, putting European research into a world-leading position. These grid and interacting e-Infrastructures allow Europe to benefit from research that addresses the greatest challenges facing the planet today, such as climate change, pandemics and sustainable energy.

Grid infrastructures are now moving towards a sustainable and more user-centric model through the European Grid Infrastructure, which will integrate national operations at a European level. During this transition, it is essential to keep the achievements and impact of grid, distributed and high performance computing at the forefront of people’s minds, through dissemination projects that cross national and even international boundaries. While the first phase of GridTalk focused principally on communicating the benefits, success stories and challenges of grid computing, e-ScienceTalk will expand its focus outwards from a central core of grid computing to cover the interactions and offerings from other e-Infrastructures, such as cloud computing, the supercomputing networks of DEISA and PRACE and the networking layer of GÉANT. This blurring of boundaries is being increasingly driven by the needs of users, such as the life sciences and fusion communities, and the future users represented by the European Strategy Forum for Research Infrastructures (ESFRI) projects. By broadening its approach in this way, e-ScienceTalk will increase its relevance to the general public, policy makers and the broader scientific community, helping to ensure continued public support for the European e-Infrastructures activities, as outlined by the EC for 2020 and beyond.

### **Expected results**

E-ScienceTalk’s output will consist of four principal products. First, e-ScienceTalk will produce a series of GridBriefings aimed at policy makers in order to disseminate key policy reports and issues underpinning grid and e-Infrastructure development in Europe, seeking to expand the audience for these reports to new areas, such as the US. As part of these activities, e-ScienceTalk will also coordinate annual concertation meetings and activities for the e-infrastructures area.

Secondly, the GridCafé, GridCast and GridGuide suite of interactive websites will expand in content to cover new developments and players in the changing arena of EGI, National Grid Initiatives (NGIs), European Middleware Initiative (EMI) and other e-Infrastructure projects.

Thirdly, these websites will be enhanced by a closer interaction with the Real Time Monitor of GridPP, the UK Grid for Particle Physics, combining live views of grid activity with the human aspects of grid computing. Finally, the growing online weekly publication, International Science Grid This Week (iSGTW) will communicate directly with the existing and potential grid and high performance/high throughput computing user community. The impact and sustainability of the e-ScienceTalk products will be assessed by the work package producing the GridBriefings, who will produce reports on the impact of these products on their audiences, but also outline plans and options for their sustainability at regular intervals throughout the project. Each of the work packages will provide input into these status reports, which will lead to a final report covering the sustainability of all the e-ScienceTalk products: the GridBriefings, the videos, blogs, user generated content, images, graphics, documents, the websites for GridCafé, GridCast and GridGuide and the weekly publication iSGTW and its archives. These products will all be made available as open access materials, freely accessible to European-funded projects and beyond.

## Audiences

E-ScienceTalk aims to increase awareness of the scientific impact of European grid and e-Infrastructure projects by providing interesting, useful and insightful material aimed at four main audiences.

1. **Policy makers in European science and business.** Policy makers will be informed and updated with the achievements and potential of e-Infrastructures through four-page GridBriefings. These publications summarise in non-technical language the key reports and issues and emphasise the need for sustainable methods of communication surrounding these topics.
2. **Members of the public in Europe and worldwide.** This audience will be engaged via the well-established GridCafé website, which explains computing grids to a non-expert audience, with additional materials about other e-Infrastructures. The website's scope and appeal has also been expanded through new media channels during the first phase of GridTalk, to include blogs, podcasts, and social media sites. This reach will be expanded in e-ScienceTalk to cover interactive online environments. The GridGuide complements the GridCafé by providing a more in-depth guide to institutions across the globe that are involved in grids and distributed computing. In turn, the GridGuide will become increasingly interactive and accessible through co-development with the Real Time Monitor, which shows traffic on the worldwide grid in real time.
3. **European scientists in a position to develop or exploit grid computing and e-Infrastructures.** These are targeted by the weekly electronic newsletter International Science Grid This Week, produced in collaboration with Open Science Grid and with over 5800 subscribers worldwide. E-ScienceTalk will aim to increase iSGTW subscribers by at least 30%.
4. **University and final year high school students.** These students are the future users and drivers of Europe's e-Infrastructures. They will be introduced to grid computing and its associated technologies through the GridCafé and GridGuide websites.

## Main messages

The principal messages to be communicated will be:

- Grids and e-Infrastructures are enabling scientists in Europe and around the world to achieve results and discoveries that would otherwise be impossible.
- Computing grids and e-Infrastructures are a daily part of the lives of scientists and Europe is in a leading position to exploit these infrastructures in disciplines from life sciences, to social sciences, to high energy physics.
- Use of e-Infrastructures is growing, with tens of thousands of users depending on grid computing projects in Europe alone and new projects proliferating across the globe.

- Funding for grid computing and e-Infrastructures has been, and remains, a worthwhile investment for Europe in order to support the European Research Area.
- The technologies and infrastructure developed for distributed computing infrastructures have varied applications in business and government and Europe is benefiting from these.
- Grid computing and e-Infrastructures have, and will continue to have, an important and positive impact on the lives of the general public, enabling scientific breakthroughs in areas such as understanding climate change, improving health and novel IT services.

### Plans for the project

Building on the excellent results of the GridTalk project and preserving its successful consortium, e-ScienceTalk will develop and expand the communication channels already developed during the first phase. GridTalk was funded under FP7: Coordination Action for the Research Infrastructure Initiative to run from 1 May 2008 to 31 August 2010. GridTalk has already reached an extensive worldwide audience, as a result of its engaging and successful design-led products, qualified journalism professionals, high quality content, media contacts and extensive project networks. The GridBriefings alone reflected the work of over 40 projects in the course of their first year, including non-European projects such as Open Science Grid and the Open Grid Forum, and international projects and initiatives such as the WorldWide Large Hadron Collider Computing Grid, the Green Grid and the fusion facility, ITER. The GridGuide was launched during GridTalk and now features over 25 sites, including sites in Europe, South America and the US. During the first year of GridTalk, iSGTW reached readers from nearly 200 countries, speaking 115 different languages and produced articles covering 62 European projects and 46 from the US. An entirely new version of the GridCafé website was launched in November 2008 using a 3-D format, keeping the site at the cutting edge of web design and attracting more than 320,000 visits from nearly 100,000 visitors since its launch. GridTalk held six GridCast events in its first year, filming more than 70 podcasts with more than 7300 views on videosharing website YouTube alone, and visits from more than 80 countries to the blog itself.

The Technical Review Report for the first period of the GridTalk project was very positive regarding progress during the first year: “The reviewers consider that the GridTalk project has made excellent progress, even exceeding expectations....Other scientific communication projects could benefit considerably from the approach/es developed and implemented by GridTalk. The GridTalk model for disseminating scientific research – both the information products and the dissemination methods – could and should be replicated.”<sup>1</sup> The report went on to commend the consortium itself: “Good relations are evident amongst the team members/working groups, with beneficial cross-work package exploitation of content, resources and feedback.”

While building on these successful results, e-ScienceTalk will also work on the following new areas:

- **E-ScienceTalk will expand its remit to communicate successes in the broader e-Infrastructure areas** particularly as these interact with grid computing, including volunteer, cloud, high performance computing and the network layer.
- **E-ScienceTalk will aim to work with projects from a wider geographical area**, covering Europe and the US, but also more countries in Asia through Academia Sinica Grid Computing and projects such as EUAsiaGrid, Latin America through bodies such as REUNA, the National University Network in Chile and Africa.
- **The existing consortium will expand to include Imperial College**, in order to bring onboard their key technical experience with GridPP’s Real Time Monitor, which demonstrates the global reach of grid computing in a highly visual and engaging way; this collaboration will enhance the co-development of both the Real Time Monitor and the GridGuide.

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<sup>1</sup> Technical Review Report: GridTalk, 5 June 2009

- **The consortium will also include EGI.eu**, as the project management will be provided by the Chief Administrative Officer / Dissemination Manager of the EGI-InSPIRE project. This will enable a close synergy between GridTalk and EGI in the areas of dissemination and networking, while enabling e-ScienceTalk to liaise independently with other e-Infrastructure projects, for example through the European E-Infrastructures Forum.
- **E-ScienceTalk will work to establish an extended network of contacts within the new EGI structures** such as the National Grid Initiatives and EGI.eu, which will be facilitated by including EGI.eu as a partner, as well as the wider e-infrastructure area. Work will concentrate on establishing connections between key dissemination hubs through which information can flow to the various audiences, such as GÉANT, DANTE, DEISA and PRACE.
- **As some of GridTalk's products, such as iSGTW and GridCafé, are now well established over several years, more in-depth analysis of the reach and impact of these products will be carried out**, as recommended by the EC first year reviewers, with the aim of communicating the lessons learnt to other EC-funded projects as an important resource for future dissemination projects.
- **E-ScienceTalk will explore sustainability models for continuing e-ScienceTalk's products** beyond the lifetime of the project, including open access digital repositories such as the BELIEF Digital Library and commercial funding models for products such as iSGTW. Drawing on the sustainability and impact reports as well as the final deliverables from each of the work packages, e-ScienceTalk will also produce an overview guide to dissemination for EU projects, based on the extensive experience gained and lessons learnt during both phases of the project.
- **The innovations offered by some of the new Web 2.0 technologies now available will be explored**, such as social media sites and interactive virtual environments, in order to help broaden the profile of the audiences reached by GridCafé, GridGuide and GridCast.

#### **Phases of work:**

E-ScienceTalk will be a 33 month project, from 1 September 2010 to 31 May 2013. E-ScienceTalk will continue seamlessly from GridTalk, which closes at the end of August 2010. Imperial College, London and EGI.eu will join the consortium officially at the start of e-ScienceTalk but will start to collaborate with GridTalk during the final months of the project.

The new areas of work outlined above will be grouped into roughly three phases of work:

1. Establish a new network of contacts within the emerging European Grid Infrastructure ecosystem, within other e-Infrastructures such as GÉANT and DEISA, and in regions outside Europe, such as Latin America, Asia and Africa, while maintaining the high quality outputs established in GridTalk;
2. Build on these networks to report on success stories, including covering the interactions between grids and other e-Infrastructures such as cloud computing, volunteer and supercomputing and the network layer, by increasing the contacts in these areas, and coordinating e-concertation activities;
3. Explore a sustainable model for dissemination of grid computing successes, evaluate the impact of the GridTalk and e-ScienceTalk products and disseminate the results to other EC-funded projects.

### B 1.1.1 Objectives for work package 1 – Policy, impact and sustainability

Governments across Europe have committed substantial funds to scientific grid computing, both through national projects and European initiatives. Scientists are reaping the benefits of this forward-looking investment, as there is an extensive production infrastructure in place, which is relied on by tens of thousands of researchers in many disciplines to produce results, including life sciences, social sciences, astronomy and high energy physics – work that is now being published in prestigious journals such as *Nature*<sup>2</sup>. However, this message needs to be reinforced with policy makers who influence the political decision-making process for science at the national and European levels.

#### GridBriefings

While projects such as Grid Computing Now! in the UK produced case studies and briefings aimed at UK businesses, there is still a need for reporting at a European and international level that is targeted at policy makers in science and business. In the past, this has represented a substantial gap in grid dissemination, and significant inroads have been made into this area by the GridTalk project's series of GridBriefings. These short, full-colour policy articles illustrate the scientific results and impacts arising from grid computing, interpreting EC policy documents and reports in an accessible and attractive format. To date, GridBriefings have covered standardisation, the European Grid Initiative Design Study, grids and clouds and women in ICT among other topics and have been distributed to all contributing organisations, the Enabling Grids for E-scienceE dissemination lists and non-European projects including OSG, ThaiGrid and the E-science grid facility for Europe and Latin America (EELA-2). The GridBriefings are timed to coincide with relevant events, such as conferences or the launch of reports. In the first year, more than 40 projects contributed to the production of the briefings, including global projects and initiatives such as the Open Grid Forum, the Worldwide LHC Computing Grid, the Green Grid and the fusion project, ITER. The reviewers noted that the project "has made appropriate efforts on issues of importance to the European Commission, such as gender, through eg its GridBriefing on 'Women in ICT'."



Examples of GridBriefings published during GridTalk

With the transition from the EGEE project to EGI and the rise in publicity surrounding cloud computing, it is now more important than ever to keep the achievements supported by European funded e-Infrastructures at the forefront of policy makers' minds. E-ScienceTalk will continue the successful series of GridBriefings, aimed at policy makers in all layers of government and industry, describing for a non-technical audience how long-term investments in grid technology have led to concrete results. The reporting will provide useful policy metrics, in terms of investment, manpower and spin-offs in science and industry, and will also put results into the context of the overarching research themes supported by the EC. E-ScienceTalk will expand

<sup>2</sup> *Nature Genetics* **41**, 283 - 285 (2009), "Genome-wide haplotype association study identifies the SLC22A3-LPAL2-LPA gene cluster as a risk locus for coronary artery disease"

the audience and distribution lists for these targeted reports to regions outside Europe including the US, for example through the collaboration with OSG, Asia in partnership with ASGC and EUAsiaGrid, South America together with REUNA and ALICE2, and Africa. The content of the GridBriefings will also broaden, to discuss how grid computing is interacting with and influencing other forms of computing, including supercomputing, clouds and volunteer grids in order to offer policy makers a full picture of the development of e-Infrastructures in Europe.

A final summary of the GridBriefings will be published bringing together all the GridBriefings issued during the project, together with a foreword by a key official. A previous summary included a foreword by Kostas Glinos, Head of Unit “GÉANT & e-Infrastructures, Directorate General for Information Society and Media, European Commission” and was distributed to 100 decision makers in 47 countries. Recipients included leaders of EU projects such as GLOBAL and PRACE as well as members of the EGI policy board and policy makers in relevant governmental departments, for example the Chief Scientific Adviser of the Government Office for Science in the UK. Around an additional 100 copies of the annual report were also printed and distributed at events such as EGEE'09, the British Science Festival and eChallenges 2009 and a similar distribution plan will be followed for e-ScienceTalk.

The work package will synergise with other policy oriented e-Infrastructure projects, including the e-Infrastructure Reflection Group (e-IRG), the European Grid Initiative, the SIENA project (Standards and Interoperability for e-Infrastructure Implementation Initiative), the European Institute of Innovation and Technology and the ESFRI projects. It will also aim to work with science policy bodies, learned societies and with funding councils to raise the profile of grid computing and e-Infrastructure in parliaments and governments. It will cooperate with networking and coordination projects such as GÉANT, DANTE, DEISA and PRACE.

### **Impact and sustainability**

Additionally, this work package will assess the impact of longer running products such as iSGTW and GridCafé and explore possibilities for their sustainability beyond e-ScienceTalk. Assessment of the long term impact of these products was recommended by the first year reviewers of the GridTalk project. This work package will analyse the metrics and feedback gathered during both GridTalk and e-ScienceTalk, in order to formulate reports that will make recommendations on future direction, highlight lessons learnt that can benefit other EC-funded projects and explore options for sustainability beyond e-ScienceTalk. Explorations of self-sustaining funding models during GridTalk to date have found that the timing is not right for commercial support for iSGTW or GridCafé due to the financial climate, but this assessment could well change in the future and new opportunities may arise. Sustainability of the e-ScienceTalk products such as iSGTW, GridBriefings, GridCafé, multimedia outputs, digital library contents, images and publications will be a principal aim for this work package.

This work package will also assume a key leading and coordinating role in the concertation activities and meetings related to the e-Infrastructure area. The objective will be to optimise synergies between projects by providing input and receiving feedback from working groups addressing activities of common interest (e.g. from clusters and projects). Projects may offer advice and guidance, and receive information relating to the 7<sup>th</sup> Framework programme implementation, standardisation, policy and regulatory, EU Member States initiatives or relevant international initiatives. These annual events will seek to build on the LHC GridFest event in October 2008, which generated 160 international press clippings from TV, radio and press and significantly raised the profile of grid computing in the minds of the general public and policy makers. The work package will also identify and attend events focused on policy makers, similar to the eChallenges event in Istanbul attended by GridTalk in October 2009, in order to distribute GridBriefings and communicate the issues directly. Similarly, the work package will target media meetings such as the International Science Journalism conference to build a network of media contacts, since reaching out through the media is an effective way to communicate with policy makers, as well as the general public.

The work package will be led by QMUL with contributions from APO and CERN, and will be tied closely to the GridCafé and iSGTW work packages. Policy articles will be published in iSGTW, helping to disseminate



them to a wider audience including the grid community and GridBriefings will fuel the 'In Debate' section of the GridCafé and the Nature Networks forum of iSGTW.

### ***B 1.1.2 Objectives for work package 2 – GridCafé, GridCast and GridGuide***

This work package covers a suite of three high quality interactive websites: GridCafé, GridCast and GridGuide. GridCafé was created by CERN and the design company APO prior to the start of GridTalk and further developed during the project. All three web sites target slightly different sectors of the GridTalk and e-ScienceTalk audiences. Common to all three sites, as well as all GridTalk's printed materials, is the outstanding design input from APO, a factor that is considered by the consortium to be a major contributor to the success of GridTalk. The reviewers also commended the extremely high standards attained stating: "The reviewers note the consistent high quality of the dissemination materials, both content (writing and subjects covered) and graphics."

#### **GridCafé**

The GridCafé website ([www.gridcafe.org](http://www.gridcafe.org)) was launched by CERN in 2003, with the aim of explaining to non-experts in a simple and stimulating fashion "what grid computing is and what it could soon be." It was nominated for both Pirelli International and Webby awards. GridCafé has been translated into several languages, including Spanish and French and it is widely cited as a primary web-based introduction and source of information about the grid.



*Screenshot of the home page for the GridCafé website*

As one of the few places where grid computing is presented without bias to a specific grid or project, the GridCafé website is already widely used as a reference by many grid project websites, including the Open Grid Forum (OGF), a standards body for grids and the Enabling Grids for E-science project. GridCafé also featured prominently in the coverage of grid computing during CERN's publicity campaign surrounding the start up of the Large Hadron Collider in September 2008. Grids were covered in the mainstream press, including on the BBC News website<sup>3</sup>, in the London Times<sup>4</sup> and the Telegraph<sup>5</sup>.

<sup>3</sup> BBC News; 8 September 2008: "Large Hadron Collider: The Grid"

<sup>4</sup> The Times, London, UK; 29 September 2008: "Grid of 100,000 computers heralds new internet dawn"

In its first phase, GridTalk redesigned the GridCafé website, keeping the friendly and welcoming feel of the original but introducing 3-D elements, new characters and a simpler navigation system to ensure easy access to all the site's pages. A new administrative system was developed, which enabled contributors to add materials in a range of languages, and the content of the site was completely revised. The new site has 65 new pages and has attracted more than 320,000 visits from nearly 100,000 visitors since its launch in November 2008, averaging over 5500 visitors per month.

