

e-ScienceTalk

FINAL IMPACT AND SUSTAINABILITY REPORT ON E- SCIENCE TALK PRODUCTS

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Abstract

This report summarises the impact of all e-ScienceTalk products including iSGTW, e-ScienceCity, e-ScienceBriefings, GridCast, GridGuide and the Real Time Monitor, as well as all social media channels and the e-ScienceTalk website. It concludes with our sustainability strategy for all e-ScienceTalk's products beyond the close of the project on July 31st 2013. This document also includes some ideas for investigation for an e-ScienceTalk2 project.

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IV. APPLICATION AREA

This document is a formal deliverable for the European Commission, applicable to all members of the e-ScienceTalk project and its beneficiaries and collaborating projects.

V. DOCUMENT AMENDMENT PROCEDURE

Amendments, comments and suggestions should be sent to the authors.

VI. PROJECT SUMMARY

Over the last 10 years, the European Commission and governments have invested substantial funds in distributed computing infrastructures. Scientists have access to state-of-the-art computational and data resources located around the world, putting European research into a leading position to address the greatest challenges facing us today, such as climate change, pandemics and sustainable energy. The advent of the European Grid Infrastructure, combined with the blurring of boundaries between grids, clouds, supercomputing networks and volunteer grids, means that a clear consistent source of information aimed at non-experts is now more important than ever, through dissemination projects that cross national boundaries.

Objectives:

- e-ScienceTalk will build on the achievements of the GridTalk project in bringing the success stories of Europe's e-Infrastructure to policy makers in government and business, to the scientific community and to the general public.
- e-ScienceTalk will work with EGI-InSPIRE and other collaborating projects to expand the scope of the existing GridTalk outputs, and to report on the interactions of grids with e-Infrastructures such as cloud computing and supercomputing.
- The project will explore options for the sustainability of e-ScienceTalk's products.
- e-ScienceTalk will produce a series of reports aimed at policy makers to disseminate key policy issues underpinning grid and e-Infrastructure development in Europe. The project will also coordinate e-concertation activities.
- The GridCafé, GridCast and GridGuide suite of websites will cover new topics and explore novel web technologies; they will integrate closely with GridPP's Real Time Monitor, combining live views of grid activity with the human aspects of computing.
- The growing weekly publication, International Science Grid This Week (iSGTW) will bring news and events to the existing and potential e-Science community.

VII. EXECUTIVE SUMMARY

The e-ScienceTalk project targets researchers, policy makers in industry and government, and the wider public at all ages through a suite of interconnected information products that fall under the e-ScienceTalk brand ‘umbrella’. As e-ScienceTalk is not connected to any specific project, it has been ideally placed to provide unbiased reporting of the successes of distributed computing across Europe and beyond.

The *D4.5 Annual Report on Feedback and Metrics*, published in June already assessed the quality of submitted research outputs and included some lessons learnt. The e-ScienceTalk project officially ends on July 30th 2013. This report focuses on the project’s impacts relating to both reach and significance for individual projects and on the whole e-infrastructure economy, society and/or culture. This document will also cover the strategies for sustainability for each of e-ScienceTalk’s range of products.

The project has been enormously successful in reaching a wide audience through its social media channels (@isgtw and @e_scitalk. It has amassed 4,000 followers, and the quality of followers is also exceptional with a large number of influential followers with wide spheres of influence. e-ScienceTalk has signed a Memoranda of Understanding with 19 projects. The project team has also developed spin-off training and consultancy in a number of different areas, which was beyond the scope of the original project (e.g. blogging, science writing, event logistics, media outreach and newsletters). The project has also successfully coordinated two e-concertation meetings. The team are currently developing a *Guide to Dissemination* for the EC, and have also written a peer-reviewed academic paper on measuring the impact of e-science/e-infrastructure outreach.

E-ScienceBriefings continue their expanding coverage of e-infrastructure and e-science policy-related issues for policy makers in industry and governments throughout Europe. Although more of a niche publication, they are well-known within the community and highly regarded as a quick reference guide to topics. In the last year and a half, there have been 17,281 downloads.

The GridCafé has been expanded by integrating it within a larger ‘e-Science City’. The new website is gradually attracting more interest and all e-science topics are fully covered (e.g. HPC, volunteer computing, data and cloud technologies). GridCasts continue to support the sense of community for participants in e-infrastructure and distributed computing across the globe, with traffic increasing year on year. It has attracted many more readers with highest views taking place in May 2013. To maintain visibility in the next year, five Star Bloggers have been recruited to keep GridCast active with European Grid Infrastructure (EGI) dissemination team taking over responsibility for coordinating major GridCasts. There is evidence to show that the blog is also regularly read by the mainstream computer science press. GridGuides have seen an increase in the number of sites covered, and is now been integrated into e-ScienceCity. The Real Time Monitor is increasingly being used as a visual tool for educators explaining the potential of the grid. During e-ScienceTalk, approximately 30,000 people have witnessed the wonders of the RTM at conferences. Towards the end of 2013, the RTM will be adopted by the London Science Museum for its LHC *Collider* exhibition, which means it could be potentially seen by 1.5 million people — 50 times the number that have seen it at e-science conferences.



Identified by e-ScienceTalk team members as one of the most successful products, International Science Grid This Week has seen its readership increase to over 3,000 followers on social media and 8,770 subscribers. Traffic to the site has quadrupled. The project has also successfully negotiated funding for the iSGTW Editor at CERN in Geneva and a US Desk Editor at Indiana University.

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1 INTRODUCTION

e-ScienceTalk's main aim is to build on the significant achievements of GridTalk in bringing the success stories of Europe's e-infrastructure to its audiences. The key challenges are to work with the new distributed computer e-Infrastructures and maintain and enhance the quality of existing outputs, while reaching out to new disciplines and regions. Outlined below are some of the key objectives of the e-ScienceTalk project.

- To disseminate the success stories and societal impact of grid computing and e-Infrastructures to researchers throughout Europe and beyond.
- To engage policy makers in grid and e-Infrastructures.
- To raise awareness amongst the general public of the existence of e-Infrastructures and how these networks contribute to the European Research Area.
- To communicate good practices and key successes to other projects.

1.1 e-ScienceTalk objectives

e-ScienceTalk's aims, as outlined in the Description of Work [R1], are 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. Influential policy makers in European science, government and business.
2. European scientists in a position to develop or exploit grid computing and e-Infrastructures.
3. Members of the public in Europe and worldwide.
4. University and final year high school students i.e. the future users of the infrastructure.

1.2 Target audience and main messages

The project scope goes beyond the dissemination of grid computing to cover the broader e-Infrastructures e.g. volunteer, cloud, high performance computing. The principal messages communicated in the project have been:

- Grids and e-Infrastructures are enabling scientists in Europe and around the world to achieve results and make 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 through the Digital Agenda.
- 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 had, 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.

1.3 How does e-ScienceTalk measure its impact?

During e-ScienceTalk's first year, the project's outputs and outcomes were recorded through tracking various metrics and by monitoring online traffic. This information collectively provided evidence for the project's wide global reach. At the end of year one (PY1), the project team modified the metrics and adapted the evaluation methodology to capture the significance of the project's outputs and outcomes, going beyond assessing whether the "aims and measurable objectives of the project have been achieved," and committing to measuring longer-term impacts.

e-ScienceTalk has a diverse audience including influential policymakers in government and business, scientists and the general public, and therefore requires an extensive and varied strategy for collecting feedback. Online engagement can provide an enormous amount of data, and e-ScienceTalk has attempted in this document to judge our reach and the impact of that engagement, and the significance. Our impact capturing strategy was to evaluate and articulate effects for each product and its target audiences (see Figure 1).

Our evidence for 'Impact' ranges from broad-based quantitative measures (number of visitors, number of links to the resources, frequency of being mentioned in the mainstream media, etc.) to more richly-detailed qualitative measures (gathered via focus groups, interviews, user feedback etc.). No single measure reflects "the impact" of all products; instead the combination of empirical evidence can be used to provide a broader idea of the various types of impacts these resources are having as a collection. Also, many measurement tools are geared towards advertising or e-commerce.

Two resources have helped us improve our strategy in PY2. JISC is the UK's expert on information and digital technologies for education and research. e-ScienceTalk has followed JISC's guidance for measuring and reporting impact, which recommends using a combination of statistics, metrics, case studies, illustrative examples and attributed testimonials, and to accumulate evidence throughout the process [R2]. A report developed by the museum sector in the UK, Culture 24, Let's Get Real: 'How to Evaluate Online Success?' [R3] was also helpful in providing guidance on website analytics. Members of e-ScienceTalk also attended the British Science Association Conference in May 2012, to gather ideas for evaluating the impact of online engagement.

The project routinely carries out formative and summative evaluations during both conception and development of its online services using a number of different technologies and methodologies. Our online resources have been built based not on assumptions about potential uses and users, but on substantive input from our stakeholders and audiences.

1.4 Quantitative Methods: Overall Project Metrics

A summary of the overall project metrics for PY3 for e-ScienceTalk is listed below (see Figure 1) adapted from last year's *D1.4 Annual Impact and Sustainability Report* [R4]. All metrics can be found in the *D4.5 Annual Report on Feedback and Metrics* [R5], and are monitored on a three-month basis and are reported in quarterly reports. The metrics were reviewed last year for the *D4.4 Annual Report on Feedback and Metrics* [R6] as the project had exceeded many of its final project end targets. Quantitative data is valuable as it provides numerical data allowing for yearly comparisons. This report compares the first nine months of PY2 to the same period in PY3. Figure 2 shows an overview perspective on other activities for measuring impact for PY2 and PY3.

Figure 1: Table to show PY3 e-ScienceTalk main metrics.

Work Package	Metric no.	Description	Target Metric	Comments
WP1	1.1	Projects covered	40 per year	Increased from 30
	1.2	Reports and briefings published	4 per year	Unchanged
	1.3	Countries where reports or briefings are distributed	30 per year	Unchanged
WP2	2.1	Sites on GridGuide	75	Unchanged
	2.2	Bloggers contributing to GridCasts	5 per GridCast	Unchanged
	2.3	GridCasts per year	4 in Europe per year, 1 outside Europe	Increased from 2 in Europe
	2.4	New areas in GridCafé	3, one new area per year	Unchanged
WP3	3.1	iSGTW subscribers	30% increase	Including social media followers
	3.2	Articles on European projects	50 per year	Unchanged
	3.3	Projects in the iSGTW/GridCafé resources section	150 in total	Increased from 100
	3.4	iSGTW printed materials distributed	1000 in total	Unchanged

e-ScienceTalk gathers data via a number of different methodologies such as surveys, website analytics and various social media measurement tools.

1.4.1 Surveys

Online surveys captured quantitative data using both close-ended and ranking-type questions. As e-ScienceTalk largely provides online communications channels and products, web-based surveys are an appropriate mechanism for capturing responses. However, there are various disadvantages to online surveys. For example, there can be technical issues, problems of partial responders, or general online survey fatigue from responders. Online surveys have been incorporated into Volunteer Garage and GridCafé. ISGTW has also sent out a Readership survey to its users. Questions have been adapted to capture unintended and anticipated impacts.

1.4.2 Website analytics

Google analytics is an easy to implement, broad-brush measure of the impact of a website that will provide evidence of changing patterns, and hopefully growth in use. Since September 2010, website traffic data has been closely monitored through Google analytics for all websites within the e-ScienceTalk project (e.g. GridCast, GridCafé, e-ScienceCity, GridGuide, iSGTW). This open-source measurement tool provides a wealth of information, not just about reader numbers for individual pages but also the paths readers take through the website, geographical location, technical information, and many other metrics. Website statistics can also offer an insight into users' behaviour and therefore provides e-ScienceTalk with data for enhancing visitor experience and formulating marketing campaigns. In 2012, Google analytics has added a variety of features (Real Time Reporting and Mobile Reporting). Flow visualization is also a highly sophisticated tool for graphically showing how visitors navigate through your site.

1.4.3 Webometric tools

Webometrics is another quantitative measure that relies on counting how many pages and domains link to a particular website. "Incoming links" provide a snapshot of the visibility of a website. Google's PageRank algorithm, a webometric indicator, suggests it is a good tool for achieving the goal of evaluating performance and activity.

1.4.4 Social Media Measurement Tools

The global adoption of social media tools and platforms has increased dramatically over the last two years. Twitter claims that activity has increased from 27 tweets per day (January 2010) to over 340 million Tweets per day (March 2012). Keeping up-to-date with this trend, e-ScienceTalk has grown its social media presence in the last year. Twitter tools (such as Tweetreach¹) and Facebook Insights have been used to monitor our activity. Due to the fact that social media channels make direct engagement possible by users, feedback is encouraged and inevitable, and can be used as a basis for making improvements and for discovering users' preferences.

Off-site web analytics refers to web measurement and analysis regardless of whether you own or maintain a website. It includes the measurement of a website's potential audience (opportunity), share of voice (visibility), and buzz (comments) that is happening on the Internet as a whole. The project team assesses e-ScienceTalk's social network's true reach (*numbers influenced*) and amplification (*a measure of your influence*) using various online tools such as Socialmention² and Klout³. e-ScienceTalk can also examine social engagement through a number of Google analytics reports.

¹ <http://tweetreach.com/>

² <http://www.socialmention.com/>

Figure 2: Overview Perspective on Programme Activities for Measuring Impact using quantitative analysis

e-ScienceTalk product	Metric
e-ScienceTalk	<ul style="list-style-type: none"> • <i>Google analytics</i> – page views/unique visitors, referrals from the e-ScienceTalk website to other e-ScienceTalk sites • <i>Twitter</i> – number of followers, mentions and numbers and types of tweets • <i>Klout</i> – monthly scores • <i>Email</i>- Deliverables submitted, milestones agreed, late Deliverable and Milestones • <i>Production</i>- e-ScienceTalk materials produced • <i>Alphagalileo</i>-Media releases issued • <i>Google Alerts</i>- Press cuttings • <i>Counting</i>- Events attended, media partnerships at events, number of MoUs signed • <i>Twitter/Facebook</i>-Social media subscribers
e-ScienceBriefings	<ul style="list-style-type: none"> • <i>Counting</i>- projects covered, reports and briefings published, countries where reports or briefings are distributed, policy articles published, printed policy reports circulated per briefing, policy events organised, attendees at e-ScienceTalk organised policy events, policy events attended by e-ScienceTalk
GridCafé/e-ScienceCity	<ul style="list-style-type: none"> • <i>Google analytics</i>- page views/unique visitors, demographics • <i>Calculations</i>-Change in unique visitors to the GridCafé website, ratio of page views to visitors for the GridCafé website, • <i>Counting</i>-sites on GridGuide, areas of GridCafé
GridCast	<ul style="list-style-type: none"> • <i>Google analytics</i> – page views/unique visitors, demographics, unique visitors to the GridCast (% new), length of time spent on the GridCast • <i>Counting</i>-bloggers on GridCast, GridCasts per year, total blog entries, podcasts, • <i>YouTube</i> number of subscribers and viewers
GridGuide	<ul style="list-style-type: none"> • <i>Google analytics</i> - page views/unique visitors • <i>Counting</i>-sites on GridGuide (EU and US), GridGuide sites on RTM
Real Time Monitor	<ul style="list-style-type: none"> • <i>Google analytics</i> - page views/unique visitors • <i>Counting</i>-countries on the RTM, numbers of delegates at events demo-ing the RTM

³ <http://klout.com/home>

iSGTW	<ul style="list-style-type: none"> • <i>Counting</i> - iSGTW subscribers, articles on European projects, projects in the iSGTW/GridCafé resources section, iSGTW printed materials distributed, issues published, US articles published, worldwide articles published, marketing materials distributed • <i>Google analytics</i> – page views/unique visitors, demographics, social engagement (shares, G+), countries or territories visiting the iSGTW website, time spent on the site per visit • <i>Klout</i> – monthly scores • <i>Social mention</i> – comparison with competitors etc. • <i>Facebook analytics</i> - numbers ‘Likes’/followers, growth rate • <i>Zoomerang</i>-survey responses • Twitter/Facebook, Google+- Social media subscribers, stories shared on social media • Third party tools e.g. Social Bro⁴, Hootsuite⁵
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1.5 Qualitative methods for assessing feedback

Qualitative methods can be helpful for both formative and exploratory evaluation. e-ScienceTalk used a number of different approaches accounting for the strengths/limitations of each perspective. Our assessment toolkit included focus groups, feedback sessions, in-depth interviews, open-ended questions in surveys, and both unsolicited and solicited feedback. Figure 3 shows some of the questions we hope to answer and some of the qualitative research methods. Some of our methods are outlined below:

1.5.1 – Feedback sessions

During the project’s second year, one-to-one feedback sessions were organised with participants at several e-science and computing conferences. On an *ad-hoc* basis, additional informal anecdotal feedback from delegates was also recorded by e-ScienceTalk to help improve the individual resources.

1.5.2 – Surveys

An annual survey of iSGTW’s readership was conducted in May 2011, July 2012 and May 2013 to give readers a chance to share their opinions on the online magazine’s layout, navigation and content. Participants filled in a multiple-choice survey and provided commentary in open-ended questioning using an online tool called Zoomerang⁶. For the last six years, iSGTW has conducted an annual survey of its subscribers to keep up-to-date with its readership’s evolving interests, and to develop the scope of the publication. Short surveys were also developed for both Volunteer Garage and GridCafé.

1.5.3 – Expert advisory panels

e-ScienceTalk consults with expert advisory boards, and the project team values their collective expertise in facilitating decision making on coverage of controversial or complex technical topics. An international advisory board (comprised of representatives of the funding partners with expertise in

⁴ <http://www.socialbro.com/>

⁵ <https://hootsuite.com/>

⁶ www.zoomerang.com

communications and management) oversees iSGTW. The Editor of iSGTW regularly liaises with the Advisory Board, which directs the content balance and mission for the publication. The panel also previews the online magazine before the publication date. The e-ScienceBriefings policy advisory board includes policy experts from the e-Infrastructure Reflection Group, and representatives of major e-infrastructures such as the European Grid Infrastructure and GÉANT.

1.5.4 – Unsolicited feedback

Throughout the project’s first year, unsolicited feedback has been gathered from a variety of sources. This type of commentary provides meaningful examples of how individuals in the community are using e-ScienceTalk products and how each service is making a difference. For example, unsolicited emails or comments to the iSGTW editors can give an indication of how articles are perceived, and if any actions were taken as a result or knowledge gained (e.g. discovery of new products or tools). Feedback and insights have also been gleaned through regular monitoring of website comments, Google+ shares, and recording both ‘unsolicited praise’ and ‘constructive criticism’ from email correspondence.

1.5.5 Interviews

e-ScienceTalk has also set up a number of interviews with MoU partners and also users of some of our products such as iSGTW. Interviews were carried out in November/December 2012.

1.5.6 Analysis of comments

e-ScienceTalk also analyses the sentiment of comments on the iSGTW website.

Figure 3: Our qualitative methods for capturing intended and unintended impacts.

	Year 1	Year 2	Year 3
e-ScienceBriefings			
How do briefings aid policy makers in European science, government and business?	Face-to-face at meetings		Final year survey to policymakers (email)
To what extent respondents are aware of e-ScienceTalk’s policy documents. How do readers use the briefings?	Canvassing at meetings	Canvassing at meetings/ mailing list survey	Final year survey to policymakers (email) /In-depth interviews
Do the briefings increase visibility for projects? How has it helped the projects?			Survey case studies
GridCast/@e_scitalk			
Is the blog/twitter helping to build a sense of community? In what ways is the blog helping the e-science community?	Unsolicited/Solicited feedback	Survey (June)/EGI Community Forum focus group	Focus groups/Survey (March)

RTM and GridGuide			
Is the GridGuide helping to foster cross pollination of expertise?	Unsolicited feedback	Solicited feedback	GridGuide survey/feedback
How is the RTM helping with outreach?		RTM user analysis	RTM User Interviews/Surveys at meetings
e-ScienceCity/GridCafe			
Are our products deepening the understanding of grid and cloud technologies amongst researcher?	Feedback scientists/science communicators		Survey
Do people find the website(s) useful?		Volunteer Garage/GridCafe online surveys	Focus groups
iSGTW			
Journalists from mainstream media will have established relationships with those within e science through iSGTW		iSGTW media 'pick' up analysis	Interviews with media sources
Centralises the communication effort and increase the visibility of e-science		MoU Thanks you emails	MoU interviews
Does iSGTW provide assistance to the community in finding future partners /collaboration?		iSGTW Survey	Interviews with authors (Top 10)
Does iSGTW help scientists informed on the latest technologies in e-science?		iSGTW Survey	Interviews with readership

1.6 Building our strategy for sustainability

There are many factors to consider when planning for sustainability. At the end of our first year, we developed a comprehensive impact measurement strategy.

- Evaluate the impact of each product. Quality assurance, measuring impact and continuous evaluation throughout the project of each product ensures that the finished resource is of value and relevance to its users, and will help to identify further development or re-purposing opportunities. It will be important to establish which products are of most value. The project has also identified barriers for increasing our impact, and some recommendations for overcoming these obstacles.
- Examine the practical steps we can take to help ensure each e-ScienceTalk resource is sustainable. Identify similar projects and how they became sustainable.
- Investigate the level of on-going maintenance that will be required to sustain the resource.

- Examine the options available for financing sustainability and partnerships. Clearly, the question of finance is the factor that will have most influence, and that will ultimately determine sustainability.
- The project also aims to produce an overview guide to dissemination for EU projects, based on the extensive experience gained and lessons learnt during both phases of the project.

2 E-SCIENCETALK PRODUCTS: BACKGROUND, METRICS AND IMPACT

2.1 *GridCafe and e-ScienceCity*

2.1.1 Background

The GridCafé website (gridcafe.org) was re-designed by the GridTalk project after being inherited from CERN (gridcafe.org/version1/index.html). The website was designed with the aim of explaining to a non-expert audience in a simple and stimulating fashion ‘what grid computing is and what it could soon be.’ e-ScienceTalk has expanded GridCafé’s scope and appeal through new media channels keeping it up-to-date and at the cutting-edge of grid and e-science dissemination.

The e-Science City (e-sciencecity.org) website was launched at the 9th e-Infrastructure Concertation meeting in Lyon in September 2011, and includes new content areas such the Cloud Lounge (cloud-lounge.org) and Volunteer Garage (volunteer-computing.org). The e-ScienceCity region is also hosted in 3D on the New World Grid, a virtual world run by the non-profit organisation Virtus, based on OpenSim technology. The virtual world has also been explored as an e-learning environment.

During PY3, four different areas were created: HPC Tower (hpc-tower.org/), Data Park (e-sciencecity.org/data-park), People Bay (e-sciencecity.org/people-bay) and news feed aggregator, Communication Centre (e-sciencecity.org/communication-centre). The forum/InDebate section is now linked to a regularly-updated e-ScienceCity Facebook page (<https://www.facebook.com/esciencecity>). People Bay contains profiles of people in grid and distributed computing, and these sites were migrated from GridGuide and this new section is called GridPort. E-ScienceCity is now complete.

2.1.2 Product metrics

The e-ScienceTalk Description of Work [R1] recommended measuring a number of key metrics to evaluate the impact of GridCafé and e-ScienceCity. Our output target was to cover new content areas, such as cloud computing in the Cloud Lounge and to develop a new citizen cyberscience area within e-Science City, in Volunteer Garage. One key metric was the number of new areas developed for e-ScienceCity.

Google analytics software was used to keep track of unique visitors and page views. The number of unique visitors provides a useful metric, as an indicator of ‘reach’, or size of the site’s audience. Page views provide an indication of how interested people are in the site. Other data that could provide insight was monitored, including time spent on site and visitor demographics, among other factors. We also have taken into consideration that there is a redirection from the old GridCafe site (gridcafe.org/version1/index.html) to the current version, and this could have an effect of traffic.

Before developing new content sections for e-ScienceCity, a formative evaluation was undertaken to understand and address the target communities’ interests and needs. This was usually carried out

through regular face-to-face discussions and focus groups. During PY2, we used a post-development web-based survey to evaluate the impact of the educational resource on its target audience. e-ScienceCity has also been assessed via a post-development focus group carried out with Physics A-level students from Simon Langton Grammar School for Boys in Canterbury. Before developing HPC Tower, a focus group was conducted at Queen Mary, University of London among post-doctoral researchers and PhD students. In June 2012, the project also set up a drop-down survey on the GridCafé site to gather feedback⁷. In March 2013, another drop down online form⁸ was developed to gather more views from users on e-ScienceCity. All unsolicited comments have also been gathered from emails via the ‘Contact Us’ page.

2.1.3 What has been the impact of GridCafé/e-ScienceCity?

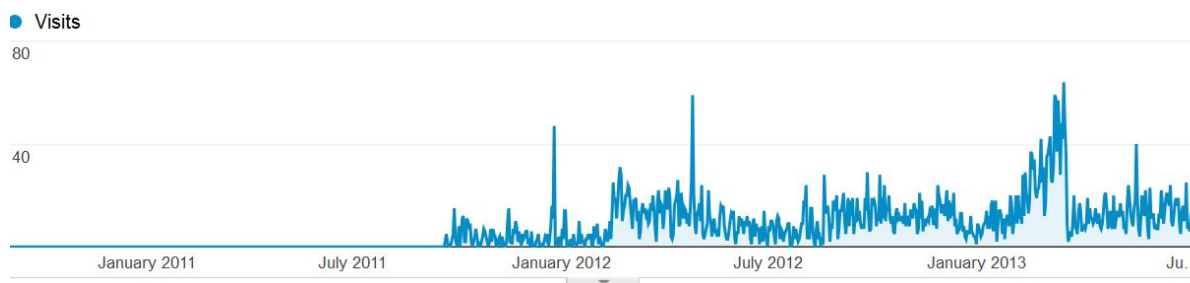
GridCafé is still one of the few places where grid computing is presented without bias to a specific grid or project, and continues to be widely used as a reference by grid project websites. At the end of PY2, the website’s Google PageRank was 7.0 due to the high number of links to the site: 4,959 (Source: backlinkwatch.com). In 2013, the team migrated GridCafé to e-ScienceCity, which now has a Google PageRank of 6.0.

It is difficult to accurately track trends in web traffic due to two developments. There was a temporary dip in traffic to GridCafé due to a change in policy on link forwarding by CERN. In February 2013, GridCafé was fully migrated into e-ScienceCity, which also makes comparative analysis less straightforward. During the summer of PY2, a proactive marketing campaign was devised by an intern at QMUL. Full details can be found in the report, *D2.5 - Final dissemination report on GridCafé, GridGuide, GridCast* [R7]. This included a number of promotional activities (e.g. a writing content for a dedicated Wikipedia page; designing a Facebook page; scheduling promotional tweets; introducing more internal hyperlinks and search engine optimisation; developing an offline school resources and filming a video to advertise grid computing resources at QMUL).

Expanding reach

- Since September 2011, the website has received **20,473 page views** and **5,424 unique visitors**. The e-ScienceCity website experienced its highest viewing figures in January 2013 (PM29) with 2,000 views. Interest is climbing (see Figure 4a/b below).

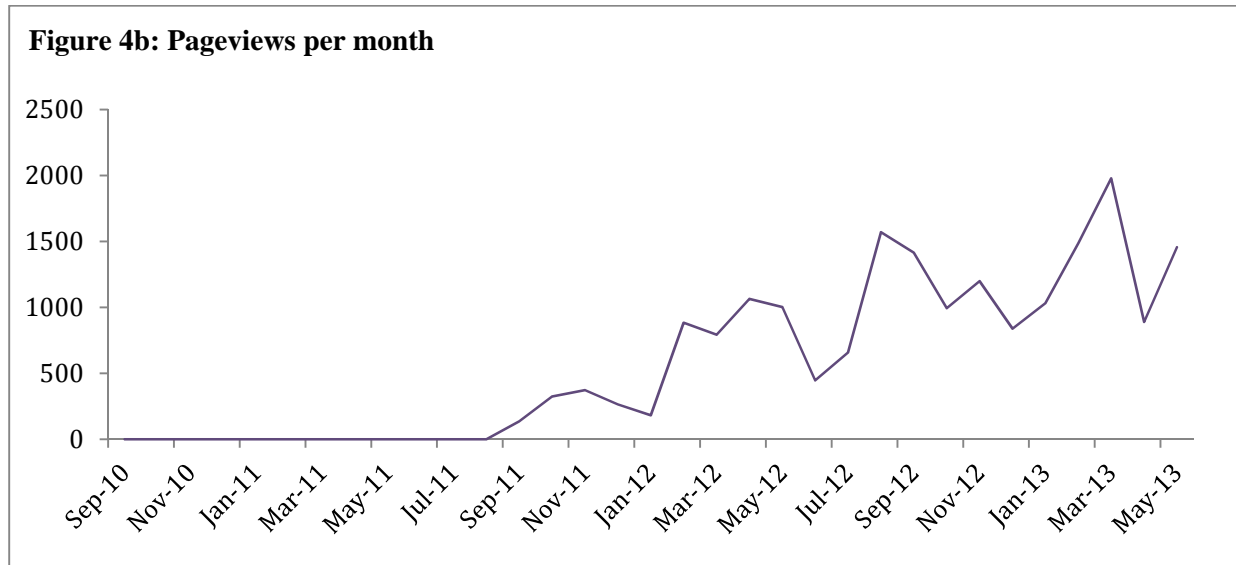
Figure 4a: Visits (e-ScienceCity)



⁷ <http://www.gridcafe.org/survey.html>

⁸ <https://docs.google.com/forms/d/1IRyGzQdM8j3ZI41B-rt1Va-JVsrn6QGutHq4RcL0NM/viewform>

Figure 4b: Pageviews per month



Widening geographical area

- Visitors come from a **wide geographical** area and so the website has a worldwide appeal (1. US 2. UK, 3. France, 4. India, 5. Switzerland, 6. Netherlands, 7. Mexico, 8. Spain, 9. Canada and 10. Columbia).

High-level engagement

- Visitors are **highly engaged**- 77% of page views visits read more than two pages (see Figure 5) and stay **almost four minutes** on site (03:56)

Actions taken after visiting the site

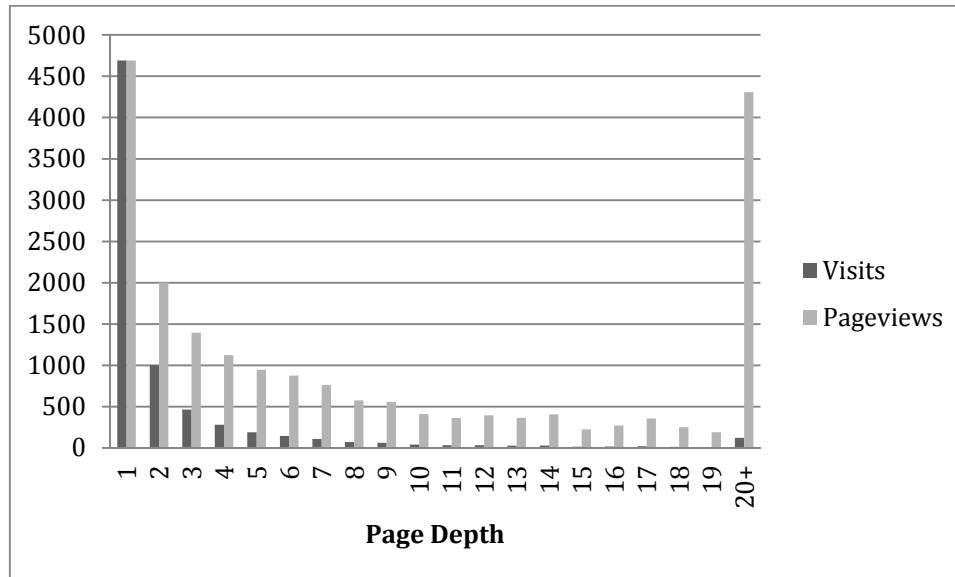
- GridCafé web statistics also reveal that a large percentage of traffic is direct, but most visits to e-ScienceCity are referrals and **direct traffic is still low** (15.2%). This indicates that the website is not as well-known as GridCafé. Google analytics shows that a few people have saved e-ScienceCity to their list favourites.

Significance of the site

- In a pop-down online survey, visitors said that the content on the website had led them to information and other sources that were useful. The results are discussed further in the Year 2 feedback report [R4]. Undergraduates at Queen Mary, University of London offered their first impressions on e-ScienceCity in a closed survey⁹ towards the end of the project in July 2013. Two questions related to impact. We asked whether e-ScienceCity make you want to explore further. All five respondents said ‘yes’. This implies that the website is **inspiring people to explore more and gaining a deeper insight into the areas**. More detailed feedback can be found in the *D4.5 Annual Report on Feedback and Metrics* [R5].

⁹ <http://www.surveymonkey.com/s/8KQ227P>

Figure 5: Engagement



Useful for educational resources

In June 2013, e-ScienceTalk conducted interviews with our MoU partners. More details can be found in the report, *D4.5 Final Feedback and Metrics Report*. MoU partners were asked what the most useful e-ScienceTalk products were (see Appendix II). Unedited quotes appear below:

- Kitti Varga, research associate at MTA SZTAKI, Hungary, looks after the dissemination of four EU projects (*SHIWA*, *GlobalExcursion*, *ER-Flow*, *SCI-BUS*): *Yes, I've seen e-ScienceCity and I like it. If I want to show someone something about e-science that is definitely the best place to go.* (Date:20.06.13)
- Barbara Kieslinger at the Zentrum für soziale Innovation from Global Excursion said: *Your online resources have been integrated (e.g. GridCafé) on to the website and we've included that for students. This is probably been the most useful product from our side.*
- Emidio Giorgio from the European Middleware Initiative (EMI) said: *GridCafé is also very useful especially when I had to do some introductory talks on the grid and I have found very good **inspiration** and materials there. The most useful sections were five big ideas and building grids. This is because even if I am explaining concepts that I know well, the way they are explained on the website is more inspiring to non-technical people.* (Date:24.06.13)

2.1.4 Sustainability

Stefan Janusz carried out an internal survey among e-ScienceTalk team members for the *D4.5 Annual Report on Feedback and Metrics* [R5]. e-ScienceCity was ranked as the 4th most important out of the 6 products for a 'future' e-ScienceTalk2. Surveys have identified a number of positive features and feedback has been largely positive (e.g. high quality content, cross-disciplinary appeal).

Google AdSense was investigated to keep the site operational but deemed not suitable as the site should maintain an unbiased perspective independent of commercial providers.

All sections of e-ScienceCity have been built, but to sustain interest heavy advertising and marketing would be needed. This was deemed unnecessary given the nature of the resource (i.e. it is largely searched for by those already somewhat interested in e-science) and also lifespan of relevance is relatively short (i.e. five years +). The website needs to be found easily by individuals looking for the information and therefore efforts to explore and maximise SEO have been carried out during PY3. A system has been designed to avoid duplicate content (same page with different URLs) to optimise SEO.

Now that the site is complete, maintenance in terms of updating content is relatively low, and an advance payment in web registration for the next five years has been organised by WP1. Plain static versions of the websites that do not use databases/scripts have also been developed so that the resource remains online in an archive. The e-ScienceCity website has also been modified in order to host external domain names and internal URLs. A caching system was also developed in order to obtain a fully stand-alone version of the website, which could work on an USB stick.

The site makes clear that material should be freely reused, distributed and disseminated subject to the Creative Commons Copyright notice. Creative Commons-Attribution-ShareAlike has been adopted to maximise dissemination and ensure that derivative content continues to be freely available for further use to others. A Google alert for 'e-ScienceCity' has been set up to monitor reuse of any material.

2.2 GridCast (and GridTalk YouTube Channel)

2.2.1 Background

GridCast (gridcast.org) combines blogs, videos and interviews from major grid computing, e-infrastructure, and policy-related events providing scientists with an opportunity to blog and record podcasts about their experiences. The site was initially created before the start of GridTalk by Francois Grey, and was redesigned and re-launched in September 2009. GridCast is now more heavily promoted at conferences through Twitter, and covers a broader range of topics (e.g. clouds, volunteer computing etc.) and regions (e.g. Latin America, USA, Asia). GridCast now also contains a widget that shows our tweets in real-time.

2.2.2 Product metrics

In order to measure the impact of the GridCast blog several key metrics and targets were outlined at the start of e-ScienceTalk. The project measures the average number of bloggers contributing to GridCasts (target: 5 for each GridCast) and the number of GridCasts each year (target: 4 in Europe per year, 1 outside Europe). This metric was increased from two in Europe. In addition, e-ScienceTalk also tracked the number of bloggers, blog entries and podcasts, which are all meaningful, as they show the quality of the relationships being built online. These engagement metrics provide an indicator for measuring the level of GridCast visitor involvement, attention or commitment. General activity metrics such as page views and site visitors were also tracked through Google Analytics. YouTube analytics has also been examined more closely this year.

e-ScienceTalk also implemented a more coherent strategy for gathering feedback from GridCast bloggers. The GridCast team sent out an email titled, ‘2012 Year-end Summer Update’ to 100 GridCast bloggers. Bloggers were asked whether they enjoyed the experience and if anything had happened as a result of their blog post (e.g. contacts made, comments, feedback etc.). The email also provided the blogger with feedback i.e. page view statistics. In May 2013, a second yearly update was sent to all bloggers. e-ScienceTalk also organised two focus groups during the EGI-Community forum. Details on methodology were provided in D4.4 *Annual Report on Feedback and Metrics* [R6]. Some of the questions related to sustainability (i.e. “What sections do you like most in GridCast?”).

2.2.3 What has been the impact of GridCast?

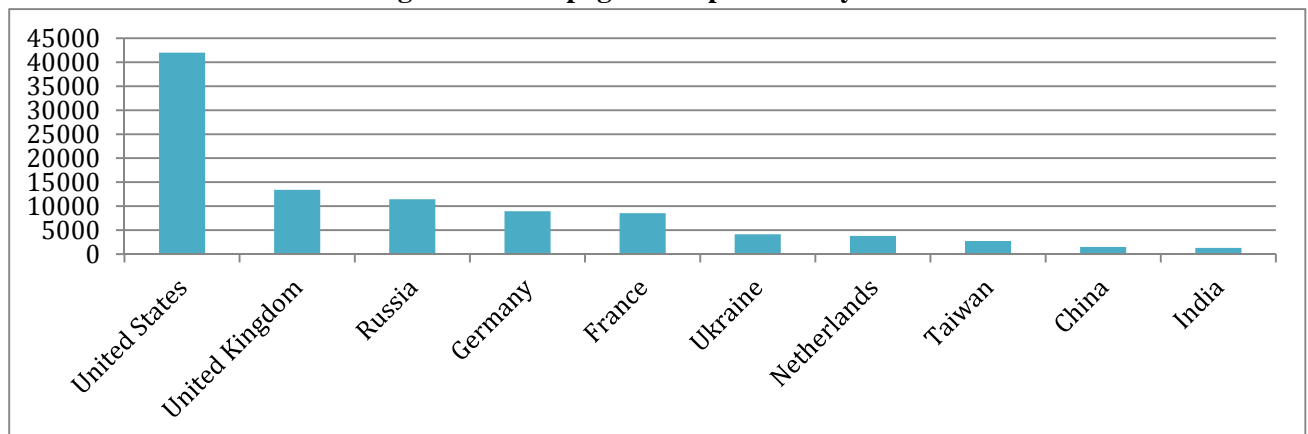
Wide reach

- During the lifetime of GridCast, the blog has received **162,575 page views** and there have been a total of **1,299 posts** (last accessed on July 16th 2013). Interest in the blog has increased throughout the project and has been very high in the final year with 30,000 page views and a total of 29,141 video views.

Reach extends beyond Europe

- The US, UK, Russia, Germany and France were the top viewing countries of the GridCast blog (see Figure 6). There is also a growing interest from other countries. The audience is becoming **more diverse and international** with readers in Brazil, Columbia, and India.

Figure 6 shows page views per country



Major growth in the last three years

- GridCast is **more popular than ever** (see Figure 7). This is due to the growing archive. Blog posts tend to cluster around events, and this is also when peak traffic is seen, as blog posts are promoted on Twitter and Google+.
- GridCast has recorded very high page views during the final project year. In fact, views during Q11 were exceptional – PM33 had the highest GridCast page views of the entire project; PM32 and 31 were 2nd and 3rd highest, respectively. In May 2013, there was an all-time high record of page views (7,103 page views).

Long-tail of interest

- A more detailed analysis undertaken in PY2 and PY3 indicates that page views for individual posts relating to events continue to increase after the event, creating a **'long tail' of interest**. Some of the most popular articles are from 2-3 years ago (e.g. Catherine Gater's blog post entitled, *Bird-brained computing at TeraGrid*¹⁰, has had 6,129 page views).

Figure 7 shows page views from GridCast's early days to present day



Our videos: our USP

- One of the project's unique selling points is the high standard of videos. During GridTalk a YouTube channel was set up on 3 Jun 2008. The GridTalk YouTube channel has grown by 40% (i.e. subscriber numbers) this year and the cumulative number of video views is now 18% higher than last year (242,940). As a reference for comparison, this is 10 times higher than HPC Wire's YouTube Channel video views, 23,142 views (joined 6 Aug 2009).
- The most popular video, published in May 2011 (FET11 - ECCE Human Robot presented by Hugo Gravato Marques), has received so far, 165,124 views, 178 shares, 78 comments, and 234 likes. The video went viral after it was **picked up and used in an article by a UK newspaper, *The Daily Mail*** on the 24th June 2011 (see Figure 8)¹¹.
- The other top rated video 'neuGRID, A Grid Brained Infrastructure to understand and Defeat Neurodegenerative Diseases', has had 1,511 views (as of 2 July 2012).
- Interest in the channel is **ten times higher than at the end of GridTalk** (20,000 downloads).