In e-ScienceTalk, this work package will maintain and extend the GridCafé website, keeping it at the cutting edge of grid and science communication. The work package will add further links to demos, videos, games and online interactive tools and will also evaluate the possibilities for extending GridCafé into an interactive environment, such as Second Life, based on the success achieved during pilots conducted in GridTalk. The content of the site will be expanded to cover the interactions between grid computing and other forms of e-Infrastructure, including clouds, supercomputing and networks. Further translations of the site will be launched, including a Chinese version, in collaboration with the iSGTW contributor in Asia.

### GridCast

This work package will also continue the GridCast blog site ([www.gridcast.org](http://www.gridcast.org)) which enables scientists at grid events to blog about their experiences. The site was initially created before the start of GridTalk, and was redesigned and relaunched in September 2009. In its first year, GridTalk held six GridCast events, filming more than 70 podcasts with over 7300 views on YouTube alone. These events included the Open Grid Forum 23 in June 2008 in Spain, Supercomputing 2008 in the US, Cloudscape in Belgium and Enabling Grids for E-science 2009 in Barcelona. The GridCast blog attracted over 10,000 visitors by October 2009 from up to 80 countries. To promote GridCast's content to a wider audience, all posts are featured in Google News and Google Alerts. For e-ScienceTalk, the work package will continue to refine the blogging team, providing guidelines for bloggers and advertising the blogs widely in advance, featuring high profile guest bloggers and breaking more news via the blog. The work package will aim to run GridCasts from key grid events, including EGI conferences, the DEISA/PRACE Symposia and TERENA conference and will also aim to broadcast from at least one event in a developing country.



Screenshots of the GridCast blog site

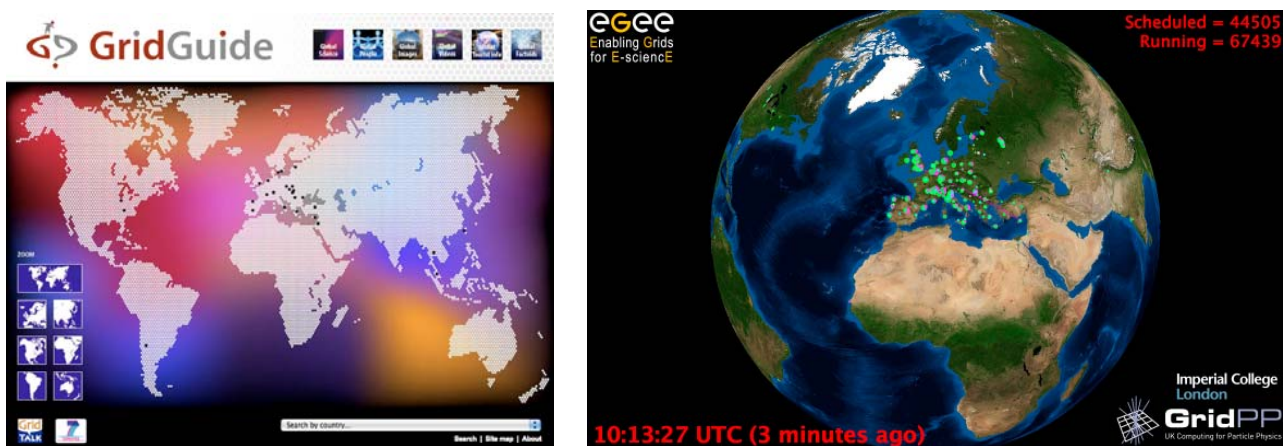
### GridGuide and the Real Time Monitor

The GridGuide ([www.gridguide.org](http://www.gridguide.org)) gives a human face to the grid, showing the sites and sights of grid computing. Users can listen to podcasts from grid sites worldwide, read about the ongoing work and watch interviews with researchers. GridGuide is the youngest of the GridTalk products, officially launched at the

<sup>5</sup> The Telegraph, London, UK; 9 September 2008: "The Grid' will see 80,000 computer network processing data from LHC"

4<sup>th</sup> EGEE User Forum in Sicily in March 2009. Individual sites are able to upload content themselves, allowing the GridGuide to grow independently but within the control of e-ScienceTalk. In its first months, the site has gathered together 31 site guides, 52 people profiles, 19 slideshows, 27 videos plus much more, adding up to a total of 250 items on more than 240 pages, and it is still growing. To date, the site has attracted more than 10,000 visitors, representing nearly 20,000 visits. The real impact of the site comes into its own when combined with the 3-D interactive Real Time Monitor (RTM) of GridPP.

The RTM is a 3-D virtual globe that shows live information about the jobs the grid is processing. The Imperial College developers worked with GridTalk to produce a version of the RTM that integrates GridGuide information. By clicking on a site that is also in GridGuide, a site information box opens that includes a feed from the GridGuide pages. At a click, the visitor can see a full picture of information from the site, on a technical and human level. The RTM is widely used for demonstrating the grid at conferences and events across Europe and beyond and is an accessible and engaging way to understand more about the grid. This work package will aim to integrate the recent developments of the RTM with the GridGuide to continue to foster this partnership, with the aim of making the RTM available on a wider range of platforms including as a web application, and ultimately on smart phones. E-ScienceTalk will also aim to increase the number of sites featured in the GridGuide including a higher proportion located outside Europe, representing work both in the grid arena, but also in related areas such as the network layer, supercomputing, volunteer and cloud computing. All the NGIs will be invited to participate, making GridGuide a definitive guide to the institutions that will create the backbone of the new European Grid Infrastructure. This work package will also investigate ensuring continued access to the existing contents of the Digital Library assembled by the BELIEF-II project.



*Screenshots of the GridGuide (left) and the Real Time Monitor (right)*

This work package will drive the overall branding for e-ScienceTalk, updating the logos and templates for posters and promotional materials such as leaflets and branded giveaway items. WP2 will also refresh the e-ScienceTalk project website, updating the look and feel for the start of the new project, providing information about the project and the project team, links to the e-ScienceTalk websites, downloads and press materials, as well as displaying news feeds from the other e-ScienceTalk websites such as iSGTW. The work package may also investigate updating the names of e-ScienceTalk products to reflect their expansion in scope, such as iSGTW and the GridBriefings. In addition, a full acknowledgement of the source funding (for example, the FP7 logo and the EU flag, EC/e-Infrastructures etc) will be given in all dissemination activities.

For this work package, led by APO with input from Imperial, QMUL and CERN, integration and collaboration with iSGTW will be of particular mutual benefit. The shared resources section will be further developed, exchanging materials and producing collaborative multi-media content. The GridGuide and Real Time Monitor are outstanding tools for communicating the scope and usage of the grid to policy makers, the media and the general public, and will be of significant use to WP1, particularly for the e-concertation events. GridCafé will also include a selection of grid and e-Infrastructure success stories based on the GridBriefings.

### ***B 1.1.3 Objectives for work package 3 – International Science Grid This Week***

International Science Grid This Week ([www.isgtw.org](http://www.isgtw.org)) is a free weekly online newsletter that promotes grid computing around the world by sharing stories of grid-empowered science and scientific discoveries. ISGTW was launched in November 2006, and is now produced through a collaboration between GridTalk and Open Science Grid (OSG) in the US. During the first year of GridTalk, 50 weekly issues of iSGTW were produced and after 18 months there are now over 5800 subscribers, a 65% increase since the start of GridTalk. Over the same period, the iSGTW website saw 235,300 page views, with its readership coming from a total of 196 countries. In total 62 separate European projects were covered during the first year, and 46 American projects. The first year reviewers noted the increase in subscribers, and commended the project team's 'flexibility and creativity' in surpassing the original goal of increasing iSGTW subscriptions by 25% in year one "through proactive marketing linked to conference registrations." Some examples of these marketing materials – posters displayed at events – are shown below.



*Publicity materials produced for iSGTW for events*

Although iSGTW is a successful dissemination tool for the multi-science grid projects EGEE and OSG, it is apparent from readership feedback that the appeal of this newsletter lies in its much wider scope and selection of subject matter. The newsletter covers a broad range of national and regional grid projects, as well as related developments in the wider world of distributed computing and supercomputing. During the first year of GridTalk, iSGTW ran two month-long themed series, one on particle physics and the LHC and a second on women in information technology. In an effort to attract and retain readers, iSGTW also covered stories on more unusual topics such as combating real-life, modern day pirates, earthquake prediction in Asia and innovative European art repositories. These stories often prove to be popular with other media outlets, and several have been reprinted in other online publications such as *SupercomputingOnline* and *PhysOrg*. Short readership surveys were conducted every six months, confirming that the iSGTW readership is happy with the publication and is keen to see a variety of topics covered, including the applications supported by the grid.



To enhance the online profile of iSGTW and to expand its readership, iSGTW set up a Facebook site to act as a community discussion area for beginners to the grid, and launched a forum on the prestigious Nature Networks site, a development that was strongly endorsed by the first year reviewers. Nature Networks is an online scientific community, hosted by the journal *Nature*, where scientists can keep in touch with colleagues and discuss research and scientific issues. The iSGTW forum was featured on the home page of the Nature Networks site, a page that attracts millions of hits per year. ISGTW also tags articles so that items relevant to particular topics can be extracted from the archives and compiled into themed publications, such as the "EGEE in the iSGTW headlines"

publications, produced by EGEE in April 2008, 2009 and 2010. (A screenshot of the iSGTW issue celebrating the launch of the Large Hadron Collider at CERN in September 2008 is shown to above).

iSGTW is currently produced by a full-time European editor working in close collaboration with a US editor, based at Fermilab. Each editor publishes iSGTW on alternate weeks and reports to an Advisory Board that comprises members of EGEE, CERN, Fermilab and OSG. This has proved to be a highly productive partnership and OSG through TeraGrid has committed to a future phase of GridTalk and iSGTW via a formal Letter of Support accompanying this document. All technical support and maintenance for the iSGTW website is provided by Xenomedia, and all costs for this support are covered by OSG, an arrangement that will continue for the second phase. E-ScienceTalk will continue to fund the iSGTW European editor based at CERN, who will be jointly responsible (with the US editor) for locating stories, researching, interviewing, writing original content, fact-checking, locating illustrations, editing and proofreading each issue of iSGTW, as well as acting as day-to-day webmaster.

An important new development for e-ScienceTalk will be a new name for the publication and this will go hand-in-hand with a major redesign and relaunch of the publication. The relaunch will be enabled by a comprehensive upgrade to the underlying web content management system powering the publication, an essential replacement for the current older system. The upgrade will allow for significantly increased functionality, such as the ability to comment on stories and rate them, share stories through social media sites, run surveys and polls of the week and incorporate multimedia content more easily, effectively future-proofing the publication for the duration of e-ScienceTalk. The upgrade will be implemented by Xenomedia, and the one-off costs of this upgrade will be funded equally by OSG and e-ScienceTalk. The relaunch will allow the readers to engage more deeply with iSGTW, building up an active community around the publication. This interactivity will be enhanced by the Nature Network forums, which if successful during GridTalk, will be expanded in the second phase of the project to become a key resource for working scientists to find out more about grid computing and e-Infrastructures and to discuss the issues of the day.

A second key advance for iSGTW during e-ScienceTalk, which will be reflected in its new name, will be an expansion of the variety of topics covered. While grid computing will remain at the publication's core, the impact of technologies such as supercomputing, the network layer, data and cloud computing on grid development and on e-Science will also be covered. This will reflect the current readers' interest in new and varied topics, a greater proportion of whom are now describing themselves as researchers rather than IT developers. Covering new areas will also help to make the publication appealing to readers from new fields, enabling iSGTW to grow its readership further during e-ScienceTalk by at least 30%. While this expansion in topics is driven by the readers' feedback, it also seen to be essential by the Advisory Board in order to allow the publication to grow and develop as grid computing and e-Infrastructures themselves develop and become more integrated.

This expansion will be supported by additional writing resource that will become available through a collaboration with a new contributor based in Asia, which will be available to e-ScienceTalk as unfunded effort. E-ScienceTalk will also fund an additional post for a Science Writer and Dissemination Officer at CERN who will write for iSGTW, while also making significant contributions to WP1 and WP2. As well as increasing the scope of the topics covered, these additional resources will allow for more exclusive stories and longer, more in-depth, multi-source stories to be produced – something that iSGTW's readers have consistently asked for in the readership surveys. iSGTW will also seek to recruit a student intern to work on the publication for up to 3 months, based either at CERN, Imperial or QMUL in collaboration with Science Communication degree courses. An internship was completed successfully during GridTalk by a student from the MSc in Science Communication at Imperial College, who advanced the marketing plan and contributed several articles at minimal cost to the project.

WP3, led by CERN with input from QMUL and APO, will integrate very closely with the other work packages in e-ScienceTalk. Articles for iSGTW can readily be adapted for use in the GridBriefings produced by WP1, and case studies discussed in the GridBriefings may also lead to full articles in iSGTW. The shared resources area between iSGTW and the GridCafé will continue to expand during e-ScienceTalk, and features and articles written for iSGTW can be included as web content in the GridCafé, GridCast and GridGuide sites.

**B 1.1.4 Objectives for work package 4 – Management**

The objectives for the management work package are to ensure that the e-ScienceTalk project is run effectively and achieves its overall objectives in reaching out to its key audiences of policy makers, the scientific community, students and the general public. The work package will coordinate all the various activities for e-ScienceTalk and will also monitor progress. This will be achieved by recording a range of metrics, but also through surveys of the iSGTW readers, conducting interviews and questionnaires at conferences attended by the grid and e-Infrastructure community, through the impact and sustainability reports of WP1 and also by acting on the feedback from the Project Management Board. This work package will also assist the EC in the organisation of information days, concertation meetings and brainstorming activities including access to vide Conferencing facilities. WP4 will also draw on the outputs of the final reports from each of the work packages to produce an overall guide to dissemination for EU-funded projects, based on the experience gained and lessons learnt from both the GridTalk and e-ScienceTalk projects. In this way, a strong synergy between the four work packages exists and can be exploited very effectively by this support action.

**B 1.1.5 Objectives summary table**

<p><b>Key objectives of the Capacities Research Infrastructures Work Programme call INFRA-2010-3.3</b></p>	<p><b>E-ScienceTalk’s relevance to these objectives</b></p>
<p>Proposals will aim at providing support for e-Infrastructures, including the coordination between national and pan-European e-Infrastructure initiatives and programmes...</p>	<p>E-ScienceTalk will act as a key communication channel between the National Grid Initiatives, EGI.eu and dissemination teams in other e-Infrastructure projects, helping to coordinate their dissemination activities to deliver a clear message about the evolution of Europe’s grid computing and e-Infrastructure services during the transition to EGI. GridTalk established a wide range of contacts across more than 60 European projects and will bring this high level of collaboration to e-ScienceTalk. The project has received Letters of Support from a number of European projects covering countries across Europe and beyond, and this document sets out concrete plans for how e-ScienceTalk will work particularly closely with EGI, DEISA, PRACE, GÉANT, OpenAIRE, OSG and others.</p> <p>E-ScienceTalk will form a key element in a network of dissemination hubs, including the dissemination teams of EGI.eu, EMI, the NGIs and others. Each of these hubs will target different audiences, whether users from a particular scientific community, users located in a particular country or region, middleware developers or owners and managers of the grid resources. As a dissemination project with international scope, e-ScienceTalk will be well placed to distribute its products via the hubs for these specialist networks and hence reach a much wider audience. In turn, e-ScienceTalk will be able to offer its well established networks of media contacts, policy makers and its general public-focused products as channels for success stories from the various communities. E-ScienceTalk will focus on collaboration with the dissemination teams of EGI.eu and DANTE. According to the EGI Blueprint<sup>6</sup>, the dissemination team for EGI.eu will “focus on content production and coordinating activities” and “support and coordinate the publication work of EGI”. E-ScienceTalk’s products will</p>

<sup>6</sup> EGI Blueprint, EU Deliverable: D5.3, 22 December 2008

	<p>provide ideal channels for disseminating the outputs from these teams.</p> <p>For example, the GridCafé website is a standard resource for an authoritative and unbiased introduction to grids for the general public. ISGTW reaches over 5800 subscribers from across a wide range science communities, and e-ScienceTalk aims to increase this by at least a further 30%. This anticipated growth in readership will be coupled to an increasingly community-based dimension to iSGTW. This will be achieved through its contributions on grid computing and e-Infrastructures to the Nature Networks forum, the introduction of a reader comment facility on articles that will be available in the relaunched iSGTW, as well as reader polls and the ability to share stories through social media sites. The community contributions encouraged during GridTalk will be extended during e-ScienceTalk to include blogging through the GridCast website, and coordination of e-concertation activities in the e-Infrastructure area.</p>
<p>..specific studies on e-Infrastructure related topics, in particular to evaluate the impact of the e-Infrastructure programme including the establishment of appropriate indicators...</p>	<p>Responding to the review comments for GridTalk, the e-ScienceTalk project will seek to evaluate more closely the impact of long running products such as GridCafé and iSGTW on their audiences, as well as the impact of the younger products. In turn, this will shed light on the impact of the e-Infrastructure programme itself on policy makers, innovators, the e-Science community and the general public. E-ScienceTalk will gather and analyse metrics relating to the GridTalk products, such as the readership figures for iSGTW and the profile of this readership by conducting annual readership surveys. Through web statistics, it is also possible to assess which types of stories gain the most attention from the community and to follow this up with more in-depth one-to-one interviews. The general and trade press also pick up certain iSGTW stories and redistribute them to their own readership, for example a feature on tracking down pirates off the Horn of Africa, and another on resurrecting an ancient Greek musical instrument using the grid. By evaluating which stories gain a wider a readership, it will also be possible to understand the impact the research has had on the general public.</p> <p>By monitoring which areas of GridCafé website are most frequented, this will also add to our knowledge of where gaps in understanding still exist among the general public regarding e-Infrastructures and build up a fuller picture of where future dissemination projects should focus their efforts. Tracking the usage of the GridTalk products through readership surveys, questionnaires and interviews with delegates at key conferences will all help to extend our insight. By making the results of these studies available to other EC-funded projects through open access channels such as the BELIEF Digital Library and OpenAIRE, e-ScienceTalk will also contribute to the sustainability of the e-ScienceTalk products. E-ScienceTalk will also draw together the final deliverables from each of the work packages to produce an overall guide to dissemination for EC-funded projects, based on the experience gained and lessons learnt during both phases of the project.</p>
<p>...support actions for the dissemination of information on the e-Infrastructure programme and project results as well as for project concertation.</p>	<p>The principle aim of e-ScienceTalk’s work packages will be to disseminate the success stories and impact of grid computing and e-Infrastructures. These stories will come from the e-Infrastructure’s flagship pan-European projects but also from a whole host of smaller and emerging projects, who have limited effort available for dissemination and limited networks of contacts and collaborating partners. By giving these projects access to e-ScienceTalk’s wide variety of dissemination channels, including websites,</p>