Figure 8: GridCast video used in Daily Mail article



¹⁰ <http://gridtalk-project.blogspot.co.uk/2011/07/bird-brained-computing-at-teragrid.html>

¹¹ <http://www.dailymail.co.uk/sciencetech/article-2007740/Ecci-worlds-advanced-robot-muscles-tendons--ability-correct-mistakes.html>

Extensive coverage

- GridCast has partnered with a number of organisations in the last two years, and has been to several new conferences. After signing a Memorandum of Understanding with N4U, GridCast was invited to an outGRID- ITU High-Level Workshop, 20–21 February 2012, Geneva, Switzerland. Our first major virtual GridCast was also coordinated in Mexico for the Joint GISELA-CHAIN Conference. In PY3, we attended a number of new conferences including EUDAT (1st conference), CRISP (2nd Annual Meeting) and CAPRI (5th evaluation meeting in Utrecht). The project is increasingly invited to conferences but often has to decline due to conflicting obligations. The GridCast team has been to **around 50 events (major, mini, nano and virtual)** in the last three years.

Ease of discovering GridCast

- One important question that can be examined with Google analytics data is how people find the site. Around 32% of the people search for the site through search engines, 47% come from referral websites and 20% are direct traffic. If you examine traffic sources at a deeper level, the greatest referral traffic is through blogger, followed by CERN, Twitter, Facebook and iSGTW.

Significant interest in blogging within the community

- Several people have expressed an interest in blogging next year and in recent months we've had **a number of unsolicited blog entries and requests to blog** (e.g. Carlos Jaime Barrios Hernandez at SCCAMP'12 and Elizabeth Leake).
- GridCasts have been important for community building within the grid and e-science community. The Blogger platform only allows 100 bloggers. On several occasions, we have had to delete bloggers for short periods of time to accommodate new bloggers. This shows the **growing popularity** of the blog among the community.
- The project has a number of active bloggers (see Figure 8). Some of the advantages of blogging were noted at conferences. People find that having a shared resource to promote their work increases dissemination. Blogging communities also give participants the chance to make new connections with other people in their area. Writers also use the blog to test bed ideas for more in-depth articles.

Figure 8: Breakdown of bloggers, entries and podcasts over three years

Year	Number of bloggers for GridCast	Blog entries	Podcasts
1	59	244	56
2	46	181	30
3*	100 (22 active bloggers)	130	40
Total	127	555	126

- Year 3* is only 10 months.

Impacts and reasons behind blogging

- Two yearly surveys of bloggers (see *D4.4 - Final report on feedback and metrics*) have asked bloggers to recall whether anything has happened as a result of their blog post(s).
 - Agnes Szeberenyi from the MTA SZTAKI project in Hungary received two inquiries (one from a US project and another EU-based research team) after blogging, both proposing possible collaborations. A joint paper has been written that was inspired by her blog about the GLOBAL excursion project at the EGI Community Forum, *Never too early to start science!*
 - Another GridCast blogger, Carlos Jaime Barrios Hernandez, said that people often contact him directly about his posts.
 - Beatrice Bressan, outreach coordinator of the TOTEM experiment, said she's blogged a few times during two conferences, and has had some positive feedback from readers.
 - Gera Pronk, (Owner ISeeTea and formerly Community Manager, SURFNet) replied to our most recent survey in May 2013, she said *'I got a few nice supporting reactions from people.'* She also said that *'blogging does attract attention'* and that she likes to write and she said that *'blogging about events is for me a way of summarising what I have learned and experienced'*.
 - We asked another regular blogger about what motivated him to blog. Muhammad Farhan Sjaugi of the Desktop Grid Federation, Academic Grid Malaysia comments: *"I love being in the grid community hence I always like to contribute to the community. I come from South-East Asia which is geographically very far from Europe. By actively participating in the European Grid projects, it helps me to build my network with researchers in Europe for further research collaborations"*.

Influencing mainstream media

- In PY2, one blog post was also picked up by HPC Wire – a commercial publication with a large subscriber-base. During CloudScape IV, Morris Reidel discussed some take-away messages in his blog entitled, *'Interesting Discussions at CloudScape IV'*. An extract from this particular blog post was included in an article for HPC in the Cloud, entitled *'Cloudscape IV Spurs Discussion'*¹², on 28 February 2012.

Making projects results more visible

- In June 2013, e-ScienceTalk conducted interviews with our MoU partners. More details can be found in the report, *D4.5 Final Feedback and Metrics Report*. MoU partners were asked what the most useful product was and asked to provide reasons.
 - Kitti Varga, research associate at MTA SZTAKI who looks after the dissemination of four projects (*SHIWA*, *GlobalExcursion*, *ER-Flow*, *SCI-BUS*) comments: *"From the project side, I think the blog is the best product because when we have had something to share with people you were always happy to post it. This was a big help for us"*.

Generating potential revenue in spin-off training/consultancy/capacity building

- During the EGI-Community Forum in Manchester in March 2013, Stefan Janusz conducted a short video/vlogging session. In addition to providing a service, the project is also helping ensure sustainability/contribute to **capacity building** in e-science by training individuals in

¹² http://www.hpcinthecloud.com/hpccloud/2012-02-28/cloudscape_iv_spurs_discussion.html

other e-infrastructure projects helping them acquire new skills by filming their own outcomes **maximising their project's own visibility**. Corentin and his videoing skills have also been complimented a number of times by project coordinators at various meetings.

- One of our bloggers, Elizabeth Leake has also suggested collaborating on a media training workshop for the EGI Technical Forum 2013. Her suggested topics would be: 1. Building social capital; 2. which tools are useful? 3. Divide and conquer: Partnering for optimised results and 4. Information stream or deluge? Results-oriented timing. The project is contributing to the literature on academic blogging.

2.2.4 Sustainability

GridCast is building a strong sense of community through publicising the outcome of events. As with GridCafé, GridCast was originally produced by CERN and therefore has already been shown to be sustainable, having been transferred to GridTalk and then on to e-ScienceTalk. As the site relies on voluntary blogging by people outside the e-ScienceTalk project and building an online community of regular contributors, there is a sustainable model for maintenance in terms of contributions and updates. The blog has developed a loyal volunteer base over the last five years, who wish to maintain the blog during any interim funding shortfall. Blogger is a free platform, and therefore there are no maintenance costs.

One of the unique selling points of GridCast is the integration of professional quality videos. Onsite filming at events, editing, sound design and promotion of video content is a valuable service. The YouTube channel and its video production, curation and editing are valuable making it one of the strong drivers of success. Estimated commercial freelance costs for this service are €500–€700 per day. If e-ScienceTalk were to secure funding in the next Horizon2020 cycle, some services could be offered to projects at a premium rate. The e-ScienceTalks scope of coverage is dependent on team members' availability: one team member (Mini) or 2-3 team members (Full). During busy periods when there are multiple events, the team are often in demand from multiple partners and the decision to attend an event is often based on location. MoU partners have expressed a willingness to cover the cost of travel to community events. In PY3, MoU partner CRISP had training from e-ScienceTalk at their 2nd Annual Meeting, where CRISP paid for travel and accommodation.

We have fostered a network of bloggers for next year. GridCast has cultivated six 'Star Bloggers', who have committed to blogging next year. Other people, who could be contacted to blog next year, are those, who have added expert profiles to iSGTW. MoU partners have also asked to have access to the blog for conferences in late 2013/early 2014. The blog has built community links and fostered relationships with online bloggers and with our partners (SHIWA, N4U, We-NMR, CHAIN). The project has already contacted the organisers of regular conferences to put GridCast details on their website and call for bloggers. Even if the project cannot be proactive and travel remaining visible is important.

The dissemination team at European Grid Infrastructure (EGI) have agreed to take over responsibility for moderating GridCast during EGI events. It is envisioned that while EGI do not go out to actively run GridCast events, a half a day a month should be allocated to each event by the EGI moderator. Work would involve recruiting bloggers and promoting blog posts through Twitter. It would also

involve handling comments, reading feedback from visitors; handling polls and managing the blog from a mobile device.

2.3 GridGuide and Real Time Monitor

2.3.1 Background

GridGuide (gridguide.org) is the youngest of the e-ScienceTalk products and 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 on-going work and watch 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. 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.

GridGuide has become increasingly interactive and accessible through co-development with the Real Time Monitor (RTM), which shows traffic on the worldwide grid in real time. The RTM (<http://rtm.hep.ph.ic.ac.uk/>) is a 3-D virtual globe that 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 from the RTM as well as the pages from GridGuide. The RTM is widely used for demonstrating the grid at conferences and events and is an accessible and engaging way to understand more about the grid. In PY3, GridGuide was integrated into e-ScienceCity.

E-ScienceTalk's aim for PY2 for the RTM was to show traffic from more sources. The RTM now includes PANDA jobs from one of CERN's largest LHC experiments, ATLAS as well as the data transfers on the GÉANT networking layer. During PY3, Janusz Martyniak worked on a number of features that will make the RTM more accessible and visually appealing. This includes technical improvements but it also includes some general aesthetic improvements (e.g. a full screen version, a globe that automatically jumps between locations, a recorded offline version, and more data sources CMS-Phedex). This work is described in more detail in *D2.4 Annual Upgraded RTM* [R8].

2.3.2 Product metrics

One of the main aims of e-ScienceTalk was 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. The e-ScienceTalk Description of Work [R1] outlines a target of 100 sites in total, to be achieved by the end of the project. The number of EU sites and non-EU sites were also recorded. As with other e-ScienceTalk products, the project also monitored unique visitors and page views for the year.

e-ScienceTalk's aim is for the RTM to be available on a wider range of platforms and to show jobs from more sources. The two metrics used to examine the impact of RTM are countries in the RTM, number of delegates at events demo-ing the RTM. However, a number of other methods were used to assess the RTM in PY2, including an investigation into RTM users and their reliance on the RTM for

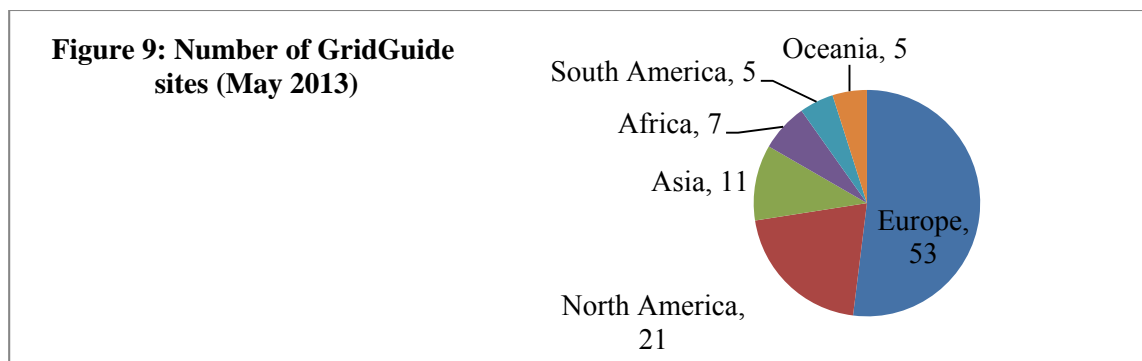
outreach, funding and dissemination. Also, anecdotal evidence from demos at various events has been gathered during PY3.

2.3.3 What has been the impact of GridGuide and RTM?

a. *GridGuide*

Number of sites has increased

- At the end of the first year, there were 38 sites on GridGuide. At the end of the project, there are now 102 sites (May 2013). This is two sites over the target at the end of the project. There is now a greater geographical spread (see Figure 9 below).



Less self-generated content than originally anticipated

- A campaign in April/May 2012 to improve the quality of content on existing sites was carried out but did not generate much activity by existing GridGuide site editors. Only four grid hosts updated their sites. Although the content and resource is useful, it is not fulfilling its creator's original intentions and motivating site administrators to generate and update their guides spontaneously. It was envisioned to be social network for e-scientists. There is also a 'huge variance in quality and quantity of information on a site', reflecting the fact that sites are allowed to post their own information, without quality/editorial control.

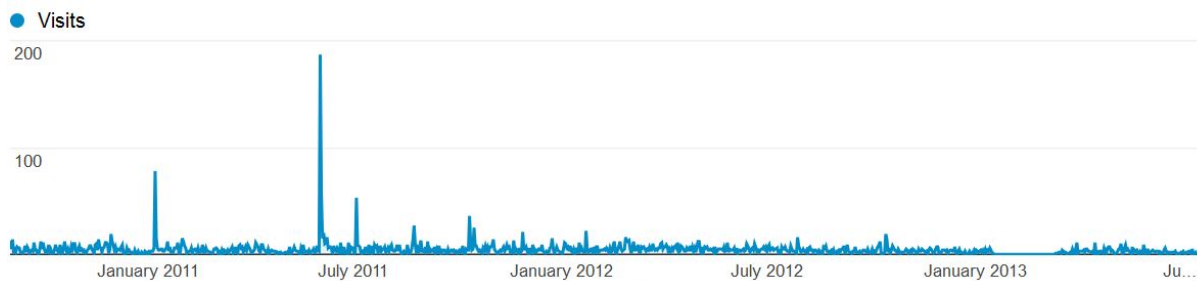
Least visited product

- The website traffic statistics for GridGuide have been low in comparison to the other e-ScienceTalk sites. In PY3, there were 559 unique visitors and 943 page views (see Figure 10).

Ranked least important product

- It was ranked by the e-ScienceTalk team as the 6th most important e-ScienceTalk product. The project does not get much feedback on GridGuide. The look and feel of the website (and the site map) was highly rated by a survey of scientists and science communicators in the first year but it has been difficult to get feedback as the site still generates less interest than other products. This may be due to an increase in use of LinkedIn and other social networking sites for scientists (e.g. <http://www.researchgate.net/>). The site may not be as relevant as it was when it was first proposed during GridTalk.

Figure 10: Visits to GridGuide website



b. Real Time Monitor

High visibility and worldwide recognition

- This year, **10,740 people** have attended conferences where the RTM has been demo-ed. Last project year, the e-ScienceTalk team and EGI and others have used the display at 10 meetings with almost 12,000 attendees. These have included **teachers, students, the press, politicians and members of the IT and grid communities**. In total, 30,000 people will have seen the RTM during the last three years.

Science museum gives recognition to RTM

- The RTM developer, Janusz Martyniak is collaborating with the London Science Museum to design an RTM demo as part of their LHC exhibit, *Collider*. This will run from November 2013 to April 2014. We can anticipate that during the six-month run, the RTM could potentially be seen by 1.5 million people –50 times the number that have seen it at e-science conferences.
- This recognition provides significant opportunities for the RTM and acclaim for its developer. It will open the RTM and grids to new audiences of all ages and nationalities hopefully encouraging a new generation to follow science and technology careers. There is also potential to develop the resource further by capturing feedback during the exhibition. The RTM may also be included in the educational materials for visiting schools. An email from Harry Cliff (a physicist) at the Science Museum, UK reveals that the Real Time Monitor was “something we've looked at and been impressed by”.
- In the future, the RTM may even tour outside the UK reaching a worldwide audience.

More countries displayed on the RTM

- Fifty four countries can now be found on the RTM.

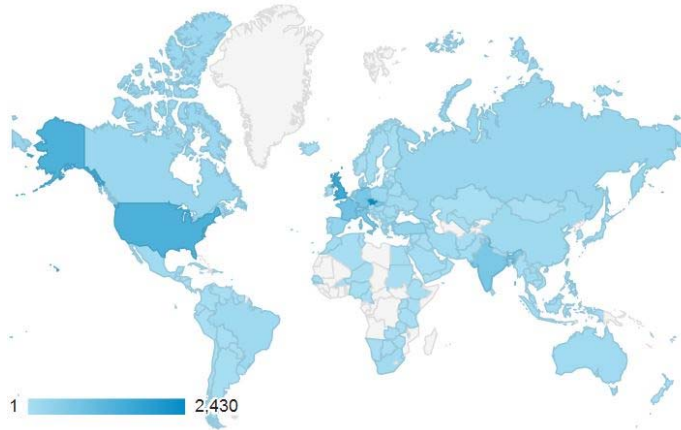
A significant amount of interest among other developers

- Janusz has been contacted by a number of individuals, who would like their site displayed on the RTM. The most recent request was from Kuwait.
- The RTM has been recognised by software experts. In early September 2011, an editor from Softpedia emailed the team, as the Real Time Monitor had been added to their database. It is featured with a description text, screenshots, download links and technical details. The entry includes the editor's own opinions on the program itself.

Increasing number of visitors to the website

- Tracking code for Google analytics was added to the RTM on the 14 December 2012 to gain a better understanding of who is accessing the website. e-ScienceTalk analysed the data available (from 14, December 2011 to 17, July 2013). During this period, there were 15,339 visits, 13,076 unique visitors, and 34,595 page views.
- RTM **visitors come from mainly Europe**, but there is a significant number from the US (see Figure 11). The top referrers were a Czech site (zive.cz), as well as the GridPP website (556), CERN (251), Wikipedia (224), e-ScienceTalk (166), GridCafe (156) and iSGTW (135). Only a few visits were via social referral (1%); the RTM has not been substantially promoted through iSGTW/e_scitalk Twitter.
- On Tuesday October 23rd 2013, there was a huge spike in traffic (1,451) due to an event in the Czech Republic¹³, which featured the RTM on a website.

Figure 11: Geographical Spread of Visitors



100s of institutions are displaying the RTM

- After the first year, it was noted that not much was known about users who actually download and run the RTM on a regular basis. In the project's second year (PY2), e-ScienceTalk set out to examine how people were utilising this unique resource and that impact. More information on how this was carried out can be found in *D4.4 Annual Report on Feedback and Metrics* [R6]. The top five users are based in Italy, UK, Germany, France and Spain (see Figure 12). IP analysis revealed a number of important institutions are running the RTM including some highly-recognised worldwide establishments (Österreichische Akademie der Wissenschaften, Istituto Nazionale di Fisica Nucleare - Sez. di Catania, Roma Tre University, Oxford University, University of Glasgow, Max-Planck-Institut für Physik, the CC-IN2P).

Used for outreach, education and demos

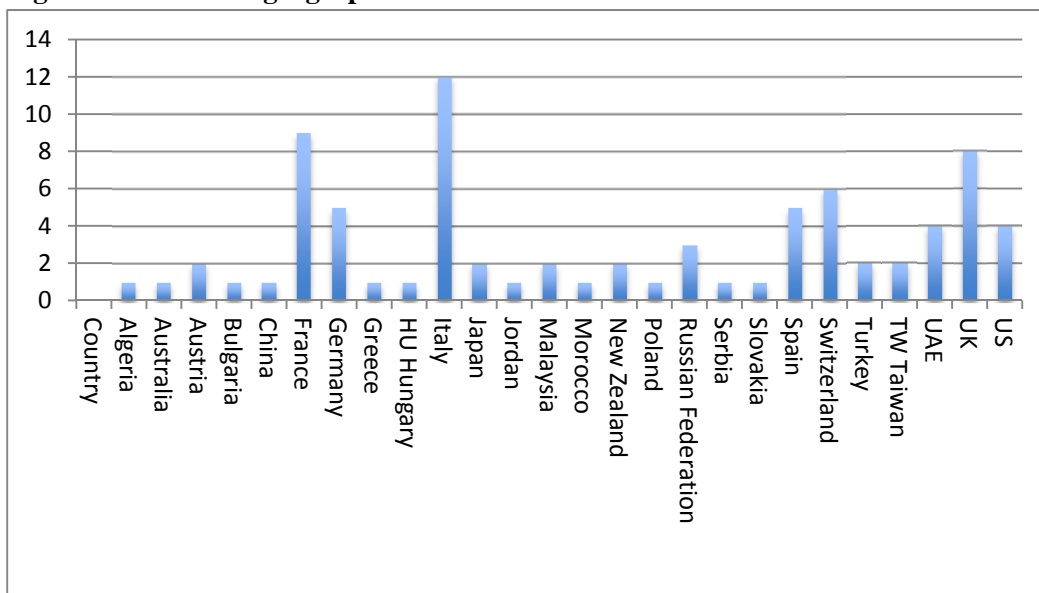
- RTM is being utilised for both **outreach, educational and demonstration** purposes over a wide geographical spread. For example, two RTM monitors are installed by the Academia Sinica Grid Computing in Taiwan. Here, the RTM is used to demonstrate global grid traffic (for both infrastructure and applications). ASGC is part of this backbone and functions as a

¹³ www.zive.cz/clanky/osm-zivych-map-ktere-vam-popisou-co-se-deje-ve-svete/sc-3-a-166010/default.aspx

Tier-1 Center for the Worldwide Large Hadron Collider Computing Grid (WLCG) making it one of only eleven such centers around the globe. One RTM monitor can be found at the operation shift seat and the other is installed at the demonstration screen-wall in the data center. Eric Yen, the technical manager at ASGC, explained that, “The purpose of the RTM for us is mainly for demonstration, training and education purposes. The RTM is used once in a week”. The Instituto de Fisica de Cantabria (IFCA) use the RTM especially on school visits, in order to show them the grid’s “live” status, which happens either a couple of times per month or during special “open doors” weeks. Another user of the RTM is Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France (which is also part of the WLCG). The LHC France use the RTM to demonstrate the functioning of WLCG or when they have to showcase the grid to countries not yet involved. The RTM runs continuously, with minor breaks. e-ScienceTalk has also confirmed that the University of Alberta (UoA), a WLCG Tier 2 site that is supporting ATLAS, also runs the RTM. Erming Pei is the System Analyst/Grid Specialist at UoA and is also a RTM enthusiast: “We set up some displays for local/global WLCG site monitoring in University of Alberta. RTM is in one of those displays. It's basically running all the time, except some breaks due to desktop sleeping”. David Britton from Glasgow University uses the RTM about 5 to 10 times a year to demonstrate the worldwide computing Grid when he gives a talk to a public or non-specialised audience.

- Durign PY3, we found out that the WeNMR project also use the RTM, as ‘it’s a nice overview for showing the grid traffic’. They show it from time-to-time when giving a talk.

Figure 12 shows the geographical distribution of RTM users.



2.3.4 Sustainability

GridGuide is an innovative and eye-catching product but it is still a niche product and so realistically has a small audience. Throughout the e-ScienceTalk project, it has not been used as much by the community as initially expected. GridGuide has now been incorporated into e-ScienceCity in area called GridPort. This development, it is hoped, will aid discovery of the resource and simplify

marketing and promotion. Increasing number of people are adding their names to the profile section of iSGTW so there is an interest in this type of networking resource: *Ben Seow (25/06/2013)*, *Alan Sill (25/06/2013)*, *kawai Admin (09/07/2013)*, *James Belaugh (27/06/2013)*, *Vakantiehuisen Frankrijk (25/06/2013)*, *andrew jones (19/06/2013)*, *Margahayuland (11/05/2013)*, *David Jonn (11/05/2013)*, *steven b (03/05/2013)* and *Anda Roxana Nenu (11/04/2013)*.

The RTM has previously received development funding from GridPP, the UK's grid for physics. At the end of project, the RTM can be supported on a best-effort basis by the Imperial College Technical Developer, Janusz Martyniak who will continue to do maintenance work after the development work has been completed (end of July 2013). Any maintenance work is likely to be supported by Imperial College while there is still interest in the RTM from the science museum. When the project surveyed users they asked what extra information people would like to see on the RTM. There were a number of detailed responses to this question, which were included in the *D4.4 Annual Report on Feedback and Metrics*. The fact, that people have such strong opinion on the RTM, suggest it is well-used and is serving its purpose. It is an excellent way of illustrating a "virtual" concept by giving a moving image to the grid and it is also a great way of making the grid additionally relevant and dynamic.

2.4 e-Science Briefings

2.4.1 Background

e-ScienceTalk continues the successful series of GridBriefings, renamed e-ScienceBriefings in Q2 which are aimed at policy makers in all layers of government and industry. These four page documents describe for a non- technical audience how long-term investments in e-infrastructures have led to concrete results. The reports provide useful policy metrics, in terms of investment, manpower and spin-offs in science and industry, and also put results into the context of the overarching research themes supported by the European Commission. During PY3, e-ScienceBriefings have covered a range of issues that were relevant to the year's agenda (e.g. Transferring Technology and Knowledge¹⁴, Big Data¹⁵, the Security Issue¹⁶, Horizon2020¹⁷).

2.4.2 Product metrics

The e-ScienceTalk Description of Work [R1] for Work Package 1 (WP1) recommended analysing three key metrics to measure our audience. During PY2, some of the metrics were increased to reflect the project's achievements during year one, including the number of projects covered (target: 30 per year; an increase of 10), the number of reports printed and published (target: 4 per year) and number of countries where reports and/or briefings are distributed (target: 30 year). In addition to the top-line project metrics, the project also examined a number of other metrics at work package level, including the number of policy events organised and the number of attendees at policy events. Three new metrics were incorporated in PY2: policy events attended by e-ScienceTalk, number of delegates at policy events attended by e-ScienceTalk and the number of downloads of policy documents.

¹⁴ <http://www.e-sciencetalk.org/briefings/EST-Briefing-23-technology-knowledge.pdf>

¹⁵ <http://www.e-sciencetalk.org/briefings/EST-Briefing-24-Big-Data.pdf>

¹⁶ <http://www.e-sciencetalk.org/briefings/EST-Briefing-25-Security-F02.pdf>

¹⁷ <http://www.e-sciencetalk.org/briefings/EST-Briefing-26-HorizonWeb.pdf>

Assessing how the e-ScienceBriefings have impacted upon or influenced their intended audiences in concrete ways is challenging. The project sent a Zoomerang¹⁸ questionnaire after releasing the e-ScienceBriefing on Visualisation. The survey was relatively short (including six questions), and asked what people like about the briefings and also gave readers an opportunity to provide suggestions for improving the briefings and future topics. Question two was particularly relevant for evaluating impact, as briefing recipients were asked how they make use of the briefings. Comments, compliments and suggestions at various policy events were also recorded by e-ScienceTalk WP1 members. During PY3, another Zoomerang poll was modified and released¹⁹.

2.4.3 What has been the impact of e-ScienceBriefings?

Exceeded all targets

- E- ScienceTalk has increased circulation and broadened the scope of the e-ScienceBriefings. **Eight** briefings have been published since September 2011. The number of projects covered this year was above the target of 30 per year at **59 per year**.

Increasing subscriber numbers

- Currently, there are 164 registered subscribers to the electronic mailing list – an **increase of 22%** since last year. It has also been observed that more people read the briefings, as a number of list members' forward the briefings on, acting as multipliers.

Increasingly shared

- The technical team have implemented two methods for gauging online interest. AddThis²⁰ media sharing functionality data was added to the briefings page in May 2012. Since implementation, e-ScienceTalk has noticed that people are increasingly sharing the documents. On 1 July 2012, the number of people, who shared the home page on social media platforms was recorded (1 'Like on Facebook; 12 tweets, 1 share on Google+ and 5 Shares). Exactly a year later, there has been **9 'Likes, 61 Tweets, 4 G+ shares and 16 Shares** (July 19th 2013).

Downloads tripled in PY3

- Many people have also downloaded the PDF version of briefings and this can be verified by tracking the number of downloads. This analytical feature was implemented in September 2011, and allows the team to see the country of origin of the download. In July 2012, there were 5,766 downloads of e-ScienceBriefings. Exactly a year later, the **number of downloads has tripled** to 17,281 (July 16th 2013).

Interest from a wide range of countries

- e-ScienceTalk has also been tracking its campaigns through Twitter and URL shortening services²¹. Downloads have been from a **wide range of countries** outside of Europe (see

¹⁸ <http://www.zoomerang.com/Survey/WEB22EXEWE5XUQ>

¹⁹ <http://www.surveymonkey.com/s/9PHLDVR>

²⁰ <http://www.addthis.com/>

²¹ <http://v.gd/stats.php?url=esciencebriefings>

Figure 14). On Monday 5th of March 2012 at 09:46, a vd.link was created for each e-ScienceBriefing download. There have been 1,259 visits since its creation.

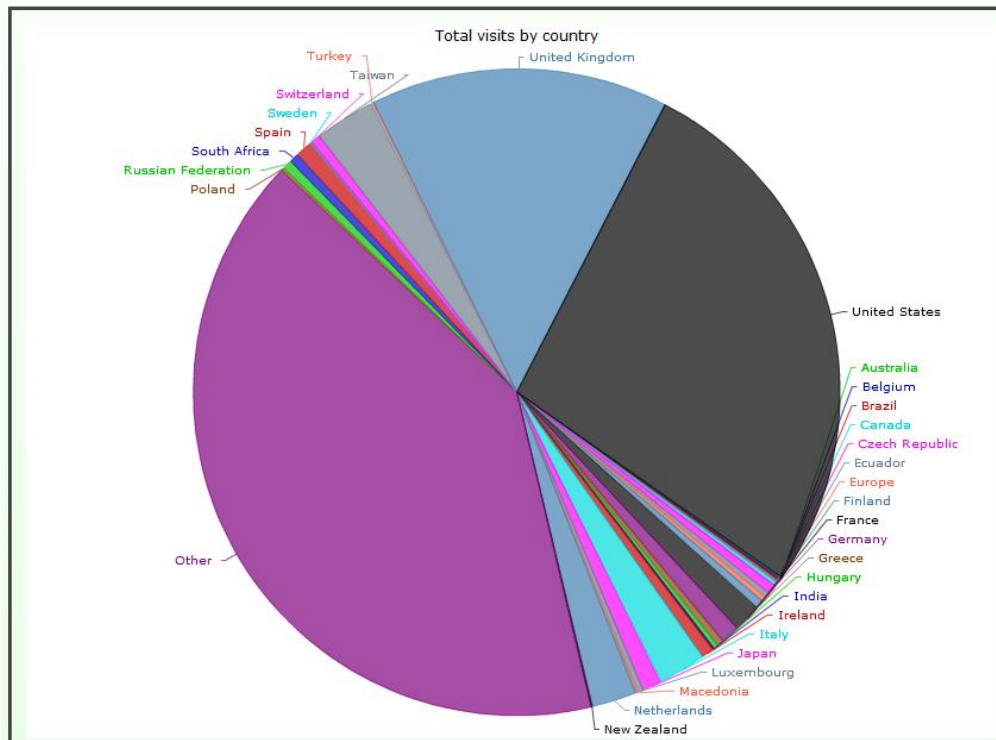
Awareness and use in the community

- People acknowledging that briefings helped them explain e-science topics to those new in the field. The Zoomerang survey revealed two people had printed off copies for meeting, and one had emailed it on to others.
- Another Zoomerang survey demonstrated the popularity of e-ScienceBriefings. The EGI Community Forum (Munich, 2012) a feedback survey asked delegates to tick which free publications they would like to receive. Delegates were given a choice of seven publications including HPCWire, GlobusWorld, Datanami and the EGI-InSPIRE newsletter. The survey subsequently collected their email addresses, and 17 people answered this question. The majority (over 73%) requested a subscription to the briefings, and out of the seven publications it was the most requested publication.
- At the EGI Technical Forum 2012, Prague, 17-21 September, 13 people (out of 21) asked to be signed up to the briefings.
- At the 10th e-Concertation meeting, 15/16 people requested a subscription to the e-ScienceBriefings list.
- Although, the email list has a limited circulation through the subscriber list, many people, when asked at conferences that the e-ScienceTalk team regularly attend, recognize the format.
- According to the 10th e-Concertation feedback survey, the most widely read briefings were Open Data/Open Science (14), Big Data (12) and Research Networks (9).

Good way of publicising project results

- e-ScienceBriefings again provide an independent voice and shared platform for projects to show-case their work under a collective brand. The briefings continue to be well-regarded by the community, and the quote below is indicative of the continued positive feedback: *"I have contributed to e-ScienceBriefings. It is a beautiful publication and I love that it is printed. It is so important because it is a very graphical snapshot of what's important today for the hands of legislators and policymakers. I actually stole one to show the National Science Foundation."* More quotes/additional details can be found in *D4.5 Annual Report on Feedback and Metrics* [R5] and *D4.4 Annual Report on Feedback and Metrics* [R6]

Figure 14: Wide range of countries



2.4.4 Sustainability

Each briefing takes approximately three weeks to develop (one week of researching case studies and source images, one week to write and edit and the final week to gather feedback and make corrections). The time and effort would have to be funded, as content curation is a key component. It is therefore not feasible to continue providing updates to the briefing series as each is time-intensive. The e-ScienceBriefings are currently on the e-ScienceTalk website in an archived repository. This ensures the resource is available to all those who need it, whenever they require it. Most partners already upload the e-ScienceBriefings on their website (e-IRG) and the project has also ensured a commitment from all MoU collaborating projects that they will upload all briefings to their websites.

2.5 iSGTW

2.5.1 Background

During e-ScienceTalk, the weekly online newsletter, *International Science Grid This Week* (www.isgtw.org) has broadened its scope significantly to cover e-Infrastructures such as supercomputing, distributed computing, networks, data, cloud and volunteer computing, as well as other forms of distributed computing and their impact on grid development. The newsletter now

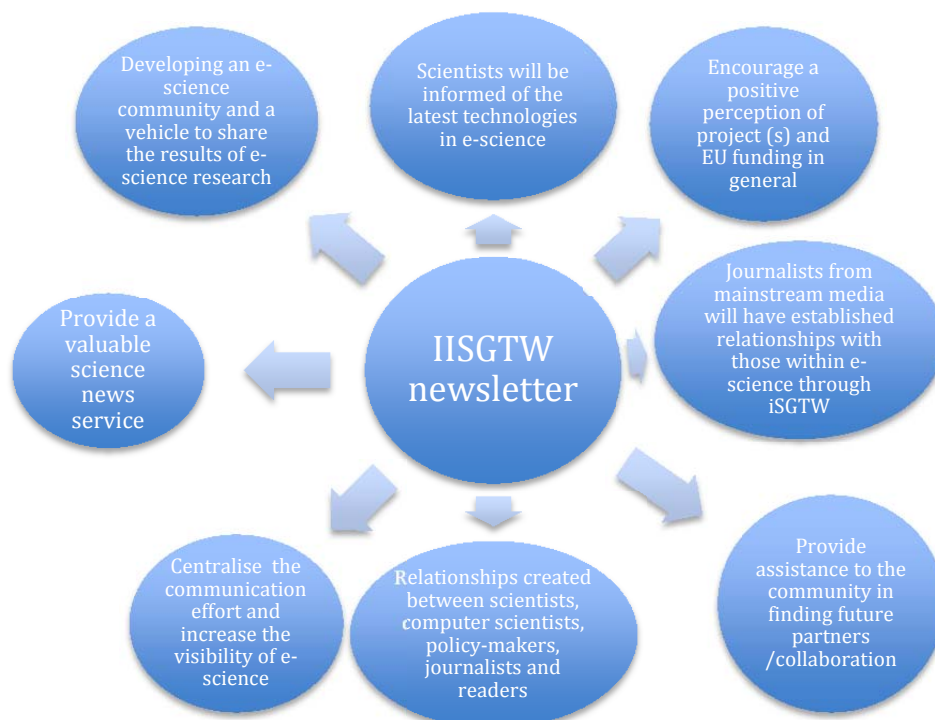
covers a broad range of international, national and regional grid projects, as well as related developments in the wider world of modern science and research.

In May 2011, we started a more aggressive campaign to promote iSGTW through branded social media and news aggregators. Our suggested plan of action is summarised in the *D3.3 Marketing strategy for iSGTW* [R9] and the results and recommendations in *D3.7 iSGTW and Social Media* report [R10]. Social media has the advantage of providing a real-time voice for iSGTW and an opportunity to share content from other industry sources. In addition, more people can discover iSGTW content (@isgtw and iSGTW Facebook), and this therefore increases the exposure/reach of the project. iSGTW regularly tweets its articles daily, as well as stories around distributed computing and the science it enables and e-ScienceTalk project/partner events and announcements.

2.5.2 Product Metrics

To assess the impact of iSGTW, a number of key metrics are being tracked during the project. Both the number of subscribers (target: increase by 30% by close of project) and the number of articles in iSGTW on European projects (target: 50 per year) have been monitored. e-ScienceTalk is also monitoring social media subscribers (e.g. Twitter, Facebook etc.). Subscribers are readers who have signed up to receive the publication each week by email. Other metrics that have been examined include the number of iSGTW printed materials distributed to European projects (target: 1000 by close of project). At the start of our second year, e-ScienceTalk listed our intended outcomes and also some impact goals (see Figure 15).

Figure 15: iSGTW impact goals



Social media/media influence

e-ScienceTalk continues to monitor the impact of these strategies in attracting target audiences and promoting iSGTW. Part of the impact evaluation process was to measure the effects of social media. This was done through examining the percentage of referrals from social media with Google Analytics, and a number of other third party tools. Social media can also help us gain insights into audiences and issues, and solicit feedback to enhance the editorial experience. e-ScienceTalk reports the most popular articles and media pick-ups in monthly reports to the iSGTW Advisory Board. iSGTW uses a number of free tools to measure success and impact on its audiences (iSGTWs reach, engagement, influence and significance). This includes counting counts and analytics (e.g. 'Friends', 'Followers', RSS feeds) to understand the reach of the audience. The project is also looking at how many people engaging with content using Google analytics AddThis (e.g. bookmarking, sharing) and interactions (e.g. Twitter retweets and mentions). The project examines how influential iSGTW is in the social media landscape by monitoring Klout scores. The publication also examines its followers via a Twitter website called Twiangulate²² that analyses your followers and their connections. iSGTW also regularly compares its social media statistics to HPC Wire (hpcwire.com/) and Datanami (datanami.com) on a monthly basis. In PY3, the project started to record its new twitter followers on a monthly basis and its retweets.

Media analysis

Since PY2 of the project, ISGTW has carried out a comprehensive media analysis of the types of media (blogs, websites, computer magazines) that have 'picked up' iSGTW stories. In this context, a 'pick-up' is defined where content has either been republished, translated or commented on by bloggers or journalists. The methodology for analysis included googling for both the magazine acronym (iSGTW), full magazine title (*International Science Grids This Week*) and also for individual article titles. Any mentions/pick-ups relating to projects directly linked to the story were removed. This type of republishing is more reciprocal.

Readership survey

In this final report, we will also analyse some of findings from the last three iSGTW Readership Surveys and compare them to GridTalk. In PY3, seventeen questions were emailed to the entire subscriber list, and there have been 114 responses to the survey. A number of questions relating to the impact of the magazine were incorporated into the iSGTW Readership Survey. The project really wanted to understand in what ways researchers within the field have benefited from reading and contributing stories to iSGTW.

Articles/interactions

Other parameters that were investigated include analysing the geographic spread of articles published. iSGTW has also gathered other information and data on its interactions/conversations such as comments on posts. The activity stream in Google analytics allows you to see how people engage with, share, and discuss content on social networks. The Activity Stream in Google analytics shows the URLs they shared, how and where they shared (via a "reshare", a "post", or a "comment" on Google+, for example), and what they said. iSGTW is also recording content topics (e.g. numbers of grid computing, HPC articles), and recording all comments. iSGTW also track the number of comments on the website.

²² <http://twiangulate.com/search/>

Website traffic

iSGTW is also keeping track on a monthly basis on its page views, unique visitors, website stickiness (average number of page hits per visitor), referral traffic, demographics, most popular articles and top five searches etc.

Focus groups

During the EGI Community Forum 2012, a small focus group was conducted. Some of the questions help us to understand the publication's impact.

Interviews with readers

The Dissemination Officer, Zara Qadir, conducted interviews with eight researchers in December 2012. This was done to gather more in-depth feedback on iSGTW and also to find out a little more about any impacts that could not be directly captured in the iSGTW Readership Survey 2012.

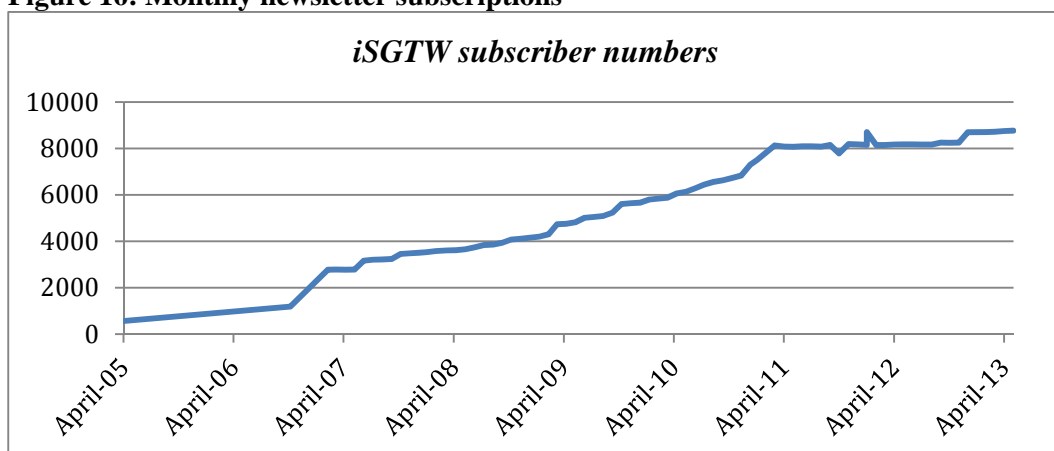
2.5.3 What has been the impact of iSGTW

2.5.3.1 Reach

Expanding reach

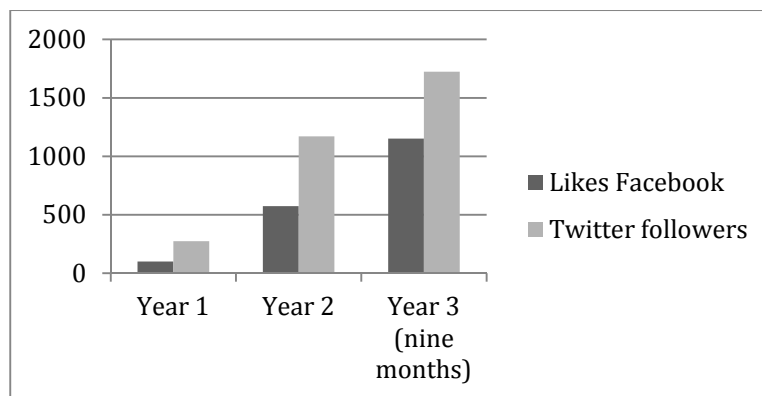
- Growth in reach as indicated by increase in subscriber numbers. e-ScienceTalk aimed to increase subscriber numbers by 30% (to 8,529) by May 2013. One month before the end of the project e-ScienceTalk has **8,770, which is 241 over the target (2.8%)**. Since last year, subscriber numbers have increased by 600 (~7%). In the early days of the project, iSGTW signed up followers automatically at conferences. This practice has been reviewed, and subscribers gained in the last year have been due to self-initiated subscriptions and therefore are more likely to reflect a more engaged readership. Figure 16 shows the number of monthly subscribers over time.