	<p>blogs, social media sites, weekly publications, events, conference booths and printed materials, their results can be disseminated far more widely and to a greater range of audiences than would otherwise be possible. This audience reaches beyond Europe to the US through the US editor for iSGTW and the collaboration with OSG, to Asia through partnership with ASGC and EUAsiaGrid and to Latin America through REUNA. Collaborating with projects with an international scope such as SIENA and others opens up an even wider global audience for the European e-Infrastructure programme project results.</p>
<p>...international cooperation including promotion of the interoperation between similar infrastructures on the global scale with the aim of reinforcing global relevance and impact of European e-Infrastructures.</p>	<p>E-ScienceTalk will work with the other projects such as GÉANT, DANTE and DEISA/PRACE to disseminate the interdependencies of Europe’s e-Infrastructures through the GridBriefings, articles in iSGTW and by expanding the content of the GridCafé. Through the policy impact work package, e-ScienceTalk will also work closely with e-IRG and the European Strategy Forum on Research Infrastructures (ESFRI) projects who are currently involved in building a united roadmap for the development of e-Infrastructures in Europe that are user relevant and appeal to a wide variety of disciplines including social science and the humanities. E-ScienceTalk will aim to bring the progress of this roadmap to all its audiences in Europe and beyond. For example, the GridBriefings produced by WP1 will be circulated to a wider audience beyond Europe, including the US, Asia and Latin America. The GridCafé will feature success stories from beyond Europe contributed by collaborating projects such as ASGC, REUNA and EUAsiaGrid. The GridGuide will also feature an increasing number of sites outside Europe, and GridCast will blog from at least one non-European event. ISGTW is by nature an international publication as it is a joint EU-US initiative, covering projects from Europe and the US, as well as increasingly from Asia, Latin America and Africa.</p>

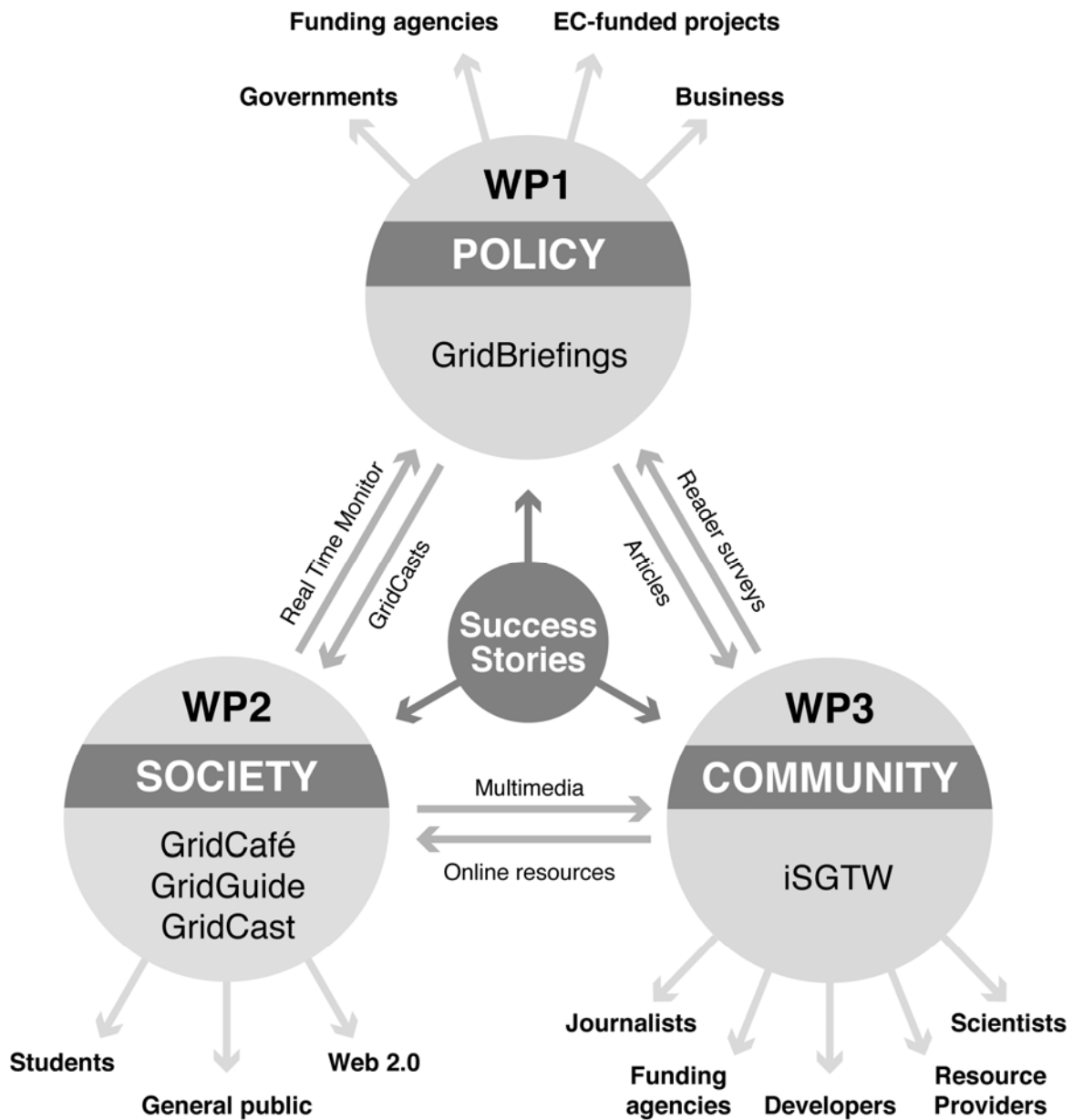
***B 1.2 Quality and effectiveness of the support mechanisms and associated work plan***

***B 1.2.1 Overall strategy and general description***

The e-ScienceTalk proposal is distributed in four work packages. The first three of these, WP1 (Policy, Impact and Sustainability), WP2 (GridCafé, GridCast and GridGuide) and WP3 (International Science Grid This Week) target the main audiences of the proposal: policy makers, scientists, students and the public. The final work package, WP4, deals with project management. Schematic information on each work package is given below in the form of a diagram of components and interdependencies, risk assessment, timing of work packages and components, a work package list, a deliverables list, a milestones list, work package descriptions and a summary of effort.



*B1.2.1.1 Diagram of components and interdependencies*



*B1.2.1.2 Risk assessment*

The risks identified for the e-ScienceTalk project tie in with the current top level risks for GridTalk, which are currently being monitored via the GridTalk risk register. These include risks arising from dependency on a limited number of individuals, such as recruitment, retention and staff stress levels. Failure to reach and maintain the audience is monitored as a current risk for GridTalk, by addressing media coverage of GridCasts for example. The challenge for e-ScienceTalk will be to maintain these audiences. Technology failures are also addressed as risks in both GridTalk and e-ScienceTalk. Similarly, effective coordination between the partners is essential, for example between the European and US editors of iSGTW, and this risk will be closely monitored during e-ScienceTalk.

## **1. Dependency on a limited number of individuals**

E-ScienceTalk is a small project with limited manpower in each work package. The challenges of finding appropriate people to carry out the work, and the risk of hiring people that are not a good fit for the project represent significant risks when key deliverables depend on single persons in most cases. This risk is minimised by noting the track record of each partner in delivering high-quality communication results, and especially the existing collaboration experience established during GridTalk. In all work packages, candidates to carry out the work have been identified in most cases, and all have experience in this area either through GridTalk or roles in other related projects. However, staff turnover remains a risk with the potential for delay to deliverables while replacement staff members are recruited. However, changes to staff were dealt with effectively in the first phase of the project, so the probability of a manpower problem is low (<10%), although its impact would be potentially high, affecting the deliverables of an entire work package both qualitatively and quantitatively.

## **2. Failing to maintain the audience**

A key risk is that one of the work packages fails to maintain its established target audience. Stringent metrics will be put in place to monitor this, including the number of subscribers to iSGTW, hits on the GridCafé, GridCast and GridGuide websites and the distribution lists of the GridBriefing reports. E-ScienceTalk will also conduct regular user surveys once a year to assess the impact that the various products are having and to ensure that materials are reaching their predicted audience. The probability of this risk is low (<10%), given the impressive track record of GridTalk. However, individual targets for growth in audience numbers may not be met. The impact of not reaching audiences is high, since this is the key underlying objective of all the e-ScienceTalk work packages.

## **3. Technology failures**

The success of e-ScienceTalk will depend in part on the new technologies used to deliver the online content, both the existing elements and the planned new features, such as increased user generated content and interactive online environments. If the wrong technologies are chosen, or advances in web use make these obsolete, there is a risk that the expected growth of the media outputs and the launch of the new products will not be achieved. This risk will be mitigated by using the partners' expertise in new media and regularly reviewing the channels used. The probability of such failure is low (about 10%), given the expertise and experience available to the project. The impact of such technological failure should also be minimal, since the core communication efforts rely on more established technologies.

## **4. Ineffective coordination**

As in all European-wide projects there is the risk of insufficient coordination between the partners. A particular risk for e-ScienceTalk is associated with coordinating the information flow from and to all the projects on which e-ScienceTalk will depend for content. To minimise this risk, all the work packages will have a plan for communicating with other projects. In addition, a range of projects have provided e-ScienceTalk with Letters of Support, expressing their intent to contribute dissemination material and use e-ScienceTalk's dissemination channels. The probability of a coordination problem is low (<10%) and its impact would also be low as the project has support from a wide variety of projects should a partnership with a particular project prove to be unproductive.

**B 1.2.2 Timing of the work packages and components****PM 1-12**

Months	1	2	3	4	5	6	7	8	9	10	11	12
<b>WP1 Policy</b>												
T1.1 Policy		D1.2.1	D1.1		D1.2.2			D1.2.3			D1.2.4	
T1.2 Impact											D1.3	
T1.3 Events			MS1									
<b>WP2 GridCafé</b>												
T2.1 GridCafé												
T2.2 GridGuide												D2.1
T2.3 GridCast		MS4				MS4				MS4		
<b>WP3 iSGTW</b>												
T3.1 Weekly	D3.1 cont.		D3.2									D3.4.
T3.2 New media					MS7				D3.3		MS7	
<b>WP4 Mgmt</b>												
T4.1	MS10	D4.1	D4.2	MS10		MS11	MS10			MS10		D4.3 MS12

**PM 13-24**

Months	13	14	15	16	17	18	19	20	21	22	23	24
<b>WP1 Policy</b>												
T1.1 Policy		D1.2.5			D1.2.6			D1.2.7			D1.2.8	
T1.2 Impact											D1.4	
T1.3 Events		MS2										
<b>WP2 GridCafé</b>												
T2.1 GridCafé	D2.2											
T2.2 GridGuide						MS5					D2.3	
T2.3 GridCast		MS4				MS4			MS4			
<b>WP3 iSGTW</b>												
T3.1 Weekly					MS8							D3.5
T3.2 New media					MS7						MS7	
<b>WP4 Mgmt</b>												
T4.1	MS10			MS10		MS13	MS10			MS10		D4.4 MS14

**PM 25-33**

Months	25	26	27	28	29	30	31	32	33
<b>WP1 Policy</b>									
T1.1 Policy	D1.2.9			D1.2.10		D1.2.11		D1.2.12	D1.6
T1.2 Impact							D1.5		
T1.3 Events		MS3							
<b>WP2 GridCafé</b>									
T2.1 GridCafé									D2.5
T2.2 GridGuide								D2.4	MS6
T2.3 GridCast		MS4			MS4			MS4	
<b>WP3 iSGTW</b>									
T3.1 Weekly								D3.6	MS9
T3.2 New media			MS7				MS7		D3.7
<b>WP4 Mgmnt</b>									
T4.1	MS10			MS10		MS15	MS10	D4.5	D4.6 MS10

***B1.2.3 Work package list*****Work package list**

<b>Work package No</b>	<b>Work package title</b>	<b>Type of activity</b>	<b>Lead partic no.</b>	<b>Lead partic. short name</b>	<b>Person-months</b>	<b>Start month</b>	<b>End month</b>
1	Policy, impact and sustainability	SUPP	2	QMUL	46	1	33
2	GridCafé, GridCast and GridGuide	SUPP	3	APO	72	1	33
3	International Science Grid This Week	SUPP	5	CERN	52	1	33
4	Management	MGT	1	EGI.eu	22	1	33
	<b>TOTAL</b>				192		

**B1.2.4 Deliverables list****List of Deliverables**

<b>Del. no.</b>	<b>Deliverable name</b>	<b>WP no.</b>	<b>Nature</b>	<b>Dissemination level</b>	<b>Delivery date (proj. month)</b>
D3.1	Weekly issues of iSGTW	3	R	PU	1-33
D1.2.1-12	GridBriefings	1, 2	R	PU	2-33
D4.1	Dissemination plan	4	R	PU	2
D1.1	Policy engagement strategy	1	R	RE	3
D3.2	Relaunch of iSGTW with a new name and new underlying content management system	3, 2	O	PU	3
D4.2	Quality assurance guide	4	R	CO	3
D3.3	Strategic report on iSGTW marketing, social networking and plans for commercial exploitation	3	R	PU	9
D1.3	Annual impact and sustainability report on e-ScienceTalk products	1	R	PU	11
D2.1	GridGuide upgraded integration with the RTM	2	O	PU	12
D3.4	Report on survey of iSGTW readers and annual metrics	3	R	PU	12
D4.3	Annual report on feedback and metrics	4	R	PU	12
D2.2	Updated version of the GridCafé website	2, 1, 3	O	PU	13
D1.4	Annual impact and sustainability report on e-ScienceTalk products	1	R	PU	23
D2.3	Annual upgraded version of the RTM	2	O	PU	23
D3.5	Report on survey of iSGTW readers and annual metrics	3	R	PU	24
D4.4	Annual report on feedback and metrics	4	R	PU	24
D1.5	Final report on impact and sustainability of e-ScienceTalk products	1	R	PU	31
D2.4	Annual upgraded version of the RTM	2	O	PU	32
D3.6	Report on survey of iSGTW readers and annual metrics	3	R	PU	32
D4.5	Final report on feedback and metrics	4	R	PU	32
D1.6	GridBriefing final summary	1, 2	R	PU	33
D2.5	Final dissemination report on GridCafé,	2	R	PU	33

	GridGuide and GridCast				
D3.7	Final report on iSGTW marketing, commercial exploitation and social networking	3	R	PU	33
D4.6	Guide to dissemination for EU projects	4	R	PU	33

***B1.2.5 Milestones list*****Milestones**

<b>Milestone number</b>	<b>Milestone name</b>	<b>Work package(s) involved</b>	<b>Expected date</b>	<b>Means of verification</b>
MS10.1-12	PMB meetings	4	1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 33	Meetings held and minuted
MS4	GridCasts	2	2-33 (dates to be confirmed)	GridCasts from three events per year, including at least one non-European
MS1	E-concertation event	1, 2, 3	3	E-concertation event involving policy makers, e-Infrastructure projects and the media takes place.
MS7	Posters and marketing materials	3, 2	5-33 (every 6 months, dates to be confirmed)	Materials printed and distributed at events (exact timings will depend on the events)
MS11	Dissemination materials	4	6	Electronic and/or paper versions made available to the Project Officer
MS12	Dissemination materials	4	12	Electronic and/or paper versions made available to the Project Officer
MS2	E-concertation event	1, 2, 3	14	E-concertation event involving policy makers, e-Infrastructure projects and the media takes place.
MS8	Increase iSGTW readership by 15%	3	17	Increased the readership figures for iSGTW by half of the target total of 30%
MS5	GridGuide expanded to 25 new sites	2	18	An additional 25 active sites available on the website
MS13	Dissemination materials	4	18	Electronic and/or paper versions made available to the Project Officer
MS14	Dissemination materials	4	24	Electronic and/or paper versions made available to the Project Officer
MS3	E-concertation event	1, 2, 3	26	E-concertation event involving policy makers, e-



				Infrastructure projects and the media takes place.
MS15	Dissemination materials	4	30	Electronic and/or paper versions made available to the Project Officer
MS6	GridGuide expanded to a total of 100 sites	2	33	A total of 100 active sites available from the GridGuide
MS9	Increase iSGTW readership by a further 15%	3	33	Increased the readership figures for iSGTW a further 15% to the target total of 30%

## ***B1.2.6 Description of work packages***

### **Work package 1 – Policy, impact and sustainability**

Although scientific results produced using grid computing, supercomputing networks and volunteer computing grids are reported in the press and elsewhere, information about the e-Infrastructures that are used to produce these results is less widely disseminated. As grid and high performance computing have become more ubiquitous, the infrastructure itself becomes increasingly secondary to the science that is enabled. While this is desirable in many ways, it leaves a potential gap in the understanding of policy makers and funders as to the role that e-Infrastructures are playing. By pulling together high profile examples, and making their use of e-Infrastructures explicit, e-ScienceTalk will fill this gap. Such reporting will complement existing channels of communication to the scientific community and the public, covered in work packages 2 and 3.

WP1 will produce a regular series of publications aimed at policy makers, setting out the achievements and challenges of grid computing and e-Infrastructures, following on from the successful series produced during GridTalk. These GridBriefings will be written in accessible language that is appropriate to the audience, drawing together information from case studies, analyses, reports, policy statements, concertation meeting outcomes and articles and will consist of:

- Short, full colour GridBriefings (four per year), to be produced approximately every three months and linked to key events, policy document releases, policy announcements or other triggers. These will be aimed at policy makers of all types in parliament, government and industry. In addition to providing an overview of the impacts of grid and e-Infrastructure on society, each GridBriefing will also have a theme – for example, a geographical region, or a topic such as ‘future Internet’– to be approved by the Project Management Board.
- Final report, produced at the end of the project. This will consolidate together the short briefings and include a foreword by a key policy figure to put the work into the context of EC policy.

Content for these grid impact publications will be produced in collaboration with European and, in some cases, worldwide e-Infrastructure projects, as for GridTalk. WP1 will also work closely with policy-oriented e-Infrastructure groups such as e-IRG, EGI, SIENA and ESFRI, setting up a policy response panel to ensure its publications meet the needs of these groups and report their activities successfully.

As well as the publications above, WP1 will examine alternative means for engaging policy makers in all layers of government (European, national and regional) and in business. One of the early deliverables in this work package will be an analysis of possible routes, building on the work of GridTalk, including:

- Attending two to three policy-related conferences and events per year, to give talks and host stands at exhibitions, such as future EC presidency events which will be attended in collaboration with other projects where possible.
- Holding in-person briefings or discussion sessions for policy makers, potentially in collaboration with bodies such as parliamentary committees, government bodies or learned societies.
- Working with business groups and trade organisations to hold events or publish briefings.
- Arranging tours for policy makers to sites in their region, or to major European laboratories, such as CERN.

In addition to producing the GridBriefings, this work package will also assess the impact of longer running products such as iSGTW and GridCafé, and explore possibilities for the sustainability of all e-ScienceTalk’s products beyond the close of the project. The work package will analyse the metrics and feedback gathered during both phases of the project in order to formulate a series of annual reports that will make recommendations on future directions for each work package and highlight the lessons learnt that can benefit other EC-funded projects. These reports will help to form the basis for the year-on-year strategy for each

work package, moving towards sustainability and outlining concrete proposals on how to share best practices and ensure that all e-ScienceTalk's products continue to act as a resource in the long term.