Figure 16: Monthly newsletter subscriptions



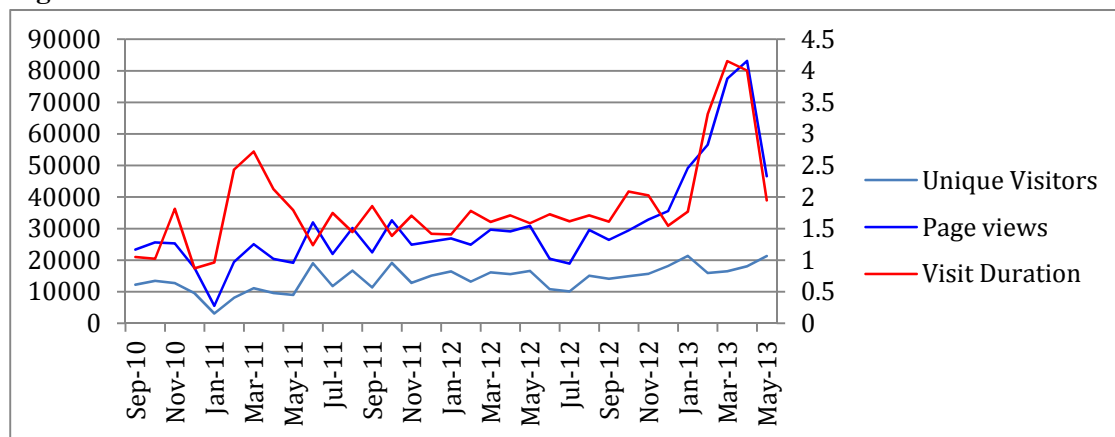
- Rise in social media reach.*** Our main focus in PY2 and PY3 of e-ScienceTalk was on increasing our social media followers. We now have an increasing number of people following iSGTW on Facebook and Twitter. In PY1 we reported 100 ‘Likes’ and by PY2, we had a total of 574 ‘Likes’. At the end of May 2013, there have been 1152 ‘Likes’. Figure 17 shows the upward trend. In May 2011, iSGTW had only 274 Twitter followers, but by the end of the second year, the publication had 1,171 Followers (see Figure 17). At the end of May 2013, the project has **1,724 followers**. There is an average increase of 61 followers per month. This trend shows that a greater number of people are listening and our reach is increasing. iSGTW total reach can be estimated by counting a sum of subscribers, ‘Likes’ (1,152), ‘Followers’ (1,724) and RSS feeds (900), and this has grown over time. The publication now has **2,624 followers through all social media (Facebook+Twitter+RSS feeds)**.

Figure 17: Twitter and Facebook followers



- Increased number of visitors to the website.*** During the e-ScienceTalk project, the iSGTW website has received **431,222 unique visitors and over 1 million page views (1,019,215)**. See Figure 18 for more details. Of the 578,290 visits, 30.4% has been direct traffic. The number of page views has increased dramatically since GridTalk (see Figure 19). Real-time analytics show that people are using iSGTW as an archive and as the amount of content has grown, people continue to reference older archived material.

Figure 18: Website traffic for iSGTW



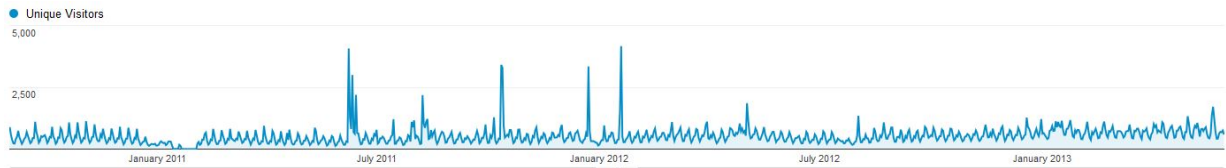
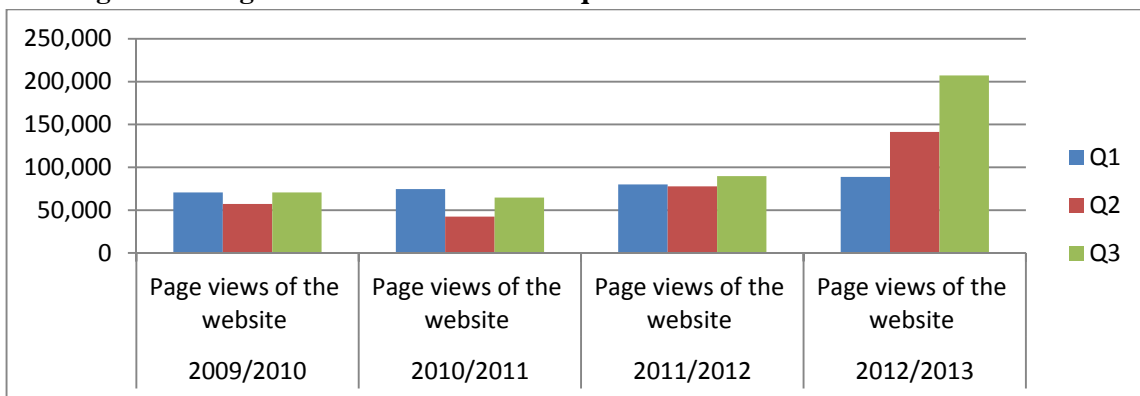
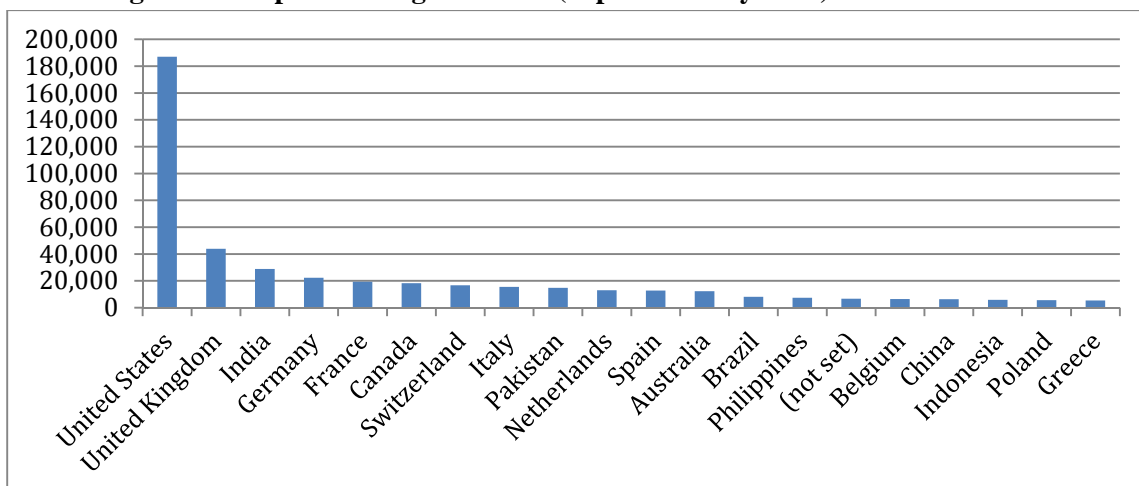


Figure 19: Page views for the first three quarters



- Increasing geographical spread.*** The top 20 visiting countries are incredibly diverse distributed across continents: North America (Canada, US), Europe (France, Switzerland, Italy, Netherlands, UK, Germany, Spain, Belgium, Greece and Poland) and Asia (Pakistan, India, Philippines, Indonesia, China), Oceania (Australia) and South America (Brazil). Figure 20 shows the geographical spread. A significant majority of visitors come from the US (32%) which strongly supports the requirement of having a US editor.

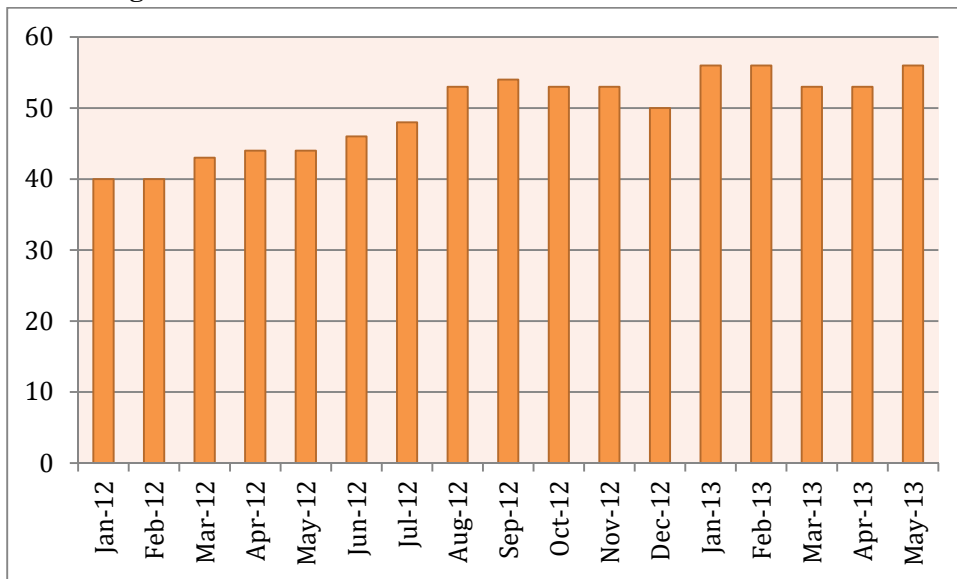
Figure 20: Top 20 visiting countries (Sept 2011-May 2013)



- Growing sphere of influence.*** Since October 2012, we have monitored iSGTWs Klout score, which measures online influence. When you create content or engage, you impact others, and Klout analyses that impact to find your Klout Score, influential topics, and your influencers. The average Klout Score is around 20. iSGTWs score has hovered between 46 and 52 in PY2

(see Figure 21). During PY3, the Klout score reached 56. It provides a good reference for comparison within these social networks. iSGTW also monitors its followers through Twiangulate. @iSGTW has a number of big name followers (CERN, Nature, Newswise, Astroparticle, Fermilab Today, Symmetry etc.).

Figure 21: iSGTW Klout Score



- Growing resonance as more people engage with content. European Grid Infrastructure surveyed delegates at the EGI Community Forum 2012 asking whether people were using any of the social networking and communication channels at the event. Twenty seven percent of those surveyed said they had been reading iSGTW articles. iSGTW is one of the premier places to check at conferences as highlighted by the EGI-Technical Forum 2012 survey (see Table below).

EGI Technical Forum 2012, Prague, 17-21 September Feedback survey

Did you use any of the social networking and communication channels at the event? (Please mark all that apply)		
Answer Options	Response Percent	Response Count
Twitter	44.4%	20
Flickr	15.6%	7
YouTube	20.0%	9
Facebook group	26.7%	12
LinkedIn group	13.3%	6
EGI blog	26.7%	12
International Science Grid This Week	37.8%	17
GridCast blog	22.2%	10
<i>answered question</i>		45
<i>skipped question</i>		88

2.5.3.2 Significance

- *Assisting the community with their dissemination.* iSGTW provides a valuable service to the research community which is illustrated by quotes from researchers during interviews conducted in December 2012 (see Appendix I). The impact aims (refer to Figure 15) that have been met are listed in bold font below the italicised quotes from researchers. Researchers have referenced articles in talks and also contacted authors through articles that they have read. More quotes/additional details can be found in *D4.5 Annual Report on Feedback* and [R5].

We've had two articles published in the magazine. One in December 2007 and the other in April 2008. The articles didn't have any direct link to impact, but it did get our name out there. It was part of our general advertising and helped us describe what we are doing both internally and externally.

Gurcharan Khanna, Director of Research Computing at Rochester Institute of Technology

These findings suggest that iSGTW is having an impact:

- ✓ **Centralising the communication effort and increasing the visibility of e-science**
- ✓ **Developing an e-science community and a vehicle to share the results of e-science research**

I probably have sent links four times in several years. I am usually quite targeted, but sometimes I do send links to a broad range of people. With a recent piece, about cosmic simulations and making movies, I'd think I sent it on to all RIT researchers. I always look for a connection. Grids are less prominent in my job now but I still like to read iSGTW. I like articles that have relevance for what we are doing. I read it for possible collaborations or those using GPUs. For one recent article from a German astrophysics group, I read the article and then emailed the researchers for links to the original paper.

Gurcharan Khanna, Director of Research Computing at Rochester Institute of Technology

These findings suggest that iSGTW is having an impact:

- ✓ **Providing assistance to the community in finding future partners /collaboration**

I have referenced URLs in talks and often when writing proposals to illustrate when we have produced an application or when we are doing something interesting. I have also emailed articles to my family.

Dr Jens Jensen, STFC Rutherford Appleton Laboratory Harwell Oxford Chilton Didcot Oxfordshire

Yes. Usually I read the articles for me. But every other newsletter, I may forward a link to my colleagues usually on technological news. I have also emailed articles on to people in my institute and people in the OGF [Open Grid Forum]. A short time ago, I read an interesting article on local energy processes. I also shared an article with my students on the evolution of usage of the European grid. There was an animation showing the number of users per country. It provided an effective illustration for the course on how the grid infrastructure is widely used.

Stéphane Vialle, Professor at SUPELEC (Metz campus)

These findings suggest that iSGTW is having an impact:

- ✓ **Scientists will be informed of the latest technologies in e-science**
- ✓ **Provides educational assistance (new impact)**

I have subscribed for around 4 to 5 years. It was when I was only a PhD. At the time I wanted to know more about grid computing, and I searched the internet to find out about the events around the world and grid computing came up. It lead me to iSGTW. Normally, I and a group of students (through a yahoo mail park grid) exchange ideas about developing grid networks and chat about the good news from the grid. We share and read articles. I remember we discussed two articles about the Higgs Boson and grids²³ and a couple about supercomputing²⁴.

Dr.Syed Raheel Hassan, Quaid-e-Awam University of Engineering Science & Technology, Nawabshah. Pakistan

These findings suggest that iSGTW is having an impact:

- ✓ **Provide a valuable science news service**

On multiple occasions, I have forwarded articles on interesting research, especially some of the stories around data management. Yes, I remember one article about moving genomic mountains by Michael Schneider. I remember making some connections with XSEDE through this article (<http://www.isgtw.org/feature/moving-genomic-mountains>).

Vas Vasiliadis, Director, Products, Communication and Development, Computation Institute, University of Chicago and Argonne National Laboratory

These findings suggest that iSGTW is having an impact:

- ✓ **Provide assistance to the community in finding future partners /collaboration**

- iSGTW has helped generate new ideas for research etc. The results of three years of readership surveys have proved to be both enlightening and motivating for the iSGTW editorial team. Measuring the magazine's impact in terms of how many people read it, and what actions they take as a result is challenging but in both PY2 and PY3, we asked our readership survey some pertinent questions on how actively they engage with the content.
 - Over 80 per cent of respondents said that they have 'discussed or forwarded an article or issue' (almost exactly the same figure as we received in last year's survey at 81%).
 - Over half of respondents also reported that they had saved or bookmarked an article or issue, which is again the same as the year before. The results demonstrate iSGTW's impact, with significant numbers of respondents reporting that they have attended an event based on information they have found on our site, or have themselves submitted an event or job announcement to our site.
 - 15% of respondents also said that they had themselves contributed in some way to the newsletter at some point and 17% said they had used iSGTW to source an image.

²³ Hear a Higgs through its data | iSGTW 1st Aug 2012 www.isgtw.org/feature/hear-higgs-through-its-data

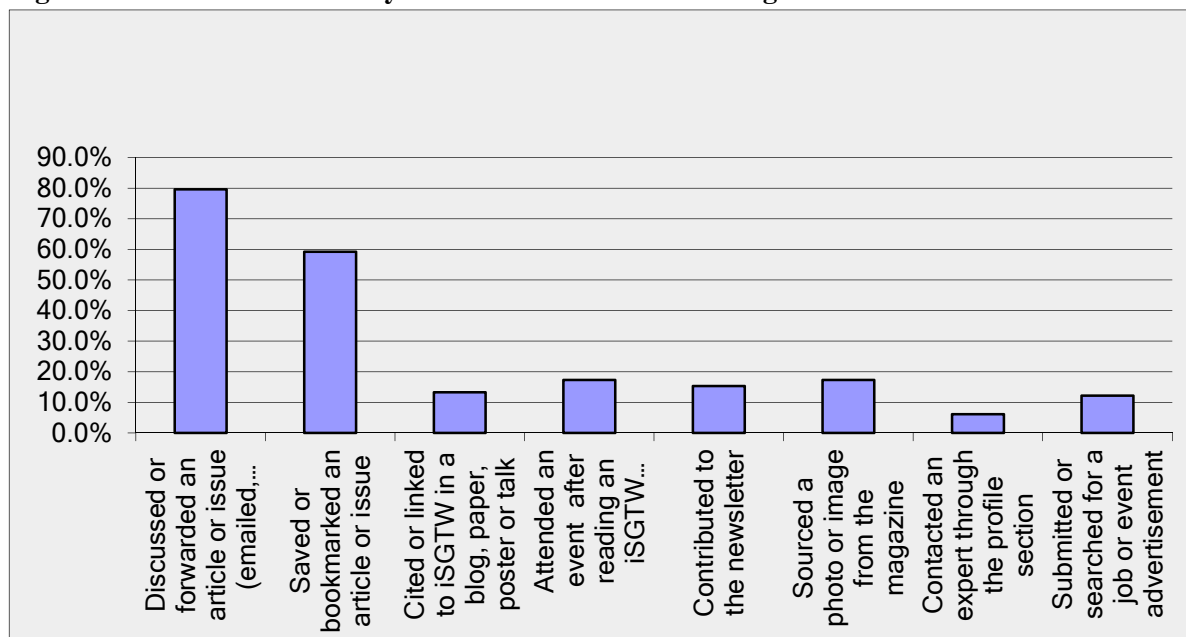
²⁴ The higgs, the history, and the grid | July 11, 2012 iSGTW <http://www.isgtw.org/feature/higgs-history-and-grid>

- In PY2, 21% cited or linked an iSGTW article in a blog, paper, or talk. In PY3, 13% of respondents reported that they had either cited or linked to iSGTW in a blog, paper, poster or talk.
- We also asked the readership to provide links to their citations^{25,26,27,28}. We asked people to fill in whether they have taken any other actions as a result of reading an article (Figure 22).
- In PY3, respondents mentioned other consequences and/or actions that they had taken including posting articles to Facebook, giving an interview, and one person even mentioned that they had received a grant (“Gotten a grant”). One individual said that they had featured an article in their newsletter, and another said they had even had “a new idea for research”. Another individual cross referenced vendors mentioned in articles to learn the latest insight on the vendors’ innovation

These findings suggest that iSGTW is having an impact:

- ✓ **Provides assistance to the community in finding future partners /collaboration**
- ✓ **Scientists are kept informed of the latest technologies in e-science**

Figure 22: What actions have you taken as a result of reading an iSGTW article?



Influencing the wider media

ISGTW has key media relationships with a number of publications including Symmetry, Discovery News, Datanami and HPC Wire. ISGTW content has been used by various online sources (see our detailed analysis in Appendix 5.1, *D1.4 Annual Impact and Sustainability Report*). Many university

²⁵ <http://e-victorcastelo.blogspot.com.es> I usually cite iSGTW in my presentations: http://tical_2011.redclara.net/doc/Victor_Castelo.pdf

²⁶ <http://www.ubuntunet.net/august2012#predicting>

²⁷ <http://www.ncbi.nlm.nih.gov/pubmed/22942011> (citation 7 and 8)

²⁸ I link to relevant ISGTW articles at my <http://distributedcomputing.info> website for distributed computing projects in which the public can participate.

computer departments feature iSGTW news on their website, and some commercial companies have featured iSGTW in their media section. A number of projects include a reference to iSGTW and most of e-ScienceTalk MoU partners have RSS feeds link directly from iSGTW. Some articles have also been picked up and translated into other languages. ISGTW content has also been cited in Wikipedia entries, and a number of images from iSGTW have been re-used by others.

iSGTW has also had a number of media pick-ups from HPC Wire, Cosmos Magazine, Wired and Symmetry. Of note, is the pick-up for the article 'The smallest music in the universe' which was published in several publications including Symmetry, Discovery News³², Wired UK and Wired US. Other articles that have been published by Symmetry include 'Happy 10th Birthday, WLCG!', 'Tevatron to shut down, but science continues' and 'Gamma rays, gravity waves, and galactic GPS'. Popular science blogs such as Science Springs and Vizworld often republish our stories.

These findings suggest that iSGTW is having an impact:

- ✓ **Journalists from mainstream media will have established relationships with those within e science through iSGTW**
- ✓ **Better links created between scientists, computer scientists, policy-makers, journalists and readers**
- ✓ **Centralising the communication effort and increasing the visibility of e-science**

Information-gathering and filtering service

- During the EGI Community Forum, a small focus group was carried out with four National Grid Infrastructure (NGI) Liaison Officers. For more information please refer to the e-ScienceTalk *D4.4 Annual Report on Feedback and Metrics*. When asked about the value participants place on iSGTW, most use the publication for finding out what's going on in e-science, and they all felt that it offers both an information-gathering and filtering service. The publication can also be useful for internal communications providing researchers with an 'inspirational' message. Two out of four of the participants said they regularly shared articles with colleagues and institutional mailing lists. The science writers that have been in this field for a very long time felt that one of the main unique selling points of ISGTW is that it is unbiased and is in support of all science. This person mentioned that there is an enormous competition in the field for readership and people are bombarded with so much information, and it is important to filter.

These findings suggest that iSGTW is having an impact:

- ✓ **Developing an e-science community and a vehicle to share the results of e-science research**
- ✓ **Encourage a positive perception of project (s) and EU funding in general**
- ✓ **Provide a valuable science and e-science news service**

Miscellaneous impacts from authors/contributors

- Jon Ison provided some feedback on an article that included his research (*Optimizing simulations for life — ScalaLife*²⁹). We asked him whether working on a story with iSGTW helped give him any ideas on how he saw or promoted his own work and whether he had been approached by other media or another researcher(s) since appearing in iSGTW.

²⁹ <http://www.isgtw.org/feature/optimizing-simulations-life-%E2%80%94-scalalife>

“Well, I've had a fair bit of interest and some of it not via the usual channels, so I think we could attribute that, broadly at least, to the iSGTW efforts. It did also make me conclude I need to think harder about a politically correct and concise summary of the work I'm doing that's appropriate to a broader audience, and that such a summary is valuable and necessary”.

- Assistant Professor Tso-Ren’s research was covered in the article, *Forecasting the wrath of a tsunami*³⁰ provided us an encouraging response.

“I recently was promoted as an associate professor and your report on iSGTW helped me a lot :-)”

Influencing a younger generation of researchers

Although the subscribers to iSGTW are in the 25-34 year old categories, followers on iSGTW’s Facebook page span a broader demographic with nearly 20% under 25 years old (see Figure 21). For the 3-month period (19th April-19th July) people ‘liking’ iSGTW articles came from the USA (199), India (177), UK (55), Italy (39), Pakistan (39), Tunisia (38) and Germany.

Figure 21: Demographics (19th April-19th July 2013)



2.5.4 Sustainability

Prior to GridTalk, *International Science Grid This Week* already existed as Science Grid This Week, a publication produced by Fermilab in the US. This subsequently became International Science Grid This Week through collaboration with CERN, and the EU Editor post was then funded for two years

³⁰ <http://www.isgtw.org/feature/forecasting-wrath-tsunami>



by GridTalk. iSGTW continues to be a successful product for e-ScienceTalk. Ensuring its long-term sustainability for its loyal subscribers is important as an example of a truly global collaboration between editors in the US, Europe and Asia Pacific.

iSGTW will continue after the e-ScienceTalk project finishes at the end of July 2013. CERN is committed to funding an Editor-in-Chief for the publication for the next year. The publication also has the support of a National Science Foundation (NSF)-funded US Desk Editor at Indiana University for a three year period from November 2012 through to November 2015 to source stories within the US and North America. The US is our main core audience (~36% of the website page views).

Last year, our sustainability plan had already discounted exploring more commercial topics in return for advertising revenue as it would risk alienating the audience we have built so far, and this would also not be permitted by the US funders, the National Science Foundation. One of our unique selling points is our independent voice in support of all areas of science and e-science.

e-ScienceTalk has explored in-kind support from collaborating projects and has developed good relationships with many of our MoU partners through media partnerships. One partnership that has developed over the last year is with CRISP (The Cluster of Research Infrastructures for Synergies in Physics). iSGTW provided communication and media training and media outreach at the recent CRISP Annual Meeting in Villigen. For the second year in a row, iSGTW has also been a media sponsor of the International Supercomputing Conference (ISC). This has involved writing three features to tie in with the event and having access to interviews with three leading figures in the field. There has also been continued interest from Academia Sinica Grid Computing in supporting iSGTW who paid €1,000 towards travel and accommodation for an e-ScienceTalk representative at their annual conference. iSGTW recently signed an MoU with the Ubuntu Alliance.

iSGTW continues to nurture a network of unfunded contributors from a wide range of projects in all its contributing regions. The publication also secured a budget of €10,000 to fund freelancers at a rate of €300 each.

2.6 e-ScienceTalk project

2.6.1 What has been the impact?

Establishing nineteen strategic relationships

During e-ScienceTalk, nineteen collaborations with other EC- funded Projects have been formed (BlogForever³¹, CHAIN³², CRISP³³, EGI³⁴, EDGI³⁵, e-irgsp3³⁶, EMI³⁷, EU-IndiaGrid³⁸, EUDAT³⁹, ERINA+⁴⁰, GISELA⁴¹, GlobalExcursion⁴², iMENTORS⁴³, LINKSCEEM⁴⁴, neuGRID⁴⁵, Shiwa⁴⁶, UbuntuAlliance⁴⁷, Virtus⁴⁸ and WeNMR⁴⁹). These projects are incredibly diverse (ESFRI projects, Virtual Research Organisations) and serve different scientific communities (biology, physics, environmental sciences etc.). The e-ScienceTalk project has signed a Memoranda of Understanding (MoU) with each project which has proved mutually beneficial (see Appendix II). In the first two years, e-ScienceTalk had to initiate introductions but towards the end of PY3, a number of projects began to approach us for support (e.g. BlogForever and iMENTORS) as our reputation grew.

Our MoU partners were also interviewed towards the end of the project. Transcripts of these interviews can be found in Appendix II. All our partners were happy with our dissemination. When we asked Emidio Giorgio from the European Middleware Initiative (EMI) how we could better service their dissemination needs, he said it would be great if we could improve the way grid is perceived in other media. E-ScienceTalk has been channelling extra effort into outreach to the external community and mainstream media through social media.

Alexandre Bonvin from WeNMR had the following to say (unedited):

“You provide good visibility. We are using these articles to report to the EU always. Whatever is coming out of your kitchen is useful, not so much to our end users and the researchers but more for the e-infrastructure in general as researchers are just doing their business and want to get the work done. So it really helps that you are disseminating towards public and stakeholders in general and the other e-science projects.”

³¹ <http://blogforever.eu/>

³² <http://www.chain-project.eu/>

³³ <http://www.crisp-fp7.eu>

³⁴ <http://www.egi.eu/projects/egi-inspire/>

³⁵ <http://edgi-project.eu/>

³⁶ <http://www.e-irg.eu/about-e-irg/e-irgsp3.html>

³⁷ <http://www.eu-emi.eu/>

³⁸ <http://www.euindiagrid.eu/>

³⁹ <http://www.eudat.eu/>

⁴⁰ <http://www.erinaplus.eu/>

⁴¹ <http://www.gisela-grid.eu/>

⁴² <http://www.globalexursion-project.eu/>

⁴³ <http://www.imentors.eu/>

⁴⁴ <http://www.linksceem.eu/ls2/>

⁴⁵ <http://neugrid4you.eu/>

⁴⁶ <http://www.shiwa-workflow.eu/>

⁴⁷ <http://www.ubuntunet.net/>

⁴⁸ <http://www.association-virtus.org/>

⁴⁹ <http://www.wenmr.eu>

“By giving us visibility, you are in fact contributing to our sustainability. This is because you need to be visible to be sustainable so having used your dissemination channels and reporting what you are writing every time about the project showcases our successes in Brussels. It’s one part of the equation (i.e. visibility and sustainability).”

Nadia Nardi from ERINA+ commented (unedited) on how we contribute to networking:

“I think what is cool is the interaction i.e. putting people in contact with the things they need. I like the whole networking thing. The whole idea that we are hyper-social people now especially with resource projects and bringing people into the whole community and EC; it’s definitely a way of drawing people into the world of research projects.”

She also describes how we have helped contribute to ERINA+ dissemination goals:

“One of our goals was to help change the impact assessment culture, which was non-existent earlier. It was the idea of getting what we are doing out there, and it was cited even in the final reports. e-ScienceTalk was mentioned more than once. That’s the thing, if e-ScienceTalk manages to get interviews it is a win-win situation as the projects get cited too. This is key for a project like yours to get your name into every project report. Reading all the projects documentation, e-ScienceTalk comes up a lot and the more it comes up, the more successful your project is.”

Building a successful e-ScienceTalk brand

e-ScienceTalk has also been successful in building its academic profile. The project has had its first academic paper (*e-ScienceTalk: Measuring the impact of online outreach for e-Infrastructures*⁵⁰) published at e-Challenges in Lisbon in October 2013. E-ScienceTalk impact data was also presented at the 10th e-Infrastructure Concertation Meeting 6-7 March 2013⁵¹ and at the International Symposium on Grids and Clouds (ISGC) 2013 meeting in Taipei, Taiwan⁵². The project website has also been shared widely on social media (11 Likes, 11 tweets, 13 G+, and 18 Shares) and has also successfully built up a community of followers on Twitter. Currently @e_scitalk has 2,222 followers. Of course, quality is more important than quantity and a detailed analysis of followers reveals a large distribution of fans around the world and many are in fact highly influential with big networks (see Figure 24).





⁵⁰ https://documents.egi.eu/public/RetrieveFile?docid=1253&version=1&filename=eChallenges_eScienceTalk_final.pdf

⁵¹ <http://indico.egi.eu/indico/contributionDisplay.py?sessionId=0&contribId=5&confId=1217>

⁵² <http://indico3.twgrid.org/indico/contributionDisplay.py?sessionId=16&contribId=117&confId=370>

Figure 24: map of @e_scitalk twitter followers (Source: <http://followerwonk.com>)

Showing 1 - 10 of 10 results

	screen name	real name	tweets	following	followers	days old	Social Authority
follow	 bengoldacre	ben goldacre	39,861	1,656	285,134	2,230	83
follow	 timberners_lee	Tim Berners-Lee	382	189	135,819	1,384	66
follow	 RichardWiseman	Richard Wiseman	18,199	169	122,047	1,634	73
follow	 googleanalytics	Google Analytics	2,211	186	263,790	1,482	71
follow	 sciencemuseum	Science Museum	13,221	7,624	269,244	1,787	72
follow	 googleresearch	Google Research	383	19	285,601	1,549	53
follow	 ChemistryWorld	ChemistryWorld	6,536	1,007	219,313	1,576	67
follow	 NWF	National Wildlife	14,716	34,472	145,673	2,295	72
follow	 guardianscience	Guardian Science	16,787	1,856	413,323	1,606	77
follow	 Steveology	Steve Farnsworth	55,143	71,498	104,424	1,839	67

Contributing to the coordination of e-Infrastructures

WP1 and WP4 coordinated the 9th e-Infrastructure Concertation meeting, which took place during the EGI Technical Forum in Lyon in September. The two-day event attracted 150 delegates including representatives from the e-Infrastructure landscape, policy makers and funding agencies. The webcast amassed a wide global audience attracting 454 unique visits from 57 different countries. In February 2013, the e-ScienceTalk coordinated the 10th e-Infrastructure Concertation Meeting 6-7 March 2013. The 10th e-Infrastructure Concertation meeting was attended by 138 delegates. The project also ran the e-Infrastructure FP7 Project Success Story Competition which generated a significant amount of interest. A total of eighty projects were represented at the meeting. Over the course of the two days, there were 51 visits to the e-ScienceTalk page, and 212 visits to the GridCast blog. E-ScienceTalk tweeted 49 times during the two day period attracting a number of influential followers. The greatest number of attendees were from the UK (26) followed by Italy (18), Belgium (17) and the Netherlands (16).

Expanding outside of e-science and facilitating networking

ERINA+ analysed the project's effectiveness in terms of competitiveness and excellence of research, innovativeness and transfer outside of the domain and cohesion. More details on the report can be found in *D4.4 Annual Report on Feedback and Metrics* [R6]. The following is a direct extract from the report.

- Of the qualitative indicators of effectiveness the project scored higher than the other collaborating projects, especially in terms of innovativeness and transfer outside the domain. The report by ERINA+ notes that, as a support action focusing on dissemination of successes for other e-infrastructure project, e-ScienceTalk does not have the same scientific objectives as many of the other projects assessed. However, “even if the project did not produce a large number of scientific articles, it is interesting to note the high number of IPRs it created: it amounts to 8 in total and 5,49 normalised on the project's budget. This is a high value compared to the average (0,84). It can be assumed that the support activities are strong which is clearly in line with the objective of the project to “give high visibility to the success stories of European e-Infrastructures through different dissemination activities”.

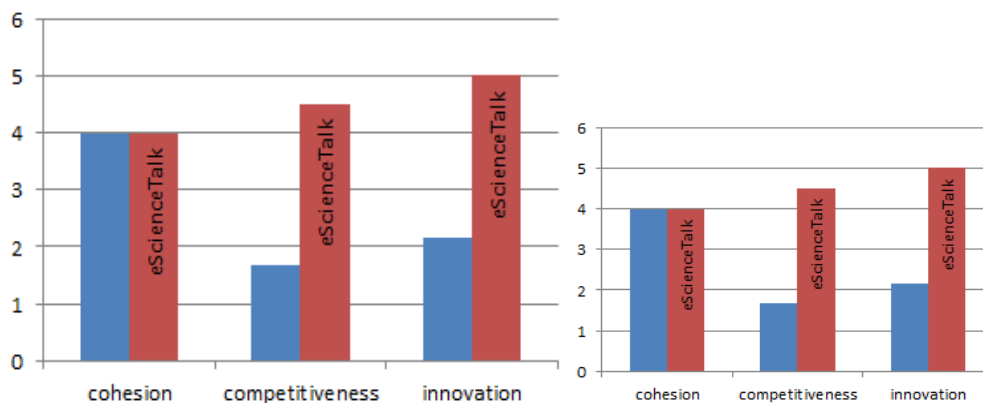
Making the work of researchers in Europe visible to researchers around the world

Other interesting points raised by the ERINA+ report include a comment on the extensive audience reach of e-ScienceTalk’s products, which are highly focused and well-defined:

- “Even if the number of dissemination activities appears limited at first, these activities by themselves have a very positive impact in terms of transfer. This is confirmed by the total audience reached by these dissemination activities, which is very high, much above the projects’ average” and also noted of the project, “it is very likely to expand its range of services to audiences outside the research domain and it partly allows for coordination of a scattered community.” E-ScienceTalk has also a positive potential impact in terms of innovativeness and transfer outside the domain. The quality and outreach of repositories and instruments are underlined by the total audience number (47, 350) which is above the average. Regarding the indicator of cohesion, e-ScienceTalk was also higher than the average, which should have a positive impact on networking as well as disseminating information beyond EU boundaries.

Both the GridCast and iSGTW were evaluated and found to be very successful by our users. The ERINA+ evaluation also showed that we are likely to expand the geographical range of users and collaboration activities. This is because we have a US and Asian Editor for iSGTW, and remote GridCasts in Latin America. Visitors to the website come from a variety of places.

Figure 25: Evaluating effectiveness: user’s point of view



Other miscellaneous impact/feedback

At the 10th e-Concertation meeting, delegates were asked what they found most useful about e-ScienceTalk’s communications. Seventeen people answered the question, and here are their responses:

- Networking and information about different FP7 projects the competition
- Delivering short but 'to the point' content
- Being kept informed about the breadth of activity
- Current news
- Very straightforward and understandable even with no specific technical background

2.6.2 Sustainability

The sustainability strategy focused on evaluating all e-ScienceTalk products on their impact, maintenance overhead (costs/effort) and likelihood of attracting future funding or in-kind support. Attracting one partner to fund for the whole project, e-ScienceTalk proved to be more difficult, simply because there are a number of different stakeholders, and audiences. e-ScienceTalk has provided various avenues for funding parts of the project separately.

There are five steps to sustainability according to a JISC report⁵³. E-ScienceTalk has met each one in this report.

1. Empowering dedicated and entrepreneurial leadership

e-ScienceTalk's business benefit lies in sustaining activities that will promote the vision of Europe2020, and support the development of Europe's e-Infrastructures. e-ScienceTalk has multiple stakeholders within the e-science and e-infrastructure field and disseminates the results of a host of FP7 funded projects. e-ScienceTalk has signed MoUs with policy bodies (e-IRGSP2/3), collaborations with organisations outside of Europe (LinkSCEEM2, CHAIN) and user communities (WeNMR, EMI, EGI-InSPIRE). In PY2, e-ScienceTalk has developed relationships with EDGI, SHIWA, N4U, EUDAT, ERINA+, Global Excursion, Virtus and CRISP. In PY3, e-ScienceTalk signed MoUs with iMENTORS, UbuntuAlliance and BlogForever. E-ScienceTalk also built relationships with the European Strategy Forum on Research Infrastructures (ESFRI) projects, including BioMedBridges and ENVRI and other outreach projects such as Discover the Cosmos, and regularly shares their news across the different platforms.

2. Creating a clear value proposition by knowing ones users

Sustainability is always an issue for digital resources, but evidence of impact can be part of a business case for continued development and support. e-ScienceTalk is working with other partners, and is often contacted about supporting new projects. By monitoring the collaborative activities agreed within the project's higher level collaboration framework, its Memoranda of Understanding, a collective business case can be developed for the products and services that prove to be most valuable to the community (see Appendix II). The project team therefore carefully markets, monitors and audits the impact of each individual activity, for all its MoU partners.

Whilst the short-term benefits of the project are more straightforward to articulate, directly assessing the longer-term business benefits is more challenging. However, the socio-economic value added by e-ScienceTalk has been evaluated externally by the ERINA+ project. Our users have reviewed our services favourably. The need for dissemination is recognised by the European Commission for FP7 e-infrastructure projects, and is therefore a major part of the of the ERINA+ value chain. The value chain describes how the success of any research project depends on its ability to communicate its results to its marketplace and clearly demonstrate how these results will benefit its end users. e-ScienceTalk provides a set of specialised communications consultancy services that can potentially benefit a range of stakeholders, including FP7 project coordinators, e-infrastructure providers,

⁵³ http://sca.jiscinvolve.org/wp/files/2011/10/iDF158-SCA_Ithaka_ReportPlus_Sep11_v1-final1.pdf

European Strategic Forum Research Infrastructure (ESFRI) projects and Research Infrastructures themselves.

The term e-science was not widely known outside the community. e-ScienceTalk products have succeeded in increasing the visibility of e-science to its audiences, such as policy makers, the general public, journalists and scientist, succeeding in communicating research supported by distributed computing beyond the IT community. The project has enhanced the knowledge that current and future e-science researchers have of the infrastructure.

3. Minimising direct costs

As a dissemination support project to the European Strategy Forum on Research Infrastructures (ESFRI) projects, e-ScienceTalk can increase effectiveness and efficiency in communication outlined in the ERINA+ report (see *D4.5 Final Feedback Metrics Report*). This leads to a potential cost saving, and also the filtering of information provided gives news items or content greater credibility. In developing new audiences and helping projects, we are potentially attracting new users. This has been demonstrated with anecdotal evidence and quotes from our partners. To achieve the digital future requires work, vision, funding and cooperation. Many of the products are inherently sustainable such as the GridCasts, which relies on crowdsourcing and outsourcing. Sustainability also means ensuring accessibility and in particular 'open access' or availability of content over time. This has already been outlined in the report.

4. Developing diverse and reliable revenue sources

e-ScienceTalk has secured NSF funding and travelling costs from Academia Sinica Grid Computing. We have also been acknowledged as preferred dissemination service by our MoUs collaborating projects and recently by CRISP.

The GridCast team provides professional multimedia support, while iSGTW's unbiased, non-technical and engaging style of reporting serves both individual projects in meeting their communication aims, but also raises the awareness of e-science (and of its important role in research) to those outside the community.

The e-ScienceTalk team includes a small but active team of eight people across five countries. Each of the team members are professionals in their fields, and are able to offer a range of services to support internal and external communications activities. The project has provided consultancy services to CRISP in website design, social media set up and video creation.