This work package will assume a key leading and coordinating role in the concertation activities and meetings related to the e-Infrastructures area. WP1 will coordinate one annual e-concertation meeting per year, commencing with an event at CERN in October or November 2010. WP1 will coordinate reporting of the event, working with other projects where possible, producing a GridBriefing based on the event and leading the use of a discussion and comment facility provided by WP2.

Metrics used to track these impacts will include:

- number of projects covered (target: 20 per year)
- number of reports and briefings circulated (target: 1000 per year)
- number of countries where reports and/or briefings are distributed (target: 30)

In addition, WP1 will integrate closely with WP2 and WP3. Case studies developed for GridBriefings will be used in iSGTW and vice versa, short discussions of the GridBriefing topics will be included in the 'In Debate' section of the GridCafé website and in the Nature Networks forum.

As during GridTalk, this work package will fund a full-time Grid Impact Reporter, based at QMUL, who will lead the production of the policy engagement strategy, and then research, write and produce the GridBriefings and the final GridBriefing summary. As set out in the initial engagement strategy, the Grid Impact Reporter will also plan associated dissemination at policy events, similar to the eChallenges event in Istanbul in October 2009, organising and hosting e-ScienceTalk booths and writing and filming blogs from the events. They will also contribute content on achievements using grids and e-Infrastructures to WP2 and WP3.

As two significant extra tasks have been added to the GridBriefing work package in comparison to GridTalk – the sustainability and impact reporting and the e-concertation events – an additional part-time member of staff at QMUL, a Dissemination Officer at 0.5 FTE, will be an essential addition to the work package. These two additional tasks can only be delivered by the work package by making additional funded effort available. This additional staff member will also contribute to policy-related content for iSGTW, GridCast blogs and GridCafé. Effort will be provided by the designer APO to produce the full-colour GridBriefings and the annual summaries to make sure that they are engaging, eye-catching and consistent with the e-ScienceTalk branding. APO will also provide technical support for the e-concertation online discussion and comment facility, create and maintain the event website and run the GridCasts. The event will also require additional effort at CERN for organisation, liaison with media contacts, logistics and production of materials, which will be provided by a Science Writer and Dissemination Officer based at CERN.

<b>Work package number</b>	1	<b>Start date or starting event:</b>		M01			
<b>Work package title</b>	Policy, impact and sustainability						
<b>Activity type</b>	SUPP						
<b>Participant number</b>	2	3	5				
<b>Participant short name</b>	QMUL	APO	CERN				
<b>Person-months per participant</b>	28	5	13				

### Objectives

- Provide reporting targeted at policy makers in government and businesses to illustrate the scientific results and impacts from grid computing, e-Infrastructures and other forms of distributed computing.
- Expand the audience and distribution lists for these targeted reports to regions outside Europe eg the US, Asia, South America, Africa.
- Assess the impact of long running products such as iSGTW and the GridCafé and explore options for the sustainability of all e-ScienceTalk's products beyond the end of the project.
- Identify and attend a series of events in order to influence policy makers and journalists and to distribute the GridBriefings.
- Assume a key leading and coordinating role in the concertation activities and meetings related to the e-Infrastructure area, maximising media impact.

### Description of work

The work package will be led by QMUL.

#### Task 1.1 Production and distribution of grid policy articles and reports (QMUL and APO)

- GridBriefings will be expanded to cover more topics than grid computing, including e-Infrastructures, supercomputing, networks, cloud computing and more.
- At least one briefing will be on the topic of networks, one on supercomputing and one on clouds.
- Work with OSG to increase the circulation of the GridBriefings to OSG contacts.
- Collaborate with projects such as REUNA to translate GridBriefings into other languages, such as French and Spanish.
- Expand into new geographical areas eg US, Asia, South America and Africa both through expanded content covering projects in these areas and wider distribution through collaborations with projects such as EUAsiaGrid and ALICE2.
- Synergise with other policy oriented e-Infrastructure projects and bodies, such as e-IRG, EGI.eu, and SIENA through a policy panel.
- Cooperate with networking projects to distribute the GridBriefings to regions outside Europe.
- Work closely with GridCafé and iSGTW to produce policy related articles, podcasts and interviews.

#### Task 1.2 Impact and sustainability of iSGTW and GridCafé (QMUL with CERN and APO)

- Establish and gather a set of metrics that reflect the quality of e-ScienceTalk's products eg quotes, distribution numbers, web statistics.

- Produce reports summarising these metrics and the lessons learnt, and explore mechanisms to make these available to other European projects, including through the BELIEF Digital Library.
- Explore the possibilities for funding iSGTW, GridCafé and other products sustainably beyond e-ScienceTalk and make recommendations regarding the available options.

### Task 1.3 Events attendance and media impact event organisation (QMUL with CERN and APO)

- Identify and attend events aimed at policy makers similar to eChallenges in Istanbul, October 2009 in order to distribute the GridBriefings and communicate the issues, collaborating with projects such as EGI.eu and DANTE to host joint booths, liaising with WP2 to produce branded giveaway items such as caps and mugs.
- Target media meetings such as the International Science Journalism conference to build a network of media contacts, as reaching out through the media is an effective way to communicate with policy makers, as well as the general public.
- Coordinate annual e-concertation meetings and activities in e-Infrastructure areas, including reporting on the event, coordinating discussion on the online forum and producing a GridBriefing based on the outcomes from the event.

### Deliverables

Del. no.	Deliverable name	WP no.	Nature	Dissemination level	Delivery date (proj. month)	Description
D1.1	Policy engagement strategy	1	R	RE	3	This report will build on the strategy produced in GridTalk to revise the means of engaging with policy makers
D1.2.1-12	GridBriefings	1, 2	R	PU	2-33	Short grid policy briefings published roughly every three months depending on the timing of events and policy statements
D1.3	Annual impact and sustainability report on e-ScienceTalk products	1	R	PU	11	Report outlining the impact of the e-ScienceTalk products and initial plans for their long term sustainability
D1.4	Annual impact and sustainability reports on e-ScienceTalk products	1	R	PU	23	Report outlining the impact of the e-ScienceTalk products and initial plans for their long term sustainability

D1.5	Final report on impact and sustainability of e-ScienceTalk products	1	R	PU	31	Final report outlining the impact of e-ScienceTalk products and concrete plans for their long term sustainability
D1.6	GridBriefing final summary	1, 2	R	PU	33	Final report pulling together the GridBriefings published, with a foreword by a key official

### Milestones

Milestone number	Milestone name	Work package(s) involved	Expected date	Means of verification
MS1	E-concertation event	1, 2, 3	3 (timing to be agreed)	E-concertation event involving policy makers, e-Infrastructure projects and the media takes place.
MS2	E-concertation event	1, 2, 3	14 (timing to be agreed)	E-concertation event involving policy makers, e-Infrastructure projects and the media takes place.
MS3	E-concertation event	1, 2, 3	26 (timing to be agreed)	E-concertation event involving policy makers, e-Infrastructure projects and the media takes place.

## Work package 2 – GridCafé, GridCast and GridGuide

Since its launch by CERN in 2003, the GridCafé website has become an authoritative source of accessible, engaging information about grid computing across Europe and beyond. With the advent of the European Grid Infrastructure and the associated fundamental changes to the way that grid computing will evolve in the future, combined with the blurring of boundaries between grid computing, clouds, supercomputing networks and volunteer grids, a clear consistent source of information aimed at non-experts is now more important than ever.

WP2 will manage both the upkeep and regular refreshment of the GridCafé web interface as well as updating its content to continue to reflect the massive advances in grid computing since the site's launch. Content will be expanded not only to cover the new EGI and European Middleware Initiative ecosystems, but will also extend to other forms of e-Infrastructure, networking and distributed computing. Grid developments outside Europe will also be covered. Semantic search tools will be explored, as well as adding links to interactive content such as demos, videos and online interactive tools. This significant expansion in content will only be possible with additional effort from a Science Writer and Dissemination Officer, based at CERN who will lead the programme for updating GridCafé and will liaise with the Dissemination Officer at QMUL.

In the era of Web 2.0, with Web 3.0 on the horizon, modern web technologies are essential to keep a website alive and interesting. WP2 will develop the websites to ensure that they are easy to use and navigate and have maximum impact, using new web tools where they facilitate this aim. WP2 will research expanding the GridCafé brand into other interactive environments, such as Second Life, depending on the outcomes from pilot work in this area during GridTalk. With a new standard 3-D web language, X3D, now available to developers, the new functionality offered by 3-D environments could help to communicate the concepts of grid computing and its results in a highly intuitive way, that is likely to be appealing to a younger audience. Visitors to a 3-D online space could, for example, spend time watching GridCast videos, chat with experts and try out interactive demos, such as the Globe 3D Protein Viewer, which is already available in Second Life.

The GridCast activity is a further facet of this more personal, interactive type of website. GridCasts combine blogs, videos and interviews from major grid computing and e-Infrastructure conferences, including policy related events. WP2 will produce at least three GridCasts each year, publicised and distributed through GridCafé and iSGTW. They will also work with DEISA, GÉANT, EGI.eu, PRACE and DANTE to create a high profile for the GridCasts, advertising widely and enhancing the news content, including breaking more live news. GridCast will also seek to invite celebrity bloggers to either blog for the site, or to link to the blog. The work package will also investigate combining GridCast with the micro-blogging site, Twitter and live coverage tools, such as CoverItLive, which help to coordinate all the various social media channels available during an event from one interface.

The GridGuide interface allows users to click on grid sites worldwide, see images from the site, find out about the work in progress and read interviews with researchers. As well as giving a visual overview of current grid work, GridGuide enables users to drill down to more detail about an individual scientist's work and how the grid has produced results. For these reasons, the GridGuide is useful for engaging with policy makers who are able to find out more detail about work going in their local regions or areas of responsibility, as well as the general public and other scientists. This work package will expand the number of sites included in GridGuide, including a higher proportion of sites outside Europe, but without increasing the maintenance or administrative burden on the GridTalk team. GridGuide will work with EGI in order to include the NGI sites.

For e-ScienceTalk, the work package will also directly fund effort for the Real Time Monitor in order to build more strongly on the co-development that is already in progress during GridTalk. The Real Time Monitor shows a live version of the job traffic on the grid, and the current integration with GridGuide allows a visitor to click on a site and view both the technical statistics as well as the human face of the grid. By developing the two products in tandem, they will have greater compatibility on a wider range of platforms, combining to create a very powerful and popular tool for demonstrating the capabilities and scope of the grid. Bringing Imperial College onboard as a partner for e-ScienceTalk will not only bring their expertise in

the RTM within the project, enabling closer integration with GridGuide, but will also foster close links with GridPP, using their dissemination networks to promote the GridGuide itself.

WP2 will work with WP1 to support the annual e-concertation meetings, providing an online blog with a facility for feedback, discussion and comments and event websites. WP2 will also investigate ensuring continued access to the existing contents of the BELIEF Digital Library.

This work package will also refresh and update the overall e-ScienceTalk project website, which will include information about the project and the project team, links to the e-ScienceTalk websites, downloads and press materials, as well as news feeds from the other e-ScienceTalk websites such as iSGTW. New logos and document templates may also be created for the new project, evolving the original GridTalk branding to reflect the expanded scope.

Metrics used to track the progress of this work package will include:

- number of sites on the GridGuide (target: 100 in total)
- number of grid and e-Infrastructure projects linking to the GridCafé website (target: 40)
- number of bloggers contributing to GridCasts (target: 5 for each GridCast)
- number of GridCasts each year (target: 2 in Europe per year and 1 outside Europe)

In the first phase of GridTalk, a full-time Web Developer was required to set up the new sites. For e-ScienceTalk, as the sites are already established, the Web Developer role can be reduced to 0.5FTE (17 PM). This effort will be mainly used to support WP2, but will also provide some technical support to WP1 and WP3 on web-related issues. This reduction will allow for funded effort for essential design support from APO at the level of 0.25 FTE (8 PM), supporting WP2 and the other work packages, as well as 0.25 FTE (8 PM) to increase the interactive content across all the websites, such as videocasts and discussion areas. Additional effort for the Real Time Monitor 18PM will be provided by a Technical Developer at Imperial College for the co-development with GridGuide, together with 8PM unfunded effort for dissemination, outreach and admin. Support with running GridCasts at events, coordinating blogging teams and contributing to the social media channels will be supplied by QMUL by the Grid Impact Reporter and the part-time Dissemination Officer, who will also help to source new sites for GridGuide. Essential additional writing resource for the expanded GridCafé and GridCasts will be supplied by the Science Writer and Dissemination Officer at CERN.



<b>Work package number</b>	2	<b>Start date or starting event:</b>		M01			
<b>Work package title</b>	GridCafé, GridCast and GridGuide						
<b>Activity type</b>	SUPP						
<b>Participant number</b>	3	2	4	5			
<b>Participant short name</b>	APO	QMUL	Imperial	CERN			
<b>Person-months per participant</b>	23	10	25	14			

### Objectives

- Keep the GridCafé at the cutting edge of grid and e-Science dissemination by refreshing the look and feel and keeping it constantly updated with new material, expanding the content to cover other forms of distributed and high performance computing.
- Explore interactive environments and new web tools to ensure that GridCafé and GridCast have impact on their audiences and are easy to use.
- Update the GridCast website and expand the marketing of the GridCast site to the grid and e-Infrastructure community and beyond.
- Expand the GridGuide to cover more sites, improve its impact and develop further interactive functionality between the GridGuide and the Real Time Monitor.
- Explore the continuation of the BELIEF Digital Library and support the e-concertation meetings.

### Description of work

This work package is led by APO.

#### Task 2.1 GridCafé (APO and CERN)

- Explore adding a semantic search engine to the websites.
- Add more links to demos, videos and online interactive tools such as the ASTRA project's (Ancient Instrument Sounds/Timbre Reconstruction Application) online application to play ancient Greek instruments resurrected by the grid.
- Evaluate the 3-D technical solutions available, based on pilot work carried out during GridTalk.
- Add content covering the areas of supercomputing, cloud, networks and data and review the content of the whole site.
- Develop more translations in addition to the Spanish and French sites, including Chinese.

#### Task 2.2 Real Time Monitor and GridGuide (Imperial with APO, CERN and QMUL)

- Add more sites to the GridGuide, covering a wider geographical area, including outside Europe.
- Add sites to the GridGuide that are involved in supercomputing, cloud and networking research projects.
- Develop further interactive functionality with the Real Time Monitor to make navigating the site more intuitive.
- Issue annual releases of the RTM with updated release notes and a two month new version support period. These releases will enhance integration with the GridGuide, to allow the new information added to the GridGuide to be easily accessible from the RTM and vice versa.

- Add further sources of information into the RTM, such as file movement around the grid, which would also then be available from within the GridGuide. This would show a real time picture of the load placed on the grid from within both the Real Time Monitor and the GridGuide.
- Explore the possibility of launching the RTM from a site included within the GridGuide as an application, such as an applet, that would run on a wide range of platforms, including handheld computers and smart phones.
- Add news elements to the home page of the GridGuide.
- Aim to make GridGuide the definitive source to find out what sites are working on within the EGI infrastructure, such as the NGIs.
- Explore continuity of access to the contents of the BELIEF Digital Library.

### Task 2.3 GridCast (QMUL with APO and CERN)

- Aim to run three GridCasts per year, including at least one non-European event, covering major EGI and e-Infrastructure events.
- Focus the management of the blogging team, including providing guides for bloggers.
- Work with DEISA, GÉANT and EGI to publicise GridCasts. Market the upcoming GridCasts in advance via the EGI.eu and NGI dissemination channels, working closely with the dissemination teams to recruit bloggers and advertise the GridCasts.
- Host and create video content and a discussion and comment facility for the e-concertation events as well as the event websites.
- GridCast is important for community building within the grid and e-Science community, but it could also have a wider reach. Build up the brand by inviting high profile guest bloggers to contribute.
- Enhance the news content of the GridCast site by breaking more live news.
- Investigate combining GridCast with Twitter and live coverage tools such as CoverItLive.
- Refresh and update the e-ScienceTalk website for the start of the new project, including updating logos and document templates.

### Deliverables

Del. no.	Deliverable name	WP no.	Nature	Dissemination level	Delivery date (proj. month)	Description
D2.1	GridGuide upgraded integration with the RTM	2	O	PU	12	New upgraded integrated version of the GridGuide and RTM released with release notes
D2.2	Updated version of the GridCafé website	2, 1, 3	O	PU	13	Produce an updated version of the website with significantly increased content
D2.3	Annual upgraded version of the RTM	2	O	PU	23	New version of the RTM compatible with a wider range

						of platforms, with release notes
D2.4	Annual upgraded version of the RTM	2	O	PU	32	New version of the RTM compatible with a wider range of platforms, with release notes
D2.5	Final dissemination report on GridCafé, GridGuide and GridCast	2	R	PU	33	Final report covering the achievements and lessons learnt from the GridCafé, GridGuide and GridCast

### Milestones

Milestone number	Milestone name	Work package(s) involved	Expected date	Means of verification
MS4	GridCasts	2	2-33 (dates to be confirmed)	GridCasts from three events per year, including at least one non-European
MS5	GridGuide expanded to 25 new sites	2	18	An additional 25 active sites available on the website
MS6	GridGuide expanded to a total of 100 sites	2	33	A total of 100 active sites available from the GridGuide

## **Work package 3 – International Science Grid This Week**

The contribution that iSGTW is making to the international grid community is apparent in its growing popularity and increased appeal, as shown by a readership that has grown 65% in under two years, drawing its readers from nearly 200 countries. ISGTW is ranked 8 out of 10 on Google's Page Ranking system and in GridTalk's first year the website saw 235,000 page views and over 9,900,000 file downloads.

The European editor based at CERN and the US based editor alternate the task of publishing iSGTW each week, both contributing content to every issue. The editors will continue to be responsible for locating stories, researching, interviewing, writing, fact-checking, locating illustrations, editing and proofreading the original content for each issue of iSGTW, as well as acting as day-to-day webmasters. The European editor will draw up a marketing strategy and oversee its implementation, using channels such as social networking sites, for example, Nature Networks, specialist sites such as Slashdot and BoingBoing, and blogs to promote iSGTW stories and raise the profile of the publication. The European editor will seek to leverage the mailing lists of other e-Infrastructure projects where possible. The European editor will also be responsible – with the help of APO – for the production of small quantities of printed promotional matter for distribution at conferences, such as posters, postcards and similar items, which proved extremely effective during GridTalk at growing the readership. During GridTalk, iSGTW acted as media sponsor for key conferences such as the EGEE events EGEE'08, EGEE'09, and the 4<sup>th</sup> and 5<sup>th</sup> User Forums. This enabled iSGTW to report direct from the event, but also to offer free subscription to all registered delegates. ISGTW will seek similar partnership deals during e-ScienceTalk, particularly with EGI.eu, TERENA and PRACE.