- **Consultancy** – communications and media outreach general consultancy; copy proof reading; and impact assessment of communication tools such as websites.
- **Print design** – high quality and innovative print design for posters, postcards, brochures, leaflets, exhibition booth materials, banners.
- **Web and graphic design** – custom built web graphics and interactive web sites, including 3D virtual world sites in New World Grid, the open source equivalent to Second Life used by ATLAS and CERN.
- **Video creation** – onsite filming at events, editing, sound design and promotion of video content.

- **Social media** – development of social media strategies, support in setting up and optimising social media feeds, management of the output through tools such as IFTTT (If This Then That) and measurement of impact using tools such as Klout.
- **Blogging** – consultancy on setting up blogs, managing blogging tools, expertise in organising volunteer contributions.
- **Science writing** - professional journalistic writing services including features, news, policy briefings and content optimised for print, web, blogs and social media.
- **Newsletters** – production of email newsletter templates, consultancy on content writing.
- Event logistics and promotion – experience of organising the e-infrastructure concertation meetings for the EC in Geneva and Lyon, attended by around 120 representatives of newly funded FP7 projects, including all outreach and promotion activities.
- **Media outreach** – contacts in trade publications such as HPCwire, HPCinthecloud and Datanami, outreach through the Alphagalileo press service, consultancy on press releases and news items.
- **Media training** – one day courses for communications professionals in press release writing, news values, social media tools and developing messages.

5. Establishing clear accountability and metrics for success

e-ScienceTalk is contributing to scholarly impact and its reports, publications and presentations are accessible through the EGI document repository⁵⁴. The project is building a library of grey literature resources. Scientometrics or bibliometrics refers to, at its simplest, the process of counting the number of citations in the academic literature to a prior work. In the past, impact metrics were limited to citations and journals. Today, usage metrics offer new opportunities to measure impact of a large scale of digital resources, also on the individual item level.

A strong project understands what the audiences' value most. As the e-ScienceTalk project regularly monitors its impact, it has recognised the importance of forecasting and evidencing impact for all stakeholders. The project has also recently produced an overview guide to dissemination for EC projects, based on the extensive experience gained and lessons learnt during all phases of the project.

⁵⁴ Document.egi.eu

3 CONCLUSION

The e-ScienceTalk project regrettably ends on July 31st 2013. However, many of the products developed by the team live on. Some elements can be handed over to larger-scale organisations (e.g. EGI) and some will be in-kind support.

e-ScienceCity

- A brand new site, e-ScienceCity has been created and marketed under the e-ScienceTalk project, which is gradually gaining a reputation within the community.
- Since September 2011, the website has received **20,473 page views** and **5,424 unique visitors**.
- Projects are using it during courses and feedback reveals that the site is serving its purpose as an educational resource. It is regularly cited as the go-to-resource for most grid workshops/talks as well increasingly cited as the main reference for other e-Infrastructure training.
- The strategy for sustainability involves a low maintenance model based on minimal web administration with funding for web hosting paid by the shortfall in funds spent.

e-ScienceBriefings

- The **subscriber list has grown by 20% this year**. Many people on the list have been identified as gatekeepers to a larger community.
- During PY2, briefings were downloaded 5,766 times. A year later, the number of **downloads has tripled to 17,281** (July 16th 2013).
- The briefings have increased visibility for projects, and some projects have cited our briefings in their dissemination reports.
- The e-ScienceBriefings are the most-time consuming product for e-ScienceTalk and therefore will have to be suspended for the foreseeable future. Going forward, the briefings would be made publicly available free on an archive. A compilation of previous briefings has been delivered during PY3 to government science and technology offices in European states.

GridCast/@e_scitalk

- GridCast has a **wide reach (162, 575 page views over its lifetime)**. The blog is more popular than ever in the last year (May 2013). There is also a long-tail of interest as the archive has valuable.
- The **GridTalk YouTube channel has grown by 40%** (i.e. subscriber numbers) this year and the cumulative number of video views is now 18% higher than last year (242,940).
- The audience is more diverse and international due to more global event coverage and interest in the channel is ten times higher than at the end of GridTalk
- The blogs USP are the videos, which have the potential to go viral e.g. Daily Mail pick up. Mainstream media are reading the blog e.g. pick up in HPC Wire from CloudScape IV.
- Writing blogs has been useful for contributors for a number of reasons e.g. fostered collaborations, helps summarise what people have learnt and helps build networks with researcher in the Europe for further research collaboration
- Creating videos has been useful for our partners, and has resulted in the project developing spin-off training modules and other consultancy services

- As the blog is built on the Blogger platform, the costs for its continuation are low. Several bloggers are regular contributors, and GridCast will be managed by EGI dissemination team for at least the next year.

RTM and GridGuide

- GridGuide and the Real Time Monitor (RTM) are both used by researchers to promote their projects to their peers, and find out about other grid sites around the world.
- GridGuide is the least well-known e-ScienceTalk product, and was incorporated into e-ScienceCity in the people bay area (GridPort).
- The RTM is a more popular tool, with many grid sites and distributed computing demonstrations worldwide making use of its graphical representation of data flowing around a 3D globe. Many institutions are running the RTM.
- Approximately **30,000 people have seen the RTM** at conferences.
- Towards the end of 2013, the RTM will be adopted by the London Science Museum for its LHC Collider exhibition, which means it could be potentially seen by 1.5 million people.
- Development and maintenance of the RTM required significant time investment (0.5FTE). Janusz Martyniak is working on a number of features that will make the RTM more accessible and visually appealing to the tens of thousands of visitors that will visit the exhibition. This should be implemented by the review in time for the exhibition. After which maintenance by Janusz will be on a best effort basis.

iSGTW

- iSGTW has been found to centralise the communication effort and increase the visibility of e-science
- *International Science Grid This Week* (iSGTW) is e-ScienceTalk's most popular product according to internal reviewers.
- Journalists from mainstream media have established relationships with those within e-science through iSGTW. iSGTW is influential and has a number of high profile media followers.
- During the e-ScienceTalk project, the iSGTW website has received 431,222 unique visitors and over 1 million page views (1,019,215).
- One month before the end of the project e-ScienceTalk has 8,770, which is 241 over the target (2.8%).
- Since PY2, the weekly web-based publication has experienced a sharp increase in unique visitors to the website, and a rise in social media subscribers (over 2,624), and features written for iSGTW have subsequently been picked up by the popular technical and scientific press.
- Interviews with our readership and surveys have revealed that iSGTW provides assistance to the community in finding future partners /collaboration and helps scientists keep informed on the latest technologies in e-science

e-ScienceTalk has developed a successful and well-known platform for disseminating the success stories and societal impact of e-Infrastructures to researchers throughout Europe and beyond. The project has built up an archive or repository of material on e-science, and also has provided an advisory role in disseminating the results of academic research outside of the community.



The project has recorded many of the lessons learnt in the *D4.4 Annual Report on Feedback and Metric*. One of the most important lessons for measuring impact is planning ahead and making resources easy to find by building partnerships/networks early on. It is also important to demonstrate impact using numerical methods and statistics enriched with more detailed case studies and stories. e-ScienceTalk has in many ways made e-science dissemination, cheaper, more convenient and less time consuming for researchers.

4 THE FUTURE: E-SCIENCETALK2

If funding were to become available in Horizon2020, the project team have brainstormed some ideas for an e-ScienceTalk2. The project has already built up a reputation and brand recognition within the community as e-ScienceTalk and could develop some of products further to better serve the community. The project has already identified lessons learnt in *D4.5 Annual Report on Feedback and Metrics* [R5]. This section highlights new products or add-on services.

E-ScienceCity could become a community hub if marketed effectively. Digital advertising methods could be adopted to promote our content, which could be as straightforward as designing a pop-up, pop-under, banners and buttons for our MoU partners to place on their website. The project would also develop the multimedia/resources section to include more quizzes/interactive crosswords. The portal could include Continuing Professional Development (CPD) services by featuring online tutorials. Materials could be sourced from the UK NES/NGS and the EGI Training marketplace. The service could be called e-ScienceTrain and by successfully completing training modules e-scientists would attain e-ScienceCitizenship.

GridCast would be rebranded and promoted as CloudCast, DataCast or e-Cast to reflect its wider scope. The project produces a lot of content that is not necessarily used (e.g. audio recordings of iSGTW interviews). These interviews could be used as podcasts. One podcast could be uploaded to GridCast every two weeks. The podcasts could be short and snappy (e.g. 60-Second Science⁵⁵) or more detailed depending on the content. If any prove particular popular on the GridCast platform, contributions could be made to other science podcasts⁵⁶. Another idea floated would be to develop a mobile app version of RTM that shows your nearest Grid Site.

The project could adopt three levels of support for MoU partners (bronze, silver, and gold). Gold could involve a premium or gold service with e-ScienceTalk developing a professional video similar to the EGI Stories from the grid using an external provider⁵⁷. A bronze service would be similar to the current level of support provided to e-ScienceTalk MoU partners. The project produces dissemination audits for our partners on a six month basis. During e-ScienceTalk, these could be formalised as a deliverable for each MoU partner and aligned with each project's reporting timelines.

e-ScienceTalk2 would be more proactive in establishing our media links. The best blog could be contributed to various community blogs and the project would build more relationships with blogging communities e.g. ScienceBlogs⁵⁸ and SoapBoxScience⁵⁹. The project could also build more active relationships with print and online media.

Two e-concertation meetings were successfully planned and managed by e-ScienceTalk. E-ScienceTalk2 could host smaller meetings to enable collaborations. The project could provide a

⁵⁵ <http://www.scientificamerican.com/podcast/podcasts.cfm?type=60-second-science>

⁵⁶ <http://www.teachthought.com/technology/40-of-the-best-science-podcasts-for-mobile-learning/>

⁵⁷ <http://www.egi.eu/news-and-media/videos/>

⁵⁸ <http://en.wikipedia.org/wiki/ScienceBlogs>

⁵⁹ <http://blogs.nature.com/soapboxscience/>



networking service by employing a former member of the research community as an associate for Knowledge Exchange (e-ScienceTank).

For a future e-ScienceTalk, the project team sees the policy briefings as being more targeted to discipline (e.g. Biosciences, geosciences, astrosociences, health sciences, environmental sciences, engineering and technology, agricultural sciences and humanities). The format would be a general introduction, followed by case studies and problems and solutions related to specific disciplines.

5 REFERENCES

R 1	e-ScienceTalk Description of Work https://documents.egi.eu/document/233
R2	Meyer, E.T. (2011). Splashes and Ripples: Synthesizing the Evidence on the Impact of Digital Resources. London: JISC. Available online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1846535
R3	Let's get real (2011). Report from the Culture24 Action Research Project http://www.keepandshare.com/doc/3148919/culture24-howtoevaluateonlinesuccess-bw-pdf-september-19-2011-11-15-am-2-1-meg?da=y
R4	D1.4 Annual Impact and Sustainability Report https://documents.egi.eu/public/RetrieveFile?docid=1297&version=4&filename=eScienceTalk_D1_4_Impact%20sustainability%20report.pdf
R5	D4.5 Annual Report on Feedback and Metrics https://documents.egi.eu/public/ShowDocument?docid=1849
R6	D4.4 Annual Report on Feedback and Metrics https://documents.egi.eu/public/RetrieveFile?docid=1328&version=4&filename=e-ScienceTalk_D4_4_Annual_Report_Feedback_Metrics_final.pdf
R7	D2.5 - Final dissemination report on GridCafe, GridGuide, GridCast https://documents.egi.eu/public/ShowDocument?docid=1848
R8	D2.4 Annual Upgraded Version of the RTM https://documents.egi.eu/public/ShowDocument?docid=1845
R 9	<i>D3.3 Marketing strategy for iSGTW</i> https://documents.egi.eu/public/RetrieveFile?docid=533&version=2&filename=D3%203_Marketing_Strategy_final.pdf
R10	<i>D3.7 iSGTW and Social Media</i> https://documents.egi.eu/public/ShowDocument?docid=1847



6 APPENDIX

I. iSGTW Interviews

Interview 1: Interviewee Gurcharan Khanna, Director of Research Computing at [Rochester Institute of Technology](http://people.rit.edu/gskpop/) <http://people.rit.edu/gskpop/>

How long have you been a subscriber, and why did you decide to subscribe to the newsletter?

I am trying to remember when it was. It was around five years ago at least when I was setting up New York State grid, and 'Grid' was on my mind. But I can't remember whether it was someone telling me about it or whether I signed up for another reason.

[He mentions that he has contributed to the magazine and I ask him about impact.]

We've had two articles, one in [December 2007](#) and one was in [April 2008](#). The articles didn't have any direct link to impact, but it did get our name out there. It was part of our general advertising and helped us describe what we are doing for both internal and external use.

How do you read iSGTW (i.e. subscriber, Twitter/Facebook, through the website)?

I typically read via email. I don't use Twitter or Facebook. I usually wait until I receive the issue.

How do you spot an interesting article (i.e. is it the title, a photo etc.)? Can you recall any stories that particularly grabbed your attention?

All of the above, really. My general area of interest is GPU computing. However, we have researchers here in astrophysics so I often send them on a link to competitions or news. I am also interested in visualisations, video, and 3-D. I look out for these buzz words. I noticed the 'How to grow a universe' that was on an 'astrophysics' topic and have sent this on. I also look at what's current.

Which sections of the website do you find most interesting? What sections do you use? Have you used the announcements section?

I scan it ...go over it quickly looking for technical stories, or stories for personal interest. I have posted jobs before. *[Looks at website]* However, now that I am looking, I can't see the 'careers' section. Perhaps this could be a little more prominent.

Several years ago, I remember making an announcement. However, nowadays I am not so proactive mainly because my role has changed.

What actions have you taken as a result of reading an iSGTW article?

I probably have sent links four times in several years. I am usually quite targeted, but sometimes I do send links to a broad range of people. With a recent piece, about cosmic simulations and making movies, I'd think I sent it on to RIT researchers. I always look for a connection.

Grids are less prominent in my job now but I still like to read iSGTW. I like articles that have relevance for what we are doing. I read it for possible collaborations or those using GPUs. One recent article from German astrophysics group *[looks up article, but can't find it]*, I read the article, and emailed the researchers for links to the original paper.

What do you think of the format, design and the photos used?

[Pauses to look at the interface]. The graphics convey the message well. I like the white background and large graphics. Articles are the core issue for me.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our readership? Should we change our name to e-science news?

iSGTW doesn't mean anything. However, 'International Science Grid This Week' has more relevance. The vision for grid was to be clouds. But 'cloud' is currently the buzz word. It's technically the same thing. What is the scope of iSGTW, it's beyond gri to volunteer, cloud, and highly scaled computing. Does it extend to visualisations? [Asks me to define the limits of iSGTW's scope]

Do you think we cover a broad range of geographical areas and/or disciplines?

I actually really like reading about non-American areas of research. However, as I read very sporadically it's difficult to really make a judgement. I am attracted to the European research articles. I am not sure why that is. Do they do more research, or maybe their self-analysis is better, not sure...

What kind of 'special' issues would you like to see us cover this year?

I am interested in astrophysics as a discipline, and especially black holes. Also HEP is interesting to me. Visualisation stories are interesting and another big topic at the moment is 'Big Data'.

Are you aware of any of the other products that fall under e-ScienceTalk?

[Gurchannan had little knowledge of our other products. He has heard of GridCafe. I said I would send him a link to GridCast, the Visualisations briefing, and GridCafe. He said he's link to GridCafe.]

[He will be at Internet2 and XSEDE and may blog if we were interested. His research interest is Networks and video conferencing.]

Interview 2: Jens Jenson, STFC

How long have you been a subscriber? Why did you decide to subscribe to the newsletter?

I can't really remember when I first received a newsletter...it's since forever, possibly since inception. It was probably EGEE that originally signed me up. I think it was a very friendly outreach person at EGEE. I stayed subscribed though [Looking back at emails]. I keep all the newsletters and I have them going back to 2006. It's useful to search my archive for key words.

I've also written a few articles. I found contributing to iSGTW a very easy process and it was easy to work with the editorial team. I haven't published anything in a couple of years though.

How do you read iSGTW (i.e. subscriber, Twitter/Facebook, through the website)?

I receive it through the weekly email, and read all the headlines.

How do you spot an interesting article (i.e. is it the title, a photo etc.)? Can you recall any stories that particularly grabbed your attention?

It's easy enough to spot an interesting article as there are only five articles to read. I usually just read things that are interesting to me. I always read the front page, and read on usually because of the abstract (not usually because of the picture or votes). Sometimes, I read because of the author. [Jens mentioned that he uses Google+ more frequently now to share articles]

What other magazines do you subscribe to in the general computing area?

I often get signed up to newsletters at events, but iSGTW is one that I actually read. It's the most useful.

Which sections do you find most interesting? What sections don't you like?

I don't think the voting system is useful. It is a bit too dependent on people really. I do like the 'Around the Web' section. It's very useful. I also have a suggestion for your archive. It would be great if you could include slightly more than just the headline, maybe an abstract or some tags.

What actions have you taken as a result of reading an iSGTW article?

I have referenced URLs in talks and often when writing proposals, to illustrate when we have produced an application or when we are doing something interesting. I have also emailed articles to my family. [He mentioned that he finds iSGTW useful as it provides a friendly summary. However, sometimes it would be good to link more details e.g. a scholarly paper.]

Do you use the announcements section? How did you find it?

I've not used it.

What do you think of the format, design and the photos used?

I like the interface, and it is pretty modern.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our readership? Should we change our name to e-science news?

I think the format, and how the articles are written as well as word length etc., mean iSGTW strikes the right balance. If you write it too simply then researchers may think it's a beginner's text. The balance is right. I think 'The Digital Scientist' as a name sounded too anonymous. It's not particularly recognisable. iSGTW for me is distinct enough, and it sets it out from other newsletters.

To open it open for a new audience, perhaps you could get more 'likes' on Facebook. Or get readers to share articles to open it up to a wider community of researchers.

What kind of 'special' issues would you like to see us cover this year?

I think that 'Data' and the large volumes of data from big instruments would be an interesting topic. I am personally interested in data security, infrastructures of petabytes etc. I also have a strong interest in how science uses the cloud. I am attending the ISC Cloud event (<http://www.isc-events.com/cloud12/>) and was interested in the interview with Manish Parashar. I'd like to read about 'How does the way science use the cloud differ from industry?'

Are you aware of any of the other products that fall under e-ScienceTalk?

Yes, I've blogged for GridCast. I usually only check GridCast if there are conferences that I am not attending.

Interview 3: Riina Salmivalli, Project Coordinator, LEAR, CSC - IT Center for Science Ltd.

15th November 2012 @ 9am (GMT)

Profile: <http://www.linkedin.com/pub/riina-salmivalli/10/b05/4a2>

How long have you been a subscriber? Why did you decide to subscribe to the newsletter? Well, I started working at CSC last year in August. When I came here, I remember my previous colleague recommended certain newsletters that would be useful for me. That was when I started subscribing. It was probably autumn last year – around August/September 2011.

How do you usually read iSGTW? Is it through the subscriber email, via Twitter or Facebook, or do you go straight to the website on an ad-hoc basis? It depends. Sometimes I read the newsletter itself

when it comes into my inbox, but quite often I just go to the website and scroll around while I drink a coffee, and have a look at what's going on that week. I haven't seen the Facebook page just the email version and the website. About Twitter, sometimes yes. I read the page every now and then when there is something that leads me there.

How do you spot an interesting article? What draws you in usually –a title, keyword or a photo etc.? It's usually when you find a keyword in the titles that you are interested in, so that's how I make a decision on where to start. In the first few months, when I started in this business, I was reading the newsletter based on what sounds interesting for my general knowledge. Nowadays, it's more for keywords in articles that are related to my work. I try to catch those articles.

Can you recall any stories that particularly grabbed your attention? Normally what catches my attention are the articles that are related to the certain project I am working on (i.e. EUDAT) but I am also quite interested in events that are recorded in the newsletter. When there is something about the EGI-technical Forum then I usually read those kinds of articles. I usually read general articles related to individual events.

What do you think of the titles? I think they are quite often clever. With some articles, I find it difficult to capture the sense of the text with the title. However, that may be the difference between being a native speaker and not being one. But yes I do think the articles are generally quite clever. It's kind of good in a marketing sense, and I think it makes it more attractive.

Which sections of the website do you find most interesting? What sections do you use or don't use? Usually, I am interested in events. The spotlight is usually interesting, and the easiest one to catch up on is the top feature. I don't really have any comments on the structure, and how that should be though.

Have you used the announcements section? Yes we have.

And did you find it difficult/ easy to post events? Yes. {hesitates} well relatively. I think we used it for the EUDAT conference back in September.

What actions have you taken as a result of reading an iSGTW article? For example, have you attended event, bookmarked or forwarded an article to a colleague? Yes, I have forwarded some articles.

What do you think of the design and the photos used? I think it's a fresh design in a sense that it is not too full. There is the right proportion of white space and text making it easier to scan. I think it works quite well.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our existing audience? Should we consider changing our name? It's hard to tell. I don't see a problem at the moment. Why not? It might be a bit of a waste of money and time to rebrand. But there are positives and negatives. When I started in CSC I kept on referring to isetw. Now that I've learnt the name, I can recall it easily now.