The editor will also gather statistics on how the publication is being read, including the number of visitors to the site, time spent on the site and on individual articles and take a snapshot of reader comments. The editor will coordinate an annual readership survey to be sent out to all readers in order to gather feedback on the types and breadth of stories being covered, the quality of the publication and to understand the profile of the readership.

The goal will be to expand the coverage of the publication beyond grid computing alone, to include technologies such as supercomputing, distributed computing, networks, data and cloud computing and their impact on grid development. The publication will continue to strive to show that these computing resources go beyond the world of physical sciences to encompass much of modern science and research. To do so, longer, more in-depth, more multi-source stories will be produced. To reflect iSGTW's increased scope, a new title for the publication will be created, to accompany a major redesign and relaunch early in e-ScienceTalk. The relaunch will introduce new interactive features, such as the facility for readers to comment on and rate stories, to share them with other websites and social media sites, and to take part in polls and surveys. The one-off cost of the relaunch and upgrade to the content management system will be born equally by OSG and e-ScienceTalk and the work will be carried out by Fermilab's web support team, Xenomedia.

To maximise the impact of the high quality professional writing skills available to iSGTW, opportunities will be actively sought to publicise features and articles more widely, with the aim of having these 'picked up' by the general media and rebroadcast to their own readers. During GridTalk, this was successfully achieved by a number of stories written by iSGTW's professional writers, such as a feature about the resurrection of an ancient Greek instrument, the epigonion and another that covered tracking down modern day pirates using the grid. In e-ScienceTalk, individual stories will be promoted using press releases posted on AlphaGalileo, the European science news service which is used by thousands of journalists and the publication itself will be promoted by the editor's attendance at meetings such as the International Science Journalism conference. By pursuing these promotional activities, iSGTW will potentially reach well beyond its current readership. However, producing stories of consistently high quality, covering a wider geographical area as well as a greater spread of topics on a weekly basis will only be achievable with additional writing resource, which will be provided by the Science Writer and Dissemination Office based at CERN.

The iSGTW calendar will feature events from across the grid and e-Infrastructure spectrum, including a wider range of EC events such as information days, workshops and concertation meetings. The calendar will be particularly useful for the EGI projects and NGIs, helping them to coordinate their events programme and

avoid clashes with other major events. Using the tagging system for articles, other projects such as GÉANT and PRACE will also be able to pull out stories relating to their work for reprint in brochures and booklets.

Metrics used to track the iSGTW work package will include:

- number of iSGTW subscribers (target: increase by 30% by close of project)
- number of articles in iSGTW on European projects (target: 50 per year)
- number of projects in the iSGTW/GridCafé resources section (target: 100 by close of project)
- number of iSGTW printed materials distributed to European projects (target: 1000 by close of project)

As well as editing iSGTW, the European editor will manage the human aspects of iSGTW by maintaining contact with projects and content providers, drawing stories from a wider geographic area than in GridTalk. In particular, the European editor will act as the main point of contact between the European and US teams, liaising with the US editor to ensure a smooth and timely publication process each week. The European editor will also work with the US editor to coordinate communications with the iSGTW Advisory Board, which consists of members based at CERN and Fermilab, including convening the quarterly meetings of the Advisory Board.

The iSGTW work package will work closely with WP2 and WP1, providing content, and creating publicity for the policy reports of WP1 through the publication of articles and announcements. The editor will also travel to major grid-related and e-Infrastructure events, such as EGI conferences and User Forums and e-concertation events, in order to conduct interviews and generate stories.

The full time European editor will be based at CERN, with the co-editor based at Fermilab in the US and funded by OSG. Additional unfunded resource will be available from a contributor in Asia, who will contribute regular articles from the region. Essential day-to-day technical web support will be contributed by Fermilab's web support and hosting team, Xenomedia. While day-to-day support and hosting costs will not be charged to the e-ScienceTalk project, a sum of €14K is requested to contribute to the replacement of the content management system by Xenomedia, with a sum of a similar size to be contributed towards the costs by Fermilab. Design effort for high quality promotional materials will be provided by APO, with essential additional content writing input from the Science Writer and Dissemination Officer at CERN and the WP1 team at QMUL. One or more student interns will also be sought, to spend up to 3 months writing with iSGTW and advancing the marketing and new media plan, based at CERN, Imperial or QMUL.

<b>Work package number</b>	3	<b>Start date or starting event:</b>		M01			
<b>Work package title</b>	International Science Grid This Week						
<b>Activity type</b>	SUPP						
<b>Participant number</b>	5	2	3				
<b>Participant short name</b>	CERN	QMUL	APO				
<b>Person-months per participant</b>	39	8	5				

### Objectives

- Produce a weekly electronic newsletter in partnership with the US editor to disseminate information about grid-related projects and other e-Infrastructure projects around the world, including EGI and its collaborating projects.
- Expand the coverage of iSGTW to report from geographic regions outside Europe and the US, particularly Asia and Latin America.
- Expand the coverage to other forms of distributed computing, such as clouds, volunteer grids and to supercomputing, networks and data.
- Draw from the other e-ScienceTalk products and events for sources of stories and to maximise the impact of the work.

### Description of work

This work package is led by CERN.

#### Task 3.1 Weekly publication (CERN with QMUL)

- Produce the weekly publication in a timely and efficient manner, liaising with the US editor to ensure the smooth running of the publication and an uninterrupted publishing schedule, outside major holidays.
- Liaise with the US editor and Xenomedia regarding technical issues with the website.
- Work with the US editor to achieve consensus on goals and directions of editorial material, communicate with the Advisory Board and convene the Advisory Board meetings.
- Relaunch the publication with a new name, a new content management system and increased functionality, such as the ability to comment on stories, rate them, and participate in polls of the week, in order to build a community around the publication.
- Expand the iSGTW resources section, including the glossary and the image bank. The image bank will encourage other publications to pick up iSGTW stories and offer a further incentive for contributions from scientists – their images will have a potential circulation beyond iSGTW.
- Contribute to the publications of other e-infrastructure projects as opportunities arise.
- Coordinate the iSGTW calendar, featuring events from across the grid and e-Infrastructure spectrum to aid with the scheduling of events by the projects and include EC events such as workshops and info days.
- Coordinate annual readership surveys to gather feedback on the publication and build up a profile of the readership.
- Seek media partnership deals with projects such as EGI-InSPIRE and other e-Infrastructure projects in order to sponsor key conferences and increase subscription rates to iSGTW from delegates, as

well as leveraging their existing mailing lists.

### Task 3.2 New media outlets eg Twitter, Nature Networks (CERN with APO and QMUL)

- Build on the work already started in marketing iSGTW during GridTalk to expand readership through social networking tools such as Twitter, Nature Networks and Facebook.
- Draw up a marketing plan using these tools and assess the effectiveness of the plans at regular intervals.
- Assess the possibilities for commercial exploitation of the publication, including models for self-funding.
- Seek to recruit one or more student interns to write for iSGTW and to advance the marketing of iSGTW via new media outlets.

### Deliverables

Del. no.	Deliverable name	WP no.	Nature	Dissemination level	Delivery date (proj. month)	Description
D3.1	Weekly issues of iSGTW	3	R	PU	1-33	Produce weekly issues of the iSGTW newsletter by email and online
D3.2	Relaunch of iSGTW with a new name and new underlying content management system	3, 2	O	PU	3	Launch of a new site and name with an associated publicity campaign
D3.3	Strategic report on iSGTW marketing, social networking and plans for commercial exploitation	3	R	PU	9	Marketing plan and assessment of social networking tools
D3.4	Report on survey of iSGTW readers and annual metrics	3	R	PU	12	Annual survey of readers and summary of statistics and metrics
D3.5	Report on survey of iSGTW readers and annual metrics	3	R	PU	24	Annual survey of readers and summary of statistics and metrics
D3.6	Report on survey of iSGTW readers and annual metrics	3	R	PU	32	Annual survey of readers and summary of statistics and metrics
D3.7	Final report on iSGTW marketing, commercial exploitation and social networking	3	R	PU	33	Final report and summary of marketing and social networking activities and conclusions of

						commercial exploitation
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### Milestones

Milestone number	Milestone name	Work package(s) involved	Expected date	Means of verification
MS7	Posters and marketing materials	3, 2	5-33 (every 6 months, dates to be confirmed)	Materials printed and distributed at events (exact timings will depend on the events)
MS8	Increase iSGTW readership by 15%	3	17	Increased the readership figures for iSGTW by half of the target total of 30%
MS9	Increase iSGTW readership by a further 15%	3	33	Increased the readership figures for iSGTW a further 15% to the target total of 30%



## Work package 4 - Management

The project will plan activities adequately resourced devoted to dissemination for specialised constituencies and the general public, in particular for awareness and educational purposes. E-ScienceTalk's management structure will be based on the very successful structure put in place during the first phase of the project. It will be overseen by a Project Management Board, consisting of the Project Manager and representatives from each of the partners. This will meet quarterly, mostly by phone or videoconference. Provision has been made in the budget for an annual face-to-face meeting for the PMB during the course of the project. PMBs will be informed by reports from each of the Work Package Leaders and the Project Manager.

WP4 will produce a dissemination plan deliverable which will consider adequate messages about the objectives of the project and its societal and economic impact. The tools to be used will include web-based communication, press releases, brochures, booklets and multimedia material. The dissemination material will be regularly updated, providing the latest version of the project status and objectives. Electronic and/or paper versions of this dissemination material will be made available to the Project Officer beforehand for consultation and on its final release. This work package will also assist the EC in the organisation of information days, concertation and brainstorming activities with access to videoconferencing facilities.

In addition to recording a range of metrics (see the descriptions of work packages 1-3), the success of the project will be assessed in four main ways:

- **Through surveys of iSGTW's readers.** Conducted once a year by WP3, these will solicit the readership's views, use and experience of iSGTW and be used to plan further developments in the newsletter.
- **Surveys of GridTalk's impact aimed at participants at conferences.** Conferences will be chosen by the PMB, but it is expected that surveys will cover EGI conferences and User Forums and e-concertation meetings, as they will include broad representation from a wide range of communities. One survey will be conducted each year. These will be combined with the results of 'feedback sessions' conducted at the conferences or elsewhere, to allow more in-depth discussion of users' experiences and views.
- **Impact and sustainability reports** produced by WP1 based on the metrics and feedback gathered during both phases of the project. These reports will help to form the basis for the year-on-year strategy for each work package, moving towards sustainability and outlining concrete proposals on how to share best practices and ensure that all e-ScienceTalk's products continue to act as a resource in the long term.
- **Acting on feedback from the PMB** to ensure that it is implemented in an efficient, timely and cost effective manner.

<b>Work package number</b>	4	<b>Start date or starting event:</b>		M01			
<b>Work package title</b>	Management						
<b>Activity type</b>	MGT						
<b>Participant number</b>	1	2	3	4	5		
<b>Participant short name</b>	EGI.eu	QMUL	APO	Imperial	CERN		
<b>Person-months per participant</b>	18	1	1	1	1		

### Objectives

- Ensure the effective coordination and running of the project, manage activities and monitor progress.
- Handle all reporting on behalf of e-ScienceTalk to the EC services.
- Compile and organise the assessment of the project's results.

### Description of work

This work package is led by EGI.eu

#### Task 4.1 Establish and run the project management structure (EGI.eu)

WP4 will establish and run the project management structure, taking care of all coordination activities, including organisation of meetings, compilation of six-monthly dissemination materials packages and periodic reports, budget and quality control, resolution of conflicts and liaison with associated and collaborating projects. The work package will also provide an initial dissemination plan, annual quality reports covering feedback and metrics on the e-ScienceTalk products, including a final report. Drawing on the sustainability and impact reports from WP1, as well as the final deliverables from each of the work packages, WP4 will also produce an overall guide to dissemination for EU projects, based on the extensive experience gained and lessons learnt during both the GridTalk and e-ScienceTalk projects for wider dissemination to EC-funded projects and beyond.

### Deliverables

Del. no.	Deliverable name	WP no.	Nature	Dissemination level	Delivery date (proj. month)	Description
D4.1	Dissemination plan	4	R	PU	2	Plan for dissemination including objectives and impact
D4.2	Quality assurance guide	4	R	CO	3	Guide to quality for the project's products
D4.3	Annual report on feedback and metrics	4	R	PU	12	Annual report covering the quality metrics and feedback on the project's products

D4.4	Annual report on feedback and metrics	4	R	PU	24	Annual report covering the quality metrics and feedback on the project's products
D4.5	Final report on feedback and metrics	4	R	PU	32	Final report on quality, metrics and feedback
D4.6	Guide to dissemination for EU projects	4	R	PU	33	Overview of lessons learnt and experience gained from GridTalk and e-ScienceTalk

### Milestones

Milestone number	Milestone name	Work package(s) involved	Expected date	Means of verification
MS10.1-12	PMB meetings	4	1,4,7, 10, 13, 16, 19, 22, 25, 28, 31, 33	Meetings held and minuted
MS11	Dissemination materials	4	6	Electronic and/or paper versions made available to the Project Officer
MS12	Dissemination materials	4	12	Electronic and/or paper versions made available to the Project Officer
MS13	Dissemination materials	4	18	Electronic and/or paper versions made available to the Project Officer
MS14	Dissemination materials	4	24	Electronic and/or paper versions made available to the Project Officer
MS15	Dissemination materials	4	30	Electronic and/or paper versions made available to the Project Officer

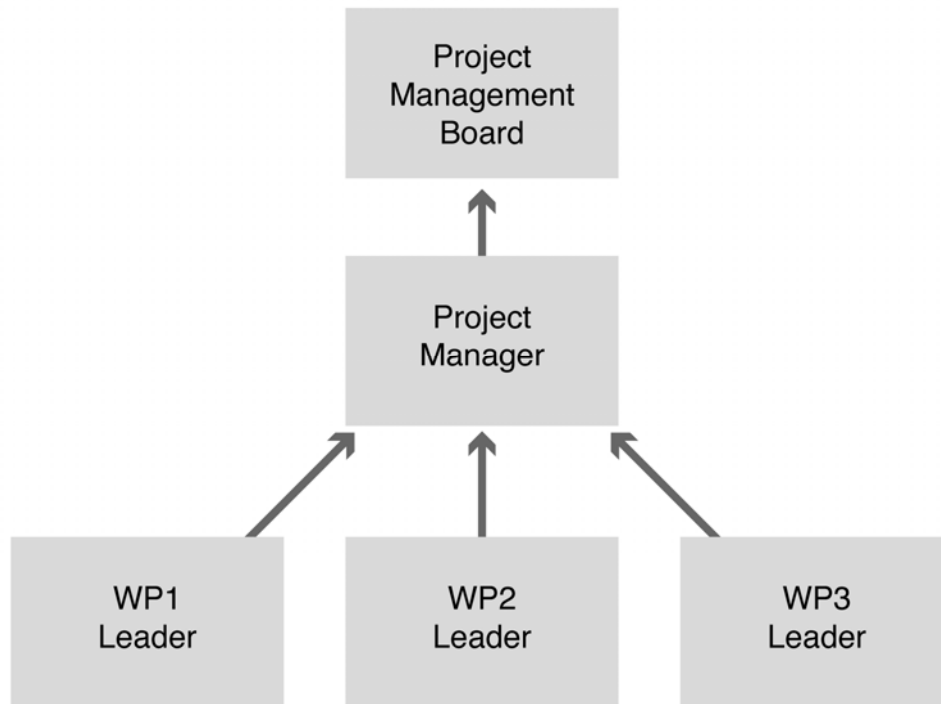
***B1.2.7 Efforts for the full duration of the project*****Summary of effort**

Partic. No.	Partic. Short name	WP1 Policy	WP2 GridCafé	WP3 iSGTW	WP4 Mgmnt	Total person months
1	EGL.eu	0	0	0	18	18
2	QMUL	28	10	8	1	47
3	APO	5	23	5	1	34
4	Imperial	0	25	0	1	26
5	CERN	13	14	39	1	67
<b>Total</b>		46	72	52	22	192

**B 2. Implementation*****B 2.1 Management structure and procedures***

Given that this support action is a small project, relying on partners with a proven track record of collaboration in GridTalk, a lightweight management structure will be adopted based on the highly successful structure put in place for GridTalk. This will ensure that the manpower involved can focus on achieving the project deliverables effectively, while maintaining adequate checks for transparency and accountability between the partners through the role of the Project Management Board. The project management of e-ScienceTalk will be organised with the following structure (see figure below):

- A **Project Management Board**, representing all partners and chaired by an elected representative, to be appointed each year.
- A **Project Manager**, with overall project responsibility for the project.
- **Work Package Leaders**, responsible for coordinating the activity of each individual WP and reporting to the Project Manager.



*Project management structure for e-ScienceTalk*

### ***B 2.1.1 Project Manager (PM)***

PM will be Catherine Gater, who has extensive project management experience in the public sector. She currently leads Enabling Grid for E-scienceE's dissemination activities, with responsibility for budget, staff and strategy and will take up the role of Chief Administrative Officer and Dissemination Manager for EGI.eu in Amsterdam. Prior to EGEE, she was a group manager for a Corporate Information Systems Department at Canterbury Christ Church University in the UK, setting priorities and schedules for a team of web and content providers, and has also worked for laboratories such as Diamond Light Source, the STFC Rutherford Appleton Laboratory and in general public outreach at the Science Museum in London. The PM is nominated by the coordinating partner and will be responsible for the overall project management. These tasks include:

- Ensure the effective advancement of the project, gathering progress updates from the Work Package Leaders on project activities with respect to expected technical achievements, results, schedules, and resources.
- Organise the collection, control and release of deliverables and cost statements.
- Ensure day-to-day management of the project.
- Act as convenor of the Project Management Board.
- Liaise with the European Commission.
- Liaise with other projects.

### ***B 2.1.2 Work Package Leaders (WPL)***

Work Package Leaders will be responsible for the activities of their own work package, including coordinating partner contributions and ensuring a regular communication and reporting between the work package and the PMB. The Work Package Leaders will generate progress reports for PMB meetings, indicating the progress made in each task and the resources consumed. Progress will be reported with respect

to the project working plan, and in the case of discrepancies each manager has primary responsibility for corrective actions.

### ***B 2.1.3 Project Management Board (PMB)***

The PMB bears ultimate responsibility for the e-ScienceTalk project. It will address financial, budgetary and technical issues and harmonise and track work activities, the quality of the deliverables and deadlines. The PMB is composed of all Partner Representatives and the PM, and chaired by an elected chairman to be appointed each year. PMB members will be: Catherine Gater - Project Manager; Dr Sarah Pearce (GridPP Project Manager) - QMUL representative; André-Pierre Olivier (Manager) - APO representative; Dr Bob Jones (Head of EU Projects, IT Department) - CERN representative; Dr David Collings (Lecturer, Department of Physics) - Imperial College representative; Dr Steven Newhouse (Director EGI.eu) – EGI.eu representative.

The PMB will:

- Deal with managerial issues, addressing strategic and contractual decisions concerning the project.
- Assess project progress on a quarterly basis, overseeing the activity of all work packages and keeping under control the timely delivery of all outcomes.
- Review and approve all project deliverables, as the final stage in the quality assurance process.
- Check that the resources spent are used in a way that is consistent with the objectives of the work plan.
- Try and reach consensus to resolve conflicts.

The PMB will meet quarterly, by phone or video conference. Additional meetings may be convened at any other appropriate time throughout the project duration, if necessary. As appropriate, external members (Work Package Leaders, or managers from other projects) may be invited to join meetings for particular items of the agenda.

### ***B 2.1.4 Escalation Process***

E-ScienceTalk is a small project, where excellent communication and open discussion between partners will be encouraged. Nevertheless it is prudent to put in place formal guidelines in case of conflict. Conflict resolution will be the responsibility of the Project Manager, who will attempt to mediate with the parties concerned. Through encouraging early reporting of difficulties from partners and Work Package Leaders, the Project Manager should aim to intervene before conflict arises.

Where possible, issues will be resolved at the project partner where they have arisen. If necessary, they can be escalated first to the Work Package Leader and, if that fails to produce a resolution, to the Project Manager. Finally, the PMB serves as the last step in the conflict resolution process.

In order to avoid and deal with conflict, the PMB will:

- Regularly review and monitor the progress of the project, through reports from Work Package Leaders and the Project Manager, so that any areas of difficulty can be identified early.
- Ensure that each issue arising is allocated as the responsibility of a member of the PMB.
- Keep a log of project issues and the actions in train to deal with them, reviewing this log at each PMB meeting.

The PMB will be established before the project begins. At its first meeting, it will elect a Chair and agree the procedures to identify and resolve conflicts and issues. As well as quarterly PMB meetings, the Work Package Leaders will also hold regular weekly meetings to assess progress in their areas and identify

problems. Actions from these meetings will be recorded and tracked, and escalated to the PMB where appropriate through the Project Manager.

## ***B 2.2 Beneficiaries***

The five individual participants in e-ScienceTalk, EGI.eu, QMUL, APO, Imperial and CERN are covered in the following pages:

### Participant 1: EGI.eu (EGI.eu)

#### Expertise relevant to the work:

EGI.eu was established as a Dutch Foundation - an independent legal entity – in February 2010 and is located at the Science Park in Amsterdam, the Netherlands. Defined by its statutes ([http://www.egi.eu/export/sites/egi/about/governance/EGI-eu\\_statutes\\_def\\_ENG.pdf](http://www.egi.eu/export/sites/egi/about/governance/EGI-eu_statutes_def_ENG.pdf)) its main objective is to coordinate pan-European distributed computing activity within Europe on behalf of its stakeholders (NGIs, EIROs, and others). It will be independent of any particular institute or application community.

During its startup phase EGI.eu will continue to be supported by NIKHEF which will provide legal, logistical and administrative support and these functions will transfer to EGI.eu during the first year. Staff employed by EGI.eu are organisationally distinct from staff working at NIKHEF or from other partners within the Dutch NGI.

#### Specific role in the project:

WP	Work package title	Role in the activity
1	Policy, impact and sustainability	Provide a network of contacts in the NGIs and EGI collaborating projects to help source content for the GridBriefings.
2	GridCafé, GridGuide and Gridcast	Leverage the EGI contacts networks to source content for the GridCafé. Collaborate with e-ScienceTalk in running GridCasts from EGI events. Encourage NGI sites to be fully represented in the GridGuide.
3	International Science Grid This Week	Promote media involvement at EGI and e-concertation events through partnership with iSGTW.
4	Management	Lead WP4 to manage e-ScienceTalk, convening the PMB, overseeing deliverables and liaising with grid and e-Infrastructure projects and the EC.

#### Profile of key participants:

**Catherine Gater (Project Manager)** was the Dissemination Manager for EGEE, managing the dispersed dissemination team for EGEE consisting of 27 partner institutions in 25 countries. She represents CERN on the GridTalk PMB and has worked in communications at major research facilities, including STFC Rutherford Appleton Laboratory. She will also be Chief Administrative Office and Dissemination Manager for EGI.eu in Amsterdam.

**Steven Newhouse (PMB Member)** is the EGI-InSPIRE Project Director and Director of EGI.eu. He has been in the grids and High Performance Computing community for over 15 years holding various technical and managerial positions in industry and academia. He is formerly Technical Director of the EGEE-III project based at CERN, and will be located at EGI.eu in Amsterdam.



## Participant 2: Queen Mary and Westfield College, University of London (QMUL)

### Expertise relevant to the work:

QMUL ([www.qmul.ac.uk](http://www.qmul.ac.uk)) is one of the largest colleges of the University of London. Its Department of Physics has a national and international reputation for research with a successful High Energy Physics Group that contributes to the LHC. QMUL led the management work package for GridTalk and also produced GridBriefings aimed at interpreting key EC policy for policy makers, provided policy content for GridCafé, content for the GridGuide and integration with the RTM. QMUL is a key player in GridPP, the UK Grid for Particle Physics, providing the Chair of the GridPP Collaboration Board and the project's dissemination team, as well as hosting the QMUL e-Science Cluster, which contributes over one thousand processors to EGEE. GridPP's Dissemination Officer is based at QMUL and also acts as Press and Events Officer for EGEE. The team's expertise includes managing the GridPP website, writing news items and press releases, running conferences, commissioning demonstrations, policy communication and producing literature.

### Specific role in the project:

WP	Work package title	Role in the activity
1	Policy, impact and sustainability	Lead WP1 including researching and drafting GridBriefings and annual reports, working with national, Europe-wide and international grid and e-Infrastructure projects and coordinating e-concertation activities. Attend policy related events and coordinate the distribution of GridBriefing reports. Evaluate the impact of GridTalk products and communication channels and disseminate the lessons learnt to other EC-funded projects. Explore long-term sustainability of e-ScienceTalk products.
2	GridCafé, GridCast and GridGuide	Provide policy content for GridCafé and for the GridGuide sites. Help to edit GridCafé and GridGuide content. Manage GridCasts.
3	International Science Grid This Week	Contribute articles and provide resources on grid and e-Infrastructure policy.
4	Management	Participate in the PMB

### Profile of key participants:

**Dr Sarah Pearce (PMB Member)** is the GridPP Project Manager, responsible for the project's budget and delivery of its milestones and metrics. She was also Project Manager of GridTalk in its first phase and has extensive experience in scientific communication, including as GridPP Dissemination Officer and a science policy adviser in the UK Parliament. She currently oversees the grid dissemination team at QMUL.

**Manisha Lalloo (Grid Impact Reporter)** is a science communication professional who currently researches, writes and produces the GridBriefings, and develops content for GridGuide. She has excellent written and verbal communication skills, and a strong interest in science policy, including having worked at the European Parliament in Brussels.

**Neasan O'Neill (Dissemination Officer)** is the GridPP Events Officer and the EGEE Press and Events Manager. Neasan has a Masters in Science Communication from Dublin City University. He regularly writes GridPP publications and documentation, news items on the GridPP website and has contributed to iSGTW. He provided input for the GridBriefings, GridCafé and GridCasts for GridTalk.

### Participant 3: André-Pierre Olivier (APO)

#### Expertise relevant to the work:

APO is a small multimedia communications and design company based in France. In the area of science and technology, APO has established a long-standing relationship with CERN as a client, in particular for CERN's award-winning site on Antimatter (web design and graphics), the GridCafé website, a stand for CERN's Microcosm exhibit on how accelerators work, and a teaching kit for the CERN video series "Couldn't be without it" explaining everyday applications of technologies developed for fundamental physics. APO leads the GridCafé work package for GridTalk, and is responsible for the design, maintenance and upkeep of the GridCafé, GridTalk, GridCast and GridGuide interactive websites. APO also provides design support to the GridBriefings and iSGTW work packages.

#### Specific role in the project:

WP	Work package title	Role in the activity
1	Policy, impact and sustainability	Design GridBriefings and final summary report to appeal to policy makers.
2	GridCafé, GridCast and GridGuide	Lead WP2 to update the GridCafé site and maintain the GridCast website. Expand the GridGuide site and increase integration with the Real Time Monitor. Create multimedia content for the GridCast website. Create the e-ScienceTalk project website, logos, templates and promotional materials and advise on all web and design related issues.
3	International Science Grid This Week	Provide multimedia content for the resource section and design promotional materials to market the publication.
4	Management	Participate in the PMB.

#### Profile of key participants:

**André-Pierre Olivier (Designer and PMB Member)** has been active in the field of commercial interactive communications and multimedia for 20 years, and has been involved in internet-based projects for more than 10 years. His communications activities have been in a wide range of sectors, including culture (museums, expos), industry, banking, research and medicine. André-Pierre has six years of higher education in the fields of architecture, plastic arts and graphic arts. He worked for communications firms from 1986 to 1993, with multimedia activities from 1987 onwards, in particular for the Museum of Science and Industry at la Villette, Paris. From 1993, he has worked independently, forming the company Pictomedia which primarily produced internet sites, as well as interactive information stands, CD-ROMs, animations, games, educational materials, interface studies and expert systems. The company's work has featured at la Vilette, The Olympic Museum (Lausanne), Unterliden Museum (Colmar) and Microcosm (CERN, Geneva). The company has had a wide range of clients including Dupont, Nokia, Eli-Lilly, Sandoz, Nestlé, Givaudin, Charmilles Technologie, Secheron, Banque Lombard-Odier, Banque Pictet and Banque Cantonale de Vaud.

**Corentin Chevalier (Web Developer)** is a science communication professional with a background in Web 2.0 technologies, who currently maintains and develops the GridCafé website and runs the GridCasts for GridTalk, including managing the associated blog and podcasts. He integrates content from these into the GridCafé site, and developed the GridGuide for the GridTalk project.

**Participant 4: Imperial College of Science, Technology and Medicine, University of London (Imperial)****Expertise relevant to the work:**

Imperial College ([www.ic.ac.uk](http://www.ic.ac.uk)) is consistently rated amongst the world's best universities demonstrating excellence in scientific research and teaching. The Faculty of Natural Sciences was recently ranked as the second strongest in the UK based on the proportion of world-leading and internationally excellent research activity. The Department of Physics is one of the largest in the UK and the High Energy Physics Group has an outstanding reputation. The group currently hosts the spokespersons of four international experiments. The e-Science team within this group is one of the largest and best resourced in the UK. Dissemination has always been an important part of this team's activity and they have been developing tools that graphically display activity on the grid since 2001. These tools have used both by members of the team and many others to demonstrate the grid to a wide variety of people ranging from the King of Spain and the President of India to senior civil servants and government ministers to large numbers of the general public at open events.

**Specific role in the project:**

WP	Work package title	Role in the activity
1	Policy, impact and sustainability	GridGuide and RTM integration will enhance communication with policy makers.
2	GridCafé, GridGuide and Gridcast	Continue to integrate the GridGuide and Real Time Monitor (RTM) as both the RTM and the GridGuide evolve. Develop the RTM in a way that will allow it to link in with features developed within the GridGuide, so that users of either will be able to quickly find the information they need. Develop the RTM to collect and dynamically display information from a variety of ever changing sources. Work with BELIEF to ensure continuity of access to the contents of the existing Digital Library.
3	International Science Grid This Week	Screenshots of the RTM will be used to illustrate iSGTW articles and press releases, and will form an important part of the image gallery.
4	Management	Participate in the PMB.

**Profile of key participants:**

**Dr David Colling (PMB Member)** has led the e-Science activity within the Imperial College High Energy Physics group since 2001. In that time, as well as working on the technical and operational aspects of grid computing, he also worked on grid dissemination. He will also provide unfunded dissemination support and RTM development for e-ScienceTalk.

**Dr Janusz Martyniak (Technical Developer)** is an experienced programmer and has worked on the Real Time Monitor for over three years. During this time the project has matured and many of its elements have been updated to run more smoothly and efficiently on a wider range of platforms. The current 3D Java client has been completely re-written to use the newest World Wind SDK supplied by NASA during this time.

### Participant 5: European Organization for Nuclear Research (CERN)

#### Expertise relevant to the work:

CERN ([www.cern.ch](http://www.cern.ch)), the European Organization for Nuclear Research, is the largest particle physics laboratory in the world and is an international organisation with its headquarters in Switzerland. Currently CERN is commissioning the Large Hadron Collider (LHC), a new particle accelerator on the Swiss-French border near Geneva, expected to be operational at the end of 2009. The LHC is the world's most powerful accelerator and will provide research facilities for several thousand high-energy physics researchers from all over the globe. The LHC experiments are designed and constructed by large international collaborations and will collect data over a period of 10-15 years. These experiments will run up to 1 million computing tasks per day and will generate around 15 petabytes of data per year. This data will be shared with all the participating institutes. The computing capacity required to analyse the data far exceeds the capacity needs of any comparable physics experiments today and relies on the combined resources of some 200 computer centres worldwide. CERN and the particle physics community have chosen grid technology to address the huge data storage and analysis challenge of the LHC. The CERN IT department currently has 228 staff, predominantly engineers, who operate one of Europe's largest research computer centres supporting about 17,000 users. The department has developed leading expertise in large scale data centres and long-standing collaborations with industrial and academic partners in the fields of high performance computing and advanced networking. The CERN IT department has been at the forefront of computing for many years and now leads the world's largest grid project, EGEE (Enabling Grids for E-Science). CERN has also prominently contributed to a number of EGEE-related grid projects aiming at extending the EGEE production grid infrastructure to new geographical areas, to serve new applications domains and to support the grid community: BalticGrid-II, D4Science, D4Science-II, EGI\_DS, enviroGRIDS, ETICS 2, GridTalk, Health-e-Child and SEE-GRID-SCI. Under FP6 and FP7, the department has been involved in some 20 European Commission-funded projects. CERN is a founding partner of the recently formed European Grid Initiative that will provide a sustainable grid infrastructure for Europe's research communities.

#### Specific role in the project:

WP	Work package title	Role in the activity
1	Policy, impact and sustainability	Contribute content and case studies for GridBriefings, assist with the organisation of the e-concertation meetings.
2	GridCafé, GridCast, GridGuide	Provide content for the GridCafé, GridCast blogs and the GridGuide.
3	International Science Grid This Week	Lead WP3 to produce a weekly online newsletter that disseminates information about grid and e-Infrastructure related projects.
4	Management	Participate in the PMB.

**Dan Drollette (Editor)** is the current European Editor of iSGTW. He has extensive experience in science communication, and has published widely as a freelancer, including in *Science*. He also has excellent verbal communication skills and the ability to manage the high profile and pressure of the iSGTW editor position.

A **Science Writer and Dissemination Officer** will be recruited, with experience of writing for a range of publications in an engaging style, with a flair for news reporting and an interest in writing for online media. Additional experience in working with the media and events will also be sought.

## **B 2.3 Consortium as a whole**

The e-ScienceTalk consortium consists of five partners, all with extensive experience in communicating grid technology through traditional and new media. CERN, QMUL and APO have established a proven track record during GridTalk of delivering successful communications projects aimed at e-ScienceTalk's target audiences, and will draw on staff with demonstrated skills in these areas. The first year reviewers stated that "The GridTalk project has made excellent progress, even exceeding expectations." E-ScienceTalk will build upon this successful work by these partners in GridTalk, bringing onboard the technical expertise of Imperial College, who also have a strong record in grid dissemination through the e-Science Activity in the High Energy Physics Group. E-ScienceTalk will also bring the project management of the project onboard from EGI.eu, from the CAO/Dissemination Manager, which will allow the project to benefit from close collaboration with the EGI.eu dissemination team, the EGI network of NGIs and EGI-InSPIRE collaborating projects, as well as EGI's membership of the European E-Infrastructures Forum.

As a collaboration between an international body (CERN), a Dutch foundation (EGI.eu), two universities (QMUL and Imperial College) and a small-medium sized enterprise (APO), the consortium represents three key facets of Europe's S&T community. The partners are based in three EU member states (FR, The Netherlands and UK) and one Associated Country (CH).

The consortium members provide complementary areas of expertise, which are reflected in the work packages for which they are responsible:

- **EGI.eu** has the main objective of coordinating pan-European distributed computing activity within Europe on behalf of its stakeholders, NGIs, EIROs, and others. It will be independent of any particular institute or application community and will participate in a wide range of collaborations within Europe and beyond.
- **QMUL** is responsible for dissemination for GridPP, the UK's particle physics grid. In this role it has developed an award-winning website, overseen the production of successful demonstrations, produced widely-reported press releases and held stands at many grid and computing events. In the policy area, QMUL has produced the series of GridBriefings published during GridTalk, a guide to GridPP for UK policy makers and provided speakers to policy conferences and in Parliament. Manisha Laloo has particular experience in science policy, having worked in the European Parliament.
- **APO's** experience of web and print design and new media will be crucial in further developing the GridCafé website and interactive content. As the site's original designer, APO is in a unique position to build on its strengths and add new and innovative content, as well as to develop the GridCast and GridGuide sites. This project will also provide the opportunity for a small company to continue to develop its activities and personnel, and engage with international partners who could become future customers. APO's print design experience is also essential for producing eye-catching and engaging GridBriefings and marketing materials for iSGTW and the e-ScienceTalk project itself.
- **Imperial College** designed and built the Real Time Monitor for GridPP and will bring essential technical expertise to the consortium. The RTM demonstrates the global reach of grid computing in a highly visual and engaging way. Bringing Imperial College into the e-ScienceTalk consortium will greatly enhance the co-development of the Real Time Monitor and the GridGuide, smoothing the communication between the GridGuide and RTM developers. Imperial College is also a major centre for grid dissemination and e-Science in the UK in its own right.
- **CERN** is a well-known centre for grid communications and has hosted the editor of iSGTW since the publication's launch. CERN has also managed the EGEE's dissemination activities throughout all three phases of the project. CERN's position at the hub of many grid projects, including the WorldWide LHC Computing Grid, puts it in an excellent position to source and share contacts,

dissemination materials and success stories, which is vital for the continued success of iSGTW as well as the other e-ScienceTalk products. CERN also attracts high profile visitors from governments, business, funding agencies and international projects who will be exposed to presentations, events and materials from e-ScienceTalk.

In addition, the e-ScienceTalk consortium will work in collaboration with numerous grid and e-Infrastructure projects throughout Europe and beyond – without this close collaboration there would be no possibility of delivering the work programme. Plans for ways to collaborate with these projects have been included throughout the document and are also summarised below. Also included is a non-exhaustive list of the projects that have expressed an interest in working with e-ScienceTalk. Some of the projects have also provided formal Letters of Support, which are included in Annex 1.

i) Sub-contracting:

Some minor items such as printing services and logistical services relating to the organisation of the e-concertation meetings will be sub-contracted and the costs are expected to be minor.

Xenomedia will deliver through a sub-contract for €14K the upgrade and redesign of the content management system underlying the iSGTW website. The current CMS is a proprietary system that will no longer be supported beyond 2010. The company is contracted by Fermilab to provide long term web hosting and day-to-day technical support and maintenance to the current iSGTW website, as well as other Fermilab websites, such as Symmetry. The website CMS will be upgraded as a one-off development by Xenomedia during the opening months of e-ScienceTalk. The cost of this development work will be shared equally between GridTalk and Fermilab and OSG who also fund the US Editor post for iSGTW until the end of the current phase of OSG funding in April 2012. Once the development work is complete, Xenomedia will continue to provide daily web support, security patching and web hosting for the iSGTW website e-ScienceTalk project, funded entirely by Fermilab at no cost to e-ScienceTalk until the end of September 2012.

For support of the weekly publication of iSGTW after the OSG funding commitment to iSGTW ends in April 2012, 2K Euros will be allocated for freelance writing support. In addition, web hosting for the iSGTW website will be moved to QMUL in March 2012, with hosting costs to be provided as an in-kind support to the project. Technical support for the OpenPublish Drupal CMS is not available within the e-ScienceTalk consortium and 1K Euros per month will be allocated to allow Xenomedia to continue basic maintenance and bug fixing in the website from October 2012 until May 2013, in total 8K Euros.

E-scienceTalk will deliver the logistics for the 8th, 9th and 10th e-Infrastructure Concertation meetings, in November 2010, September 2011 and November 2012 respectively. The 3rd party costs associated with the meetings will be met from e-ScienceTalk funds including security, catering, clearing and venue costs, of up to 40K Euros in total for all 3 meetings.

ii) Other countries: None of the partner institutes are based outside the EU Member states or Associated countries. However, iSGTW is currently funded jointly with the US Open Science Grid, and GridCafé has been translated in partnership with collaborators from non-EU countries.

## **B 2.4 Resources to be committed**

E-ScienceTalk's request for funds is primarily to keep together the highly effective consortium established during the first phase of the project, which was identified as one of GridTalk's strongest assets by the first year reviewers.

GridTalk funded the employment of three full time members of staff for the two year duration of the project, one in each partner institution of the consortium. For e-ScienceTalk, while all the products are already established, and the initial effort-intensive period of starting them up has been completed, the nature of cutting edge online dissemination channels such as GridCafé, GridGuide, GridCast, the Real Time Monitor and iSGTW mean that constant redevelopment is needed to keep pace with new software, standards, applications and tools.

The wide programme of work already initiated by GridTalk will be maintained during e-ScienceTalk. In the new EGI era of grid computing, a number of highly desirable extensions and expansions to this programme have been identified for e-ScienceTalk, and have been outlined in this document. In order to carry out these extensions and expansions effectively, e-ScienceTalk proposes to add an additional amount of funded effort to the original GridTalk team as detailed below.

<b>Partner</b>	<b>GridTalk</b>	<b>E-ScienceTalk</b>	<b>Comments</b>
<b>EGL.eu</b>		<b>Project Manager</b> (0.5 FTE)	Project management of the project will be provided by the PM and the admin team at EGL.eu.
<b>QMUL</b>	<b>Grid Policy Reporter</b> (1FTE)	<b>Grid Impact Reporter</b> (1 FTE)	This role will write, produce and distribute the GridBriefings, set up and interact with the policy response advisory panel, coordinate the e-ScienceTalk presence at policy events and coordinate the e-concertation activities.
		<b>Dissemination Officer</b> (0.5 FTE)	Two significant extra tasks have been added to the GridBriefing work package WP1 compared to GridTalk – the sustainability and impact reporting and the e-concertation events – and an additional 0.5 FTE will be essential to deliver these effectively.
<b>APO</b>	<b>Web Developer</b> (1 FTE)	<b>Web Developer</b> (0.5 + 0.25 FTE)	Technical web support has been reduced to allow for additional effort for design and interactive content creation without change to the total FTE for APO.
		<b>Designer</b> (0.25 FTE)	The high quality and consistency of GridTalk's branding was a feature commended by the first year reviewers, and a similar contribution on a funded basis is considered essential by the consortium for E-ScienceTalk.
<b>Imperial</b>		<b>Technical Developer</b> (0.5 FTE)	Specialist support for the co-development of the GridGuide and the Real Time Monitor from new consortium member Imperial College, originator of GridPP's RTM, as well as to support access to the existing contents of the BELIEF Digital Library.
<b>CERN</b>	<b>iSGTW Editor</b> (1 FTE)	<b>iSGTW Editor</b> (1 FTE)	The full time European Editor role for iSGTW continues as for GridTalk, expanding the coverage to new areas.

		<b>Science Writer and Dissemination Officer</b> (1 FTE)	This role will establish networks of contacts within the entirely new EGI ecosystem, produce content covering new synergies between grid computing and other e-Infrastructures for all work packages, expand the geographic reach of this coverage and provide media outreach for the e-concertation meetings, as well as writing for the new areas of GridCafé.
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In addition, Imperial will contribute 9 PM unfunded effort to WP2 for general dissemination, management, administration and for development of the Real Time Monitor. Above this, the project members will also contribute unfunded effort to the management of the project, as representatives of their institutes will sit on the Project Management Board. Similarly, the full time US editor of iSGTW will provide unfunded effort to the e-ScienceTalk project and will be funded by OSG. The hosting and day-to-day technical maintenance of the iSGTW website by commercial company Xenomedia will be also be funded by OSG. ISGTW will also benefit from the contributions of the writer in Asia, which will be offered as unfunded support to e-ScienceTalk. The iSGTW Advisory Board members will continue to offer their time unfunded on a weekly basis, approving the preview copies of the publication, an essential part of the publishing process. In addition, the iSGTW Advisory Board meets on a quarterly basis either by videoconference, phone or face-to-face in order to discuss the future direction and progress of the publication.

The locations of the e-ScienceTalk partners also provide significant unfunded benefits to e-ScienceTalk. QMUL and Imperial College are two of the key centres for grid dissemination in the UK, with close ties to GridPP, the UK's contribution to the Worldwide Large Hadron Collider Computing Grid, the National Grid Service (the UK's NGI) and NeSC, the National e-Science Centre, based in Edinburgh, offering excellent opportunities for collaboration. CERN is an internationally renowned research laboratory, governed by 20 member states, that receives visits from over 500 journalists a year as well as from hundreds of VIPs and members of government. Recent visitors that have included grid computing as part of their visit have included the Chairman of the European Space Agency Council, the Spanish CERN Council Delegate, writer Bill Bryson, the Chief Scientific Advisor to the Scottish Government and the Secretary of State for Innovation, Universities and Skills, United Kingdom. E-ScienceTalk will be in a unique position to work with the CERN Press Office and Visits Service to capitalise on these visits during the early years of the Large Hadron Collider's operation. CERN also benefits from a large pool of volunteer guides who are prepared to assist with visits and large events free of charge. EGI.eu is located in Amsterdam in the Science Park, site of the largest internet hub in Europe (AMS-IX) and home to a large cluster of organisations specialising in the natural sciences and IT. EGI.eu has close links with the Dutch NGI, BiG Grid and NIKHEF, the National Institute for Subatomic Physics, which itself is closely linked to the LHC.

E-ScienceTalk will also continue to coordinate substantial unfunded effort from grid and e-Infrastructure projects across Europe and beyond to provide input to its dissemination products, an approach which has proved extremely effective throughout the first phase of GridTalk. A number of Letters of Support gathered during the proposal preparation phase are included in Annex 1 to indicate the level of support for this continued approach.

The budget for each work package is given below:



Activity	WP1 Policy, impact and sustainability		WP2 GridCafé, GridCast and GridGuide		WP3 iSGTW		WP4 Management		Total funded (with unfunded)
	Funded	Un- funded	Funded	Un- funded	Funded	Un- funded	Funded	Un- funded	
Type of activity	SUPP	SUPP	SUPP	SUPP	SUPP	SUPP	MGT	MGT	
Person months	46		64	8	52	(33) (OSG)	17	5	<b>179</b> (225)
Budget (€)	332,136		446,508	45,500	431,104	242,335	246,496	33,435	<b>1,456,244</b> (1,777,515)
Requested EC contribution (€)	296.155		398.136	0	385.918	0	219.791	0	<b>1,300,000</b>

In addition to personnel costs, the project has requested funding for:

- **€100K for travel for project members.** The main costs of travel will be to attend events such as policy briefings, e-concertation meetings and grid conferences, in order to distribute GridBriefings and discuss policy issues, record GridCasts and create content for iSGTW. Travel costs will also permit internal meetings for project staff and three face-to-face Project Management Boards during the project.
- **€15K for central budget hold in the project Coordinator's budget.** It will be used to cover general dissemination travel costs and provide a reserve for the travels of unfunded participants. In addition this new budget will be dedicated to fund weekly publication of iSGTW after the OSG funding (2k) which commitments ends in April 2012 and for the basic maintenance and bug fixing in the Website charged by Xenomedia from Oct 2012 till May 2013 (8k)
- **€25K for materials.** This will be used to publish and distribute the GridBriefings and reports and print marketing materials for iSGTW, so is shared between QMUL, CERN and EGI.eu, with €12K for QMUL under WP1, €3K for EGI.eu under WP4 and €10K for CERN under WP3.
- **€40K for the e-concertation events** to fund logistical costs such as catering, travel and venue costs. In-kind funding will also be sought from the hosting institution, which will be CERN for the first event in October or November 2010. This is allocated as €35K to EGI.eu under WP4 and €5K to QMUL under WP1.
- **€4K for iSGTW's contribution to the replacement and enhanced functionality of the iSGTW web content management system** by Xenomedia, costs to be shared equally with OSG and added to the CERN budget for WP3.
- **€16K for booths, e-ScienceTalk branded giveaway materials** such as hats, T-shirts and mugs and event registration fees to allow GridTalk to host booths at grid conferences and policy events, crucial for promoting iSGTW and distributing GridBriefings. This is allocated to QMUL under WP1.
- **€1K to cover software tools, licensing and equipment** related to investigating new online development such as 3-D interactive environments, for APO under WP2.
- **€3K for subsistence expenses for an intern at iSGTW**, to contribute articles to iSGTW and to advance the marketing strategy for the publication, allocated to CERN under WP3.
- **€3K for a subscription to AlphaGalileo**, the Internet press centre for European science, engineering and technology for CERN under WP3 for distribution of press releases announcing iSGTW stories, GridBriefing launches, events and other initiatives to the general press.

**Total: €220K**

## B 3. Impact

### B 3.1 Strategic impact

The important scientific and social impacts of dissemination projects that span national and international borders were outlined by Kostas Glinos, Head of Unit “GÉANT & e-Infrastructures, Directorate General for Information Society and Media, European Commission” in the GridBriefing Annual Report 2008-2009<sup>7</sup>, produced by GridTalk:

“Today, grid e-Infrastructures are facing significant challenges such as sustainability and the transition to a more user-driven and service-centric model. Grid computing has already engaged in the process of transitioning to a sustainable model of operation that would integrate at European level the corresponding national operations. This new pan-European organisation model will open grid e-Infrastructures to all scientific disciplines and complement national funding strategies in support of e-Science. Thanks to grid computing many prominent results have been achieved that directly affect people’s lives.

It is essential to show the world and especially European citizens how European-funded research e-Infrastructures are working for them. Responsible and open communication plays an important role in ensuring public support of the European grid e-Infrastructures activities. This is where projects like GridTalk, disseminating the benefits, success stories and challenges of grid computing to a wider audience, play an important role. The effective communication of complex technical or scientific matters to a wider audience not only increases the public appreciation and support to scientific progress but also inspires the younger generations to get involved in the research process.”

The need for dissemination projects to communicate the success stories and societal impact of grid computing and other EC funded e-Infrastructures has not diminished since GridTalk started in April 2008, and in fact with the transition to a new model for grid computing in Europe through the European Grid Infrastructure this is more important than ever. While dissemination will be carried out very effectively by EGI.eu and the National Grid Initiatives in their own countries, there will still exist a strong need to offer a global picture of this field to the scientific community and the general public. E-ScienceTalk will be ideally placed to communicate this overview and its global context to the wide-ranging audiences already established for its products through the GridTalk project, and earlier in the case of the GridCafé and iSGTW, which have built up a loyal following over a number of years. The ability to reach out to these audiences will be enhanced during e-ScienceTalk by co-development with the Real Time Monitor of GridPP and Imperial College, London, which has proved to be an essential tool for communicating the global spread and complexity of the grid computing network to the general public and to key policy makers.

As mentioned by Kostas Glinos, it is not only important to increase public appreciation and support for scientific progress but also to inspire the younger generations to get involved. Communicating to university students and final year high school students will be an aim for e-ScienceTalk, which is again ideally placed to reach out to the scientists and consumers of e-Infrastructures of the future. GridCafé is already seen as an important source of information for educators.<sup>8</sup> Adding more information about the human face of grid computing to the global GridGuide will offer useful careers-based information to students thinking of a career in science, using profiles of people already working in grid computing and e-Infrastructures to answer questions such as: what qualifications do you need, what sort of careers are possible and where are the best places to work? Similarly, by marketing the e-ScienceTalk products on specialist and social media sites such as Slashdot, Facebook, Nature Networks, Twitter and BoingBoing, e-ScienceTalk will be able to reach a younger audience, who are significant users of these technologies. For example, in Europe's Digital Competitiveness Report, Volume 1: i2010 – Annual Information Society Report 2009, the 16-25 age group

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<sup>7</sup> GridBriefing Annual Report 2008-2009, GridTalk

<sup>8</sup> EU Deliverable D4.3 “Feedback on GridTalk”, 24 April 2009

were shown to be nearly twice as likely to have posted messages on chat rooms and forums than the average European,<sup>9</sup> demonstrating their higher level of digital literacy compared to other age groups.

The following sections consider each of the expected impacts of the section of the FP7 Capacities Work Programme for Infrastructures covering “Support for policy development and programme implementation, including support to emerging needs.” Each section below outlines how e-ScienceTalk will contribute to these expected impacts.

**Support measures are expected to strengthen the development of a European policy for research infrastructures and to address specific needs for international cooperation in this field, thus achieving critical mass and driving global policies.**

The importance of achieving critical mass in order to drive global e-Infrastructure policies is illustrated by eResearch2020, a study that is currently investigating the types of e-Infrastructure, organisational structures, modes of collaboration and technological developments that are most effective in supporting virtual research organisations in different fields. Analysis from the study will yield a roadmap of strategies that will guide public policies and enhance the uptake and use of e-infrastructure in science. Preliminary results reported at the 7<sup>th</sup> Concertation Meeting in Brussels, 13 October 2009<sup>10</sup> showed that e-Infrastructures allow for increased collaboration and are most important to international and multi-disciplinary researchers. They also support those in novel, dynamic and collaborative fields and actually tend to lower technical barriers to accessing computing resources for international projects, compared to national projects. Researchers were asked to rate the impact of international e-Infrastructures compared to national resources, and rated the international structures higher in all categories: tasks are accomplished quicker, output is greater, costs are lower, access to resources is better, analysis is faster, researchers can work on more problems than before, and they have more publications accepted as a result.

Once the final results of the research are published, this will give a further clear message for researchers that e-Infrastructures are beneficial to their research and that access to sustainable resources of this type is essential to carry out research faster and more cheaply, to produce more results and be published more widely. This message can be sent out through articles and announcements in iSGTW, via Nature Networks and through posts on the GridCast blog, which are all read by the research community. By communicating these benefits clearly, and by including concrete examples of the wide range of user communities already relying on these technologies, this will help to convince new or fledging users of grid and e-Infrastructures that it is important to invest their time in these technologies. In this way, e-ScienceTalk will help to achieve a critical mass within the research community that uses these types of resources, supporting e-Science in Europe through to 2020.

E-ScienceTalk will also play a key part in driving global policies by including a dedicated work package to engage policy makers in grid and e-Infrastructures. The short, easy-to-digest GridBriefings on EC policy produced during GridTalk will be continued, with the aim of distributing them not only to Europe but to the US and beyond. This will involve continuing to work closely with the e-IRG and other policy groups such as the OGF, SIENA and EGI.eu to disseminate and engage policy makers both through the GridBriefings and by attendance at events. E-ScienceTalk will also take a key role in coordinating e-concertation meetings and activities in the e-Infrastructure area, as well as supporting the continuation of access to the contents of the existing BELIEF Digital Library. Experience during GridTalk has shown that face-to-face communication with policy makers has proved to be one of the most effective mechanisms for conveying the global impact of grids, which is assisted by the graphical Real Time Monitor, as it shows activity on the grid in real time. Coupling the Real Time Monitor with the GridGuide has added to the impact of both products, as policy makers and politicians can instantly see which sites in their own regions are involved, or conversely which sites are not involved and should be.

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<sup>9</sup> Europe's Digital Competitiveness Report, Volume 1: i2010 – Annual Information Society Report 2009, Benchmarking i2010: Trends and main achievements

<sup>10</sup> e-Research 2020: Preliminary Results (Reported at the 7<sup>th</sup> Concertation Meeting, 13 October 2009)

**Contribute to the emergence of sustainable approaches for the provision of cross-disciplinary research services.**

Disseminating the development and impact of EC-funded e-Infrastructures such as grids, clouds and supercomputing networks is essential at a time of intense change for the e-Science landscape in Europe. EGEE is moving towards EGI, DEISA is migrating towards PRACE and cloud computing is emerging as a powerful additional player: "...cloud computing's advantages already outweigh its drawbacks for many consumers and business users," asserted *The Economist* in its leader article "Battle of the clouds."<sup>11</sup> This is also recognised by the e-IRG White Paper of 2009, which explains that "Cloud computing and Virtualisation, are among the most promising and innovative ICT technologies. Developments in these areas need to be taken into account when re-assessing the future of e-Infrastructure and related policies."<sup>12</sup>

For these reasons, it is more important than ever over the next few years to communicate clearly and authoritatively the developments and opportunities opening up for the research community and European businesses as the e-Infrastructures move towards more sustainable governance and funding models. Similarly, this message should also reach the general public so that they can understand the contribution that e-Infrastructures are making to the European Research Area and the support that they will be giving to the flagship ESFRI projects in the coming years and decades, as set out in the EC Communication "ICT infrastructures for eScience"<sup>13</sup>: "e-Infrastructures make a major contribution to the objectives of the i2010 strategy and the vision for the European Research Area (ERA), and have a key role in supporting the deployment of new research facilities, whose development is articulated with ESFRI and e-IRG policy groups in a dialogue with Member States."

In this context, e-ScienceTalk can provide stability and consistent 'branding' throughout this period of intense change for the grid and e-Infrastructure user community, emphasising the elements that will remain essentially the same for users, such as access to resources, user support services, open source middleware and community-centred virtual organisations, while at the same time communicating the elements of change to the grid developer community. Both of these communities form a substantial part of iSGTW's 5800-strong readership. GridCast will also seek to recruit more high profile bloggers from within the community and to break more news from key events in the grid calendar, contributing to its already substantial community building role. The significant groundwork already laid by GridTalk in communicating the impact of grids to the general public through events such as the LHC GridFest in October 2008 should also not be lost. Both the general public and policy makers are highly influenced by the general media. The UK's Royal Society states that it "believes the media play a vital role in communicating science to a diverse range of audiences. The media's power to entertain, inform and educate makes it an ideal platform for letting people know about new developments."<sup>14</sup> E-ScienceTalk will use and expand the network of media contacts established during GridTalk, as well as the science press service Alphagalileo, to push particularly media friendly stories to a wider audience, such as the "Sound of long-lost Ancient Greek instruments recreated by computer experts,"<sup>15</sup> which was featured in the London *Times* and many other international news publications as a result of publicity in iSGTW and by EGEE. The e-concertation events will also target the general media in order to push the achievements of e-Infrastructures to the front of the public consciousness.

**Encourage the pooling of resources between infrastructure operators at European level in order to face future challenges and to foster a culture of cooperation between them, spreading good practices and encourage infrastructures to develop in complementary ways.**

The globalisation of research through infrastructures means that resources cannot work in isolation from each other. The EC Communication "ICT infrastructures for eScience" says: "The virtualisation of experiments enables researchers from all around the globe to cooperate and share data using advanced research networks

<sup>11</sup> The Economist October 17-23, 2009.

<sup>12</sup> e-IRG White Paper, 2009

<sup>13</sup> ICT infrastructures for eScience (EC Communication), 5 March 2009

<sup>14</sup> <http://royalsociety.org/landing.asp?id=13>, accessed 26 October 2009

<sup>15</sup> "Sound of long-lost Ancient Greek instruments recreated by computer experts", The Times, London, UK, 9 March 2009

and grid infrastructures. These changes have a transformational effect on scientific disciplines by extending their goals and scope into other domains, leading to cross disciplinary research.”

The recent White Paper by PARADE (Partnership for Accessing Data in Europe) “Strategy for a European Data Infrastructure”<sup>16</sup> emphasises the impact that the ESFRI roadmap will increasingly have on the European e-Infrastructure landscape. “All of [the ESFRI projects] will require a high quality supporting e-infrastructure in one form or another. Some of them need predominantly high performance computing or grid resources, while others also need application development, and all certainly require data services and networking capabilities. There is an enormous potential for collaboration synergy in e-Infrastructure level of the existing and new research infrastructures – and at the same time, a major risk for overlapping work being done in several locations independently.”

E-ScienceTalk will play an important role in helping to lay the ground work for the collaboration synergy mentioned in the White Paper by disseminating the progress in the various ESFRI projects to the science community via GridCasts from relevant events, such as the 7<sup>th</sup> Concertation meeting in Brussels held in October. Subsequent events in this series will be coordinated by e-ScienceTalk on an annual basis. ISGTW and GridCast have already covered stories from ESFRI projects such as LifeWatch and will continue this trend during e-ScienceTalk as the impact of the ESFRI projects grows. The ESFRI roadmap and the e-IRG roadmaps are destined to become increasingly aligned, as echoed in the e-IRG White Paper 2009 by e-IRG chairman, Leif Laaksonen: “...the enthusiastic participation of the ESFRI communities [at the French e-IRG workshop] provided an opportunity for closer engagement of new user communities in the discussion about the e-Infrastructure. We hope that the new points of views, personal contacts and new approaches from this event form the solid foundation for reaching the key goal of the e-Infrastructure: the moment when e-Infrastructure is most often thought to mean ‘everyone’s Infrastructure!’” Through its dissemination of the work of the e-IRG in the GridBriefings, and the coverage of ESFRI projects via GridCast, GridCafé and iSGTW, e-ScienceTalk will again be well placed to report on the interlinked progress of these two roadmaps, as well as disseminating the outcomes of the e-concertation meetings.

With the advent of the ESFRI projects and their diverse and demanding range of ICT requirements, closer working between the e-Infrastructures such as grids, the networking layer and supercomputing networks will be essential. Supporting these efforts will also require a global scope, particularly for dissemination. While dissemination teams will be operating nationally through the NGIs, it is extremely important to provide a resource and linking point for the scattered dissemination teams nationally and internationally in order to achieve wider promotion and greater impact. GridTalk has already reached an extensive worldwide grid-interested audience, thanks to its strong design-led branding, high quality content writing and excellent networks of contacts. The work package producing the GridBriefings alone worked with over 40 projects in the course of a year, including non-European projects such as Open Science Grid and the Open Grid Forum. The GridGuide incorporates content from more than 25 separate sites, including institutions in Europe, South America and the US. In the first year of GridTalk, iSGTW reached readers from nearly 200 countries, speaking 115 different languages and produced articles covered 62 separate European projects and 46 from the US. E-ScienceTalk will aim to work with a similar numbers of projects, and the next section lists some of the projects that have already been contacted, have expressed an interest in the project or provided Letters of Support.

E-ScienceTalk will also contribute strongly to the spread of good practices by evaluating the key successes and impacts of both the GridTalk and e-ScienceTalk projects and by passing these important lessons learnt to other projects, using repositories such as the BELIEF Digital Library and OpenAIRE. E-ScienceTalk will also explore options for the long term sustainability of the products themselves beyond the requested EC funding. While preliminary investigations have been made during GridTalk into the sustainability of products such as iSGTW, GridCast, GridGuide and GridCafé, currently the possibilities for commercial support are limited. Various options, including commercial support, will however be explored during e-ScienceTalk in order to ensure long-term sustainability of the project’s outputs, including the GridBriefings, the videos, blogs, user generated content, images, graphics, documents, the websites for GridCafé, GridCast

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<sup>16</sup> “Strategy for a European Data Infrastructure, white paper, 28 September 2009, PARADE (Partnership for Accessing Data in Europe)

and GridGuide and the weekly publication iSGTW and its archives. E-ScienceTalk will produce a series of sustainability and impact reports during the project and the recommendations from these will be built into the on-going programme of work for each of the work packages, as well as being made available to other projects as a final overview report on dissemination for EU projects from WP4.

### ***B 3.2 Spreading excellence, exploiting results, disseminating knowledge***

E-ScienceTalk aims to disseminate the success stories and impact of grid computing and e-Infrastructures to members of the public, university students, researchers and policy makers. In order to achieve this aim, e-ScienceTalk will work with a wide variety of projects across Europe and beyond. E-ScienceTalk has received either expressions of interest or Letters of Support from the projects listed in the table below, stating that they are willing to use e-ScienceTalk as a dissemination channel and to contribute content to GridTalk's products.

E-ScienceTalk will work closely with the key projects shaping the current and future e-Infrastructures, including GÉANT, DEISA / PRACE, EGI, and EMI and is fully endorsed by EGEE, whose partnership with GridTalk has proved especially productive, with joint booths at events, launches of GridBriefings, GridCasts, press releases, publications and articles. These future collaborations will help e-ScienceTalk to achieve its aims to communicate the developments in the European e-Infrastructures clearly and authoritatively at a time of great change, when users and funders of the infrastructures will be closely tuned to progress in these areas. Working NGIs such as NGS, as well as local dissemination hubs such as EUAsiaGrid, ASGC and GridPP will also make an important contribution to these aims and the ultimate success of the e-ScienceTalk project.

REUNA will work with the project team to extend the reach of e-ScienceTalk to Latin America, particularly through collaborations with the ALICE2 project and CLARA. REUNA will also help e-ScienceTalk to widely disseminate the lessons learnt documents and reports, by translating them into Spanish. REUNA will also aim to translate GridBriefings and GridCafé content into Spanish on a regular basis, and host mirror sites where possible on the REUNA website in the e-Science section. The REUNA, GridCafé and GridGuide sites will also host mutual web links. REUNA will publicise e-ScienceTalk events and GridCasts, and iSGTW will advertise events and announcements from REUNA. In these and other ways, REUNA and e-ScienceTalk will support each other to disseminate grid and e-Science success stories and activities.

E-ScienceTalk has also agreed to work with projects such as ASTRA, eNMR, neuGRID and enviroGRIDS to disseminate the results of their work in the fields of musical instrument reconstruction, grid-enabled nuclear magnetic resonance, neuroscience and environmental studies via e-ScienceTalk channels, enriching the content available across e-ScienceTalk's products. As during GridTalk, e-ScienceTalk will work with many projects of this kind, the Letters of Support from projects proposed demonstrating just a snapshot of the potential collaborations possible.

E-ScienceTalk will also aim to work with standards bodies and projects such as OGF and SIENA for policy engagement. GridTalk and OGF-Europe signed a mutual collaboration agreement outlining principal areas of collaboration in early 2008 and OGF-Europe went on to contribute to the GridBriefing PERT team, provide content for iSGTW, publish extracts from GridTalk content in OGF-Europe monthly eAnnouncements and contribute to the GridCasts. SIENA, the successor to OGF-Europe, has agreed to collaborate on communication and outreach activities and each project will identify relevant ways to maximise outreach.

**Table 3.1 Projects expressing an interest in e-ScienceTalk**

<b>Project</b>	<b>Description</b>
ALICE2	ALICE2 (Latin America Interconnected to Europe 2) aims to encourage and support collaborative research within Latin America and between the region and Europe, through the strengthening of CLARA and its network infrastructure, RedCLARA, and the promotion of the creation and maintenance of research communities working on development-related themes.
ASGC	Academia Sinica Grid Computing (ASGC), one of the leading high performance computing and communications centres in Taiwan, provides advanced and progressive grid computing services to scientists from various domains in Asia Pacific countries.
ASTRA	ASTRA (Ancient Instruments Sound/Timbre Reconstruction Application) aims to reconstruct the sound or timbre of ancient instruments using archeological data. The technique used is physical modelling synthesis, a complex digital audio rendering technique that models the physics of the instrument.
BELIEF-II / III	Bringing Europe's eLEctronic Infrastructures to Expanding Frontiers, (BELIEF), aims to coordinate efficient and effective communication of results, networking and knowledge flow between Europe's e-Infrastructure projects and their users, promoting their development and exploitation worldwide.
CUE	The CUE (Creating Users of e-Infrastructures) project builds on the success of the EGEE and ICEAGE (International Collaboration to Extend and Advance Grid Education) projects and its strategic aims are to deliver a programme of dissemination and educational events; to develop novel ways of presenting e-Infrastructures to prospective users and communities; to increase the number of users of the European Grid Infrastructure and to transfer grid technology with its benefits to the non-scientific public and business private sectors.
DEISA	DEISA, the Distributed European Infrastructure for Supercomputing Applications, is a consortium of leading national Supercomputing centres that aims to foster pan-European world-leading computational science research.
DORII+	Development of Remote Instrumentation e-Infrastructure (DORII+) will develop virtual research environments that match user requirements, addressing ESFRI project needs and extending Distributed Computing Infrastructure platforms. The project will explore service oriented instrumentation and remote access to physical instruments as a service, identifying the required standards.
e-NMR	The e-NMR project aims to optimise and extend the use of the Nuclear Magnetic Resonance (NMR) research infrastructures through the implementation of an e-Infrastructure. This provides the European bio-NMR user community with a platform integrating and streamlining the computational approaches for bio-NMR data analysis.
EGEE	Enabling Grids for E-science (EGEE) is Europe's leading grid computing project, providing a computing support infrastructure for over 17,000 researchers worldwide, from fields as diverse as high energy physics, finance, earth and life sciences.
EGI-InSPIRE	The European Grid Infrastructure will establish a sustainable grid infrastructure in Europe. Driven by the needs and requirements of the research community, it is expected to enable the next leap in research infrastructures, thereby supporting collaborative scientific discoveries in the European Research Area (ERA).
EMI	The European Middleware Initiative (EMI) project represents the coming together of the three major middleware providers ARC, gLite and UNICORE together with others to work on harmonising middleware for deployment in EGI as part of the Unified Middleware Distribution (UMD).
enviroGRIDS	EnviroGRIDS addresses numerous environmental issues within the Black Sea catchment area by bringing together several emerging information technologies that are

	revolutionising the way we observe our planet.
EUAsiaGrid	The EUAsiaGrid project focuses on promoting EGEE gLite-based grid infrastructures in the Asia-Pacific region and fostering collaborative research across geographical and disciplinary boundaries.
GÉANT	The pan-European research and education backbone GÉANT and its sister networks TEIN3, EUMEDCONNECT2 and RedCLARA in Asia-Pacific, Northern Africa and Latin America provide the underlying network infrastructure for a wide range of grid enabled applications across the world.
GLOBAL-I/II	Global Linkage Over Broadband Links provides a virtual conference centre using advanced communication technologies and concepts to support the promotion of e-Infrastructure topics in Europe and around the world.
GRIDPP	GridPP (A Grid for UK Particle Physics) is the UK's contribution to the Worldwide Large Hadron Collider Computing Grid (WLCG). It oversees 17 sites across the country supplying resources to the grid. GridPP developed the Real Time Monitor which displays the work being processed by the grid in a user friendly manner.
Health-e-Child	Health-e-Child endeavours to respond to the increasingly pressing demand to fully integrate and exploit heterogeneous biomedical information for improved clinical practice, medical research and personalised healthcare.
neuGRID	The neuGRID project aims to establish a distributed e-Infrastructure interconnecting major clinical research centres in Europe, providing neuroscientists with advanced technologies to conquer Alzheimer's disease and neurodegenerative pathologies in general.
NGS	The National Grid Service (NGS) aims to enable coherent electronic access for UK researchers to all computational and data based resources and facilities required to carry out their research, independent of resource or researcher location. NGS is the nominated NGI for the UK in the EGI Council.
OGF-Europe (now SIENA)	OGF-Europe is committed to the broad adoption of open standards for innovation in Europe and worldwide. To this end, OGF-Europe has special emphasis on key areas of innovation for Europe, as well as focused seminars and international events.
OSG	OSG is a consortium of software, service and resource providers and researchers, from universities, national laboratories and computing centers across the US, who together build and operate the OSG project, which is funded by the National Science Foundation and the Department of Energy. OSG brings together computing and storage resources from campuses and research communities into a common, shared grid infrastructure over research networks via a common set of middleware.
PRACE	The Partnership for Advanced Computing in Europe prepares the creation of a persistent pan-European HPC service, consisting of several Tier-0 centres providing European researchers with access to capability computers and forming the top level of the European HPC ecosystem.
REUNA	REUNA, Red Universitaria Nacional (National University Network - Chile), is a non-profit private corporation made up of 15 Chilean universities, the AURA Observatory and the National Commission for Scientific and Technological Research (CONICYT).
ROSCOE	ROSCOE, Robust Scientific Communities for EGI, aims to create robust scientific communities that are self-supporting and self-sustaining. These Specialised Support Centers (SSCs) will be long-lived Virtual Research Communities that will coordinate their grid activities, safeguard the community's expertise, and provide specialized support. ROSCOE targets seven scientific areas: high energy physics, life sciences, computational chemistry and material science technology, Grid Observatory, complexity science, photon science and humanities including both large, mature communities and new, strategic scientific disciplines.
SAFE	SAFE (SSCs for Astronomy and Astrophysics, Fusion and Earth Sciences) is a joint project between three scientific communities, proposing to coordinate the implementation



	of the “Specialised Support Centre” concept in their respective communities.
SGI	The Science Gateways Initiative (SGI) aims to maximise the impact of the EGI by designing and delivering multiple science gateways in partnership with user communities in many different domains, in order to bring together appropriate tools and platforms, using open standards as a means to achieve interoperability between DCIs and other resources.
TAPAS	The Team to Assist Porting Applications to e-Science Infrastructures (TAPAS) project will identify and document ‘off the shelf’ use cases where the EGI grid provided competitive solutions for e-Science and will exchange such best practices with desktop grid and supercomputing grid providers, providing technological consultation, application porting support and training.
TeraGrid	TeraGrid is an open scientific discovery infrastructure combining leadership class resources at eleven partner sites to create an integrated, persistent computational resource. Using high-performance network connections, the TeraGrid integrates high-performance computers, data resources and tools, and high-end experimental facilities around the US.

E-ScienceTalk will also aim to work with other projects in a similar way, both at a national and European level, as well as with countries and regions outside Europe. Examples of the ways in which e-ScienceTalk will collaborate with these projects include:

- using case studies in GridBriefings, iSGTW articles and as examples on the GridCafé website;
- inviting projects to use resources from the GridCafé website to communicate with the public;
- displaying infrastructure sites on the GridGuide and through the Real Time Monitor;
- writing articles for iSGTW and contributing source materials and quotes to GridBriefings;
- circulating e-ScienceTalk’s products through their dissemination channels;
- asking project members to contribute to GridCasts, and aggregating blogs from the project;
- hosting joint booths at policy-related events;
- running policy-related events in their field or geographical area;
- listing events and announcements in iSGTW;
- coverage of events hosted by collaborating projects in iSGTW and GridCast;
- media sponsorship of events by iSGTW and GridCast.

### **Intellectual Property**

GridCafé and its French translation formed part of the background for CERN at the outset of GridTalk. Substantial work has been carried out on GridCafé by one of the GridTalk partners, APO, and this website is now agreed to be the joint intellectual property of CERN and GridTalk. GridCafé and its translated sites will therefore form part of the background for e-ScienceTalk on this basis.

Other intellectual property in e-ScienceTalk relates to the images, graphics and documents produced. The copyright for these will rest jointly with the consortium for e-ScienceTalk and can be used freely and in perpetuity by all the e-ScienceTalk partners.

The Real Time Monitor constitutes part of the background for Imperial College. Free access to this will be granted to the e-ScienceTalk partners for the lifetime of the project. The RTM is open source due to its World Wind license from NASA. All results will be added to SourceForge.com or a similar site.

## B 4. Ethical Issues

### ETHICAL ISSUES TABLE

	YES	PAGE
<b>Informed Consent</b>		
• Does the proposal involve children?		
• Does the proposal involve patients or persons not able to give consent?		
• Does the proposal involve adult healthy volunteers?		
• Does the proposal involve Human Genetic Material?		
• Does the proposal involve Human biological samples?		
• Does the proposal involve Human data collection?		
<b>Research on Human embryo/foetus</b>		
• Does the proposal involve Human Embryos?		
• Does the proposal involve Human Foetal Tissue / Cells?		
• Does the proposal involve Human Embryonic Stem Cells?		
<b>Privacy</b>		
• Does the proposal involve processing of genetic information or personal data (eg. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)		
• Does the proposal involve tracking the location or observation of people?		
<b>Research on Animals</b>		
• Does the proposal involve research on animals?		
• Are those animals transgenic small laboratory animals?		
• Are those animals transgenic farm animals?		
• Are those animals cloned farm animals?		
• Are those animals non-human primates?		
<b>Research Involving Developing Countries</b>		
• Use of local resources (genetic, animal, plant etc)		
• Impact on local community		
<b>Dual Use</b>		
• Research having direct military application		
• Research having the potential for terrorist abuse		
<b>ICT Implants</b>		
• Does the proposal involve clinical trials of ICT implants?		
<b>I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL</b>	X	

## **Annex 1: Letters of Support for E-ScienceTalk**