What kind of 'special' issues would you like to see us cover this year? I don't have any ideas for the moment. [She'll get back to us]

What other publications do you read? I subscribe to several publications and big data newsletters but I don't read the others. Compared to data-related newsletters, iSGTW is very easy to be drawn into because it's not too technical or the level of technically is quite easy to understand for a beginner... [pause]... It's not dull like some of the others.

Interview 4: Stéphane VIALLE (<http://www.metz.supelec.fr/metz/personnel/vialle/>)

How long have you been a subscriber, and why did you decide to subscribe to the newsletter? [Pauses] I have received the news for several years now. I think for at least three years. I don't remember how exactly. I think it might have been an email from the European Commission.

How do you read iSGTW (i.e. subscriber, Twitter/Facebook, through the website)? I receive the email. I usually click through from the titles. I think that's all I need.

How do you decide to read an article (i.e. is it the title, a photo etc.)? Can you recall any stories that particularly grabbed your attention? I read the short sentence on each subject in the mail. I don't think the picture really influences me. A short time ago, I read an interesting article on local energy processes [?]. I also shared an article with my students on the evolution of usage of European grid. There was an animation showing the number of users per country. It provided an effective illustration for the course on how the grid infrastructure is widely used.

Which sections of the website do you find most interesting? What sections do you use? Have you used the announcements section? I have never been to the website. I haven't used the announcements section.

What actions have you taken as a result of reading an iSGTW article? How does it help you work? Yes. Usually I read the articles for me. Every other newsletter, I may forward a link of specific news to my colleague usually on technological news. I have emailed people in my institute and people in the ODF.

What do you think of the format, design and the photos used? Two years ago, I remember you changed the design. I think the format is OK now. The email is pretty easy to read.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our readership? Should we change our name to e-science news? I know iSGTW as an important source of information for me, but I still don't remember the name. He thinks adopting a more memorable name might be a good idea.

Do you think we cover a broad range of geographical areas and/or disciplines? It's ok from a geographic point of view. I'd like to see more topics for grid users. I design file systems, and am not a user. I like reading what is important for users. Articles about technology are also useful for me. I do think there is good range from Europe and US, but more news from Asia would be interesting.

What kind of 'special' issues would you like to see us cover in 2013? A specific special issue would be aimed at non-experts to teach fundamentals to increase the population that are experts in the area.

Are you aware of any of the other products that fall under e-ScienceTalk? No, not really. *I will send on information.*

Interview 5: Tiwonge Msulira Banda, F&A Manager, UbuntuNet Alliance on 19th November 2012 @ 12a.50pm (GMT)

How long have you been a subscriber? Why did you decide to subscribe to the newsletter? I read iSGTW regularly and anything that has an African link I am interested in. I can't really remember. It was probably about 3 years since the [IST Africa conference in 2010](#) in Durban. There was a printed version on one of the desks that I picked up. I read it on the plane, and when I got home I subscribed to it as we had just started working in e-infrastructures and grid computing at the same time with CHAIN.

How do you usually read iSGTW? Is it through the subscriber email, via Twitter or Facebook, or do you go straight to the website on an ad-hoc basis? I usually read it every week via email, but sometimes I check Twitter. I read it as soon as I get the email.

How do you spot an interesting article? What draws you in usually –a title, keyword or a photo etc.? ...[pause]...mostly from the titles.

Can you recall any stories that particularly grabbed your attention? All the articles that we have published in our newsletter I've generally found really interesting.

What do you think of the titles? They are fairly interesting, and usually capture my attention. For example, I remember the 'Goldilocks' article. It's always intriguing.

Which sections of the website do you find most interesting? The articles. I haven't seen the website.

What sections do you use or don't use? Have you used the announcements section? And did you find it difficult/ easy to post events? No. I haven't posted an announcement. I didn't know you could. [I'll send some instructions on]

What actions have you taken as a result of reading an iSGTW article? For example, have you attended event, bookmarked or forwarded an article to a colleague? We pass on the information to our community. A colleague of mine followed the servers coming out of CERN. Her name was Margaret.

What do you think of the design and the photos used? The design is good. I like the way it is laid out.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our existing audience? Should we consider changing our name? No. The name for me is good although I used to always mispronounce but I know it as International Science Grids This Week.

What kind of 'special' issues would you like to see us cover this year? Can I get back to you on that?

What other publications do you read? GEANT connect and RedCLARA magazine.

Interview 6: Dr.Syed Raheel Hassan, Quaid-e-Awam University of Engineering Science & Technology, Nawabshah. Pakistan.

How long have you been a subscriber? Why did you decide to subscribe to the newsletter? I have subscribed for around 4 to 5 years. It was when I was only a PhD. At the time I wanted to know more about grid computing, and I searched the internet to find out about the events around the world and grid computing came up. It lead me to iSGTW.

How do you read iSGTW (i.e. subscriber, Twitter/Facebook, through the website)? I do not have much time for Facebook and twitter. I only read the contents of the email.

How do you spot an interesting article (i.e. is it the title, a photo etc.)? Can you recall any stories that particularly grabbed your attention? What do you think of the titles? The title is the first thing I notice. The photos are very good, but it's mostly the title. I don't remember any recent articles but about 8-9 months ago I read an article by [Mine Altunay](#) from the Open Science Grid discussing the problems in grid computing and grid security. She is listed on the gridcafe site. [The article: 7 Nov 2007 – iSGTW Feature - Distributed security: keeping Open Science Grid ... Head of OSG Security Mine Altunay says constant vigilance is essential.]

What other magazines do you subscribe to within the general computing area? For grid computing, I read gridcafe.org or Open Grid Forum.

What (if any) actions have you taken as a result of reading an iSGTW article? Normally, I and a group of students (through a yahoo mail park grid) exchange ideas about developing grid networks and the good news from the grid. We share and read articles. I remember we discussed two articles about the Higgs Boson and grids and a couple about supercomputing.

Links to the articles:

Hear a Higgs through its data | iSGTW

www.isgtw.org/feature/hear-higgs-through-its-data

1 Aug 2012 – With all the excitement about the new Higgs boson-like particle found by ... Adrian Giordani is the Science Journalist of iSGTW, based at CERN, ...

The higgs, the history, and the grid | iSGTW

<http://www.isgtw.org/feature/higgs-history-and-grid>: 363,460 www.isgtw.org/feature/higgs-history-and-grid

Feature / July 11, 2012 / By Catherine Gater

Do you use the announcements section? How did you find it? I have never posted, but I regularly look at updates, blogs, announcements and I definitely think this is one of the most important sections.

What do you think of the format, design and the photos used? The design is good. However, I do have one suggestion. I filled in the survey to say that sometimes you miss the registration details for upcoming events. I wish this was highlighted.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our readership? Should we change our name to e-science news? Yes, I think a shorter name would be good. Laughs. I can never remember the name.

What kind of 'special' issues would you like to see us cover this year? Yes, I have two ideas. I think the topic of monitoring the grid (data storage and processing power) and more information on security issues would be good. People hesitate to discuss security, but it would be good to see some of the ideas out there.

Are you aware of any of the other products that fall under e-ScienceTalk? Are you attending any events, and would you be interested in contributing to our blog? He regularly uses GridCafe but hasn't heard of GridCast or GridGuide. I'll send him on some information.

Interview 7: Vas Vasiliadis, Director, Products, Communication and Development, Computation Institute, University of Chicago and Argonne National Laboratory. www.ci.uchicago.edu Date: 4.30pm Tuesday 4th Dec 2012

How long have you been a subscriber? Why did you decide to subscribe to the newsletter? I think I have been a subscriber for about two and half years. It was when I joined the University of Chicago. I think ISGTW was recommended by a few of my colleagues as an excellent source of computer science communication and news.

How do you read iSGTW (i.e. subscriber, Twitter/Facebook, through the website)? I mostly read it through the weekly email. I pick any interesting links from there and click on to the site. I don't follow twitter, but I will. *He mentions he will join up right then.* I look at the events calendar once in a while to see what is coming up and where we can present our work, and for any other interesting things.

How do you spot an interesting article (i.e. is it the title, a photo etc.)? Can you recall any stories that particularly grabbed your attention? What do you think of the titles?

I usually read the title and scan for key words. I generally read about exascale as it's big for us, and also cloud-related topics. We are also interested in big data, and cloud computing in the physical and bioscience areas. I also click on anything that covers a major event. I probably also look at articles related to funding, or trends in grants. I think the titles are quite relevant. They aren't marketing-like or press releases.

What other magazines do you subscribe to within the general computing area?

It's really hard to say as I skim so many. For many years, I subscribed to a number of publications, but I have recently whittled them down. I read iSGTW and sometimes look at Datanami or HPC in the

cloud. I get a lot of news from CIO news (www.cio.com). I also check out various blogs and a sprinkling of other sources such as Information week (www.informationweek.com/).

Which sections do you find most interesting in ISGTW? What sections don't you like? Do you have any suggestions?

I like the general way it's laid out. The feature articles at the top are always good, and the key articles below also work for me. I don't know if there are many ways you could change the format.

What (if any) actions have you taken as a result of reading an iSGTW article?

On multiple occasions, I have forwarded articles on interesting research, especially some of the stories around data management. [*He looks through his archive*]. Yes, I remember one article about moving genomic mountains by Michael Schneider. I remember making some connections with Xsede through this article (<http://www.isgtw.org/feature/moving-genomic-mountains>).

Do you use the announcements section? How did you find it?

I didn't know about this. We'd love to do this. I have read about annual globus world announcements but it would be good to have this explicit service for our department. [I will send on instructions].

What do you think of the format, design and the photos used?

I like the images, but the headline is what attracts me usually. The stories aren't terribly long and are to the point, which is useful.

Do you have any ideas on how we could expand the scope of the readership BUT still maintain our readership? Should we change our name to e-science news?

That's a hard one. I don't know what your brand equity is like. The name is recognizable within the community so who would you attract by changing the name. My personal view is that there is so many cyberscience/e-science sources that you could get lost in the noise and overlooked in searches.

What kind of 'special' issues would you like to see us cover this year?

I think more information on software as a service model and as applied to scientific research would be useful. As it's mostly been in-house purpose built (though open source software), but it would be interesting to see the dynamics of cloud impacting on people in research. Obviously, using internal infrastructure is not so cost effective but lots of people are still clinging to it. We'd be interested in contributing to an article on the subject [*Sorry, I couldn't quite hear him here, but this is the general gist of what he said*].

Are you aware of any of the other products that fall under e-ScienceTalk? Are you attending any events, and would you be interested in contributing to our blog?

Vas had not heard of any e-ScienceTalk products but requested information on GridCast and e-ScienceCity.

II. Appraisals of e-ScienceTalk by its MoU Partners

What our partners have to say about us?

e-ScienceTalk MoU Interviews

<p>Interview 1</p> <p>Kitti Varga on 20.06.13 Research associate at MTA SZTAKI Projects: SHIWA, GlobalExcursion, ER-Flow, SCI-BUS</p>	
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What do you find most useful about e-ScienceTalk communications? Please also explain which products you think have been useful, and provide reasons.

I mostly use your blog to read up on topics. To be honest I am not using twitter, but maybe I should. I don't really have the time to maintain our own twitter account. Mostly, we just tweet our things. Developing twitter will be the next step, but at the moment we don't really have the manpower to do this. Out of all the products, I really like the blog. I like that there are many topics. I like short articles and I really like the videos. I think they are very useful. From the project side, I think the blog is the best product as well because when we have had something to share with people you were always happy to post it. This was a big help for us. YouTube ofcourse is a product too and I like that as well.

[ZQ mentions some more products] Yes, I've seen e-ScienceCity and I like it. If I want to show someone something about e-science that is definitely the best place to go. KV

Which products have been the least useful? How could we improve those products?

I tried to think about how to improve the blog, but I didn't really have much in the way of ideas. I think you are doing a really good job so I don't really have any big ideas. I really like the newsletters that you are sending out. I think it is very important to send people this kind of information as people can then spend 2-5 minutes to get an idea of what's going on. KV

Can you describe some of the ways e-ScienceTalk has contributed to the dissemination goals?

You have helped me in four projects (Global Excursion, ER-FLOW, SHIWA and SCIBUS). You were really a big help because we don't know where to disseminate our small articles and our news. You posted on the e-ScienceTalk blog, and allowed us to post announcements in iSGTW and reposted our summer school in the events section. I don't really know the numbers that came from your website to our summer school page but I am sure lots of people saw it. There are statistics and at least 20 people looked at the website. I haven't done an extensive analysis but there were a lot of visitors after the announcement. KV

Has e-ScienceTalk helped you achieve any other impact goals (not directly relating to dissemination)?

ER-FLOW and SCIBUS we are looking for communities all the time, I am sure that some of them came from your e-ScienceTalk pages. You disseminate our things and they can then contact us for more details on the specifics of the technology. I am sure that this kind of dissemination has helped our project. KV

Have you any ideas that may help us maintain a sustainable platform for our 1-year funding gap?

But I thought you already had some guest bloggers. This could be the way. You maintain the infrastructure and people just post their own articles and news. [*Send on Neasan's details to Kitti*]. KV

How could an e-ScienceTalk2 better service your dissemination needs? What do you think we could improve on?

Not really. I am happy with e-ScienceTalk1 so I think if you carry on with what you are doing it would be good. [*Send Kitti some ideas after a brainstorm with the team*] KV

What you would most like to hear about?

I don't really have a topic of interest. I am interested in lots of different topics. For me, the stories should be short and 400 words should be the longest blog post. I really like stories that are easy to understand and not too technical with a link to find out more information. I like blogs that have pictures and that can be read through quickly. Usually, I don't have much time to read it. If it's short and funny and I can read it in a few minutes then I am happy. This is the same for videos. They should be short with just a few words to catch someone's interest and then here's a link.

What upcoming stories/news should we be reporting on for next year (July 2013-July 2014)?

We have a summer school at the beginning of July so I can report on that one. I don't know of anything else. I will write a conclusion at the end.

Thank you for your work in the last few years because it helped me a lot. I am happy that you were there and you could help me. I don't know what I would have done without e-ScienceTalk.

Interview 2

Dr. Alexandre M.J.J Bonvin on 24.06.12
Professor of Computational Structural Biology, NMR Research group, Faculty of Science, Utrecht University



What do you find most useful about e-ScienceTalk communications? Please also explain which products you think have been useful, and provide reasons.

The overviews of meetings are useful, for example when e-ScienceTalk covered the ISGC meeting in Taiwan. Science Grids [ISGTW] is very useful. The short coverage of events such as the Science prize is useful. Any publicity at all is useful. Science Grid has more in-depth articles that are all very useful. The GridCast, Science Grid Weekly and even the video that you shoot at meetings are also giving visibility to various projects. These would be the most important media. I monitor Science Grid This Week, GridCast, the videos and the Real Time Monitor. We sometimes use the RTM, as it looks nice. It's a nice overview for showing the grid traffic. We might show it from time-to-time for a talk. AB

Which products have been the least useful? How could we improve those products?

e-ScienceCity- I might have looked at but I see it more for high school or broad public. [*Alexandre hasn't heard of GridGuide*]. I don't think we use it much or at all. GridCafe, I've looked at it. GridCafe and e-ScienceCity together to me look more like broad public or maybe high school-type of things.

I think in general the way things are working are quite nice. I think GridCast is working fine. The papers are all there. The coverage of conferences is very useful and trying to attract bloggers from the conference themselves. iSGTW is very good.

The products that I say would be less useful, it's not about improving them or they are bad. It's just not something that is targeting us directly or the researchers directly. AB

Can you describe some of the ways e-ScienceTalk has contributed to WeNMRs dissemination goals?

I think there are two main ways. We have in WeNMR networking package, where we have to disseminate to the general public and also towards e-science projects and the stakeholders. You have definitely been very important here. If you see the covering of conferences that you have been doing and workshops, the fact that you are doing that is very useful and very helpful. The communication and dissemination to the general public is useful and towards e-science projects and the EU as well. You provide good visibility. We are using these articles to report to the EU always. Whatever is coming out of your kitchen is useful, not so much to our end users and the researchers but more for the e-infrastructure in general as researchers are just doing their business and want to get the work done. So it really helps that you are disseminating towards public and stakeholders in general and the other e-science projects. AB

Has e-ScienceTalk helped you achieve any other impact goals (not directly relating to dissemination)?

By giving us visibility, you are in fact contributing to our sustainability. This is because you need to be visible to be sustainable so having used your dissemination channels and reporting what you are writing every time about the project showcases our successes in Brussels. It's one part of the equation (e.g. visibility and sustainability). AB

Have you any ideas that may help us maintain a sustainable platform for our 1-year funding gap?

You have good hopes that you'll be funded in 2020 and so do we. You should link-up with all e-ScienceTalk conferences and form a relationship from the very start of the organising process so that they call upon people to blog. I guess with EGI it won't be an issue, but if there are other conferences you should get in contact with people now. Contact the organisers and convince people to publish once a month would be good. I can see you can't send people all around the place as it costs money. Have the conferences put you on the website and call for blog. Even if you don't travel you remain visible and remaining visible in that one year time is important. AB

How could an e-ScienceTalk2 better service your dissemination needs? What do you think we could improve on?

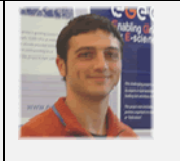
In principle, if you could say you are servicing all e-science projects funded by the EU you could also think about having twice a year a newsletter or every three months where you ask all projects to contribute a small story [*I mention the briefings but Alexandre is referring to a case study update type newsletter*]. This would be an e-infrastructure update newsletter once every six months as all projects have to report every three months. Every three months we have to write a one page summary. Every project has to do this but we don't have access other reports. Why not convince the EU that in your reporting you have this one page summary, which is supposed to be public. If you were to provide us with those one pages we would get an overview of what's happening in different projects. AB

What upcoming stories/news should we be reporting on for next year (July 2013-July 2014)?

Again, the WeNMR project is ending on November 1st. Next year we'll keep running but maintaining our services [*Alexandre/Andrew will write something in September*]. AB

Interview 3

Emidio Giorgio at 24.06.13
European Middleware Initiative (EMI)



What do you find most useful about e-ScienceTalk communications? Please also explain which products you think have been useful, and provide reasons.

From our point of view it is iSGTW. At least from my perspective, it is the product with the widest audience. I have somehow the impression that the others are self-referring if you know what I mean. With ISGTW if the article is put on the front page it has a much bigger response or feedback. GridCafé is also very useful especially when I had to do some introductory talks on the grid and I have found very good inspiration and materials there. The most useful sections were five big ideas and building grids. This is because even if I am explaining concepts that I know well, the way they are explained on the website is more inspiring to non-technical people. EG

Which products have been the least useful? How could we improve those products?

I cannot talk about products that I haven't used. I have not used e-ScienceCity, GridGuide, and the YouTube Channel. I think we have benefited from Corentin's help to make videos but we didn't directly use them. EG

Can you describe some of the ways e-ScienceTalk has contributed to the dissemination goals?

The most obvious one is disseminating our achievements and milestones and helping us reach the whole grid community audience. EG

Have you any ideas that may help us maintain a sustainable platform for our 1-year funding gap?

It is important to maintain all that it is possible. EG

How could an e-ScienceTalk2 better service your dissemination needs? What do you think we could improve on?

It would be great if we could improve in a way how grid is perceived in other media. The work you do is great, but it is still in some ways self-referential. It is great to explain what is happening in the grid ecosystem. I am not sure it is well-perceived out of the community. This is one of the most common remarks we have had. What is missing is an extra effort to outreach to the external community and the other media. EG

[Emidio asked how we analyse our tweets. ZQ explained about twitter and will send on the Guide to Dissemination to Emidio]

Interview 4

Nadia Nardi
ERINA+ Deputy Director



What do you find most useful about e-ScienceTalk communications? Please also explain which products you think have been useful, and provide reasons.

I think what is cool is the interaction i.e. putting people in contact with the things they need. I like the whole networking thing. The whole idea that we are hyper-social people now especially with resource projects and bringing people into the whole community and EC; it's definitely a way of drawing people into the world of research projects.

I believe the GridCast is where you had interviews with Andrea. That was very good. NN

Which products have been the least useful? How could we improve those products?

I am not a tweeter and haven't followed the feed. It's definitely something that you need to have on your website, and if you don't your incomplete. I can see how it's useful. NN

Can you describe some of the ways e-ScienceTalk has contributed to the dissemination goals?

One of our goals was to help change the impact assessment culture, which was non-existent earlier. It was the idea of getting what we are doing out there, and it was cited even in the final reports. e-ScienceTalk was mentioned more than once. That's the thing, if e-ScienceTalk manages to get interviews it is a win-win situation as the projects get cited too. This is key for a project like yours to get your name into every project report. Reading all the projects documentation, e-ScienceTalk comes up a lot and the more it comes up, the more successful your project is. You can say afterwards that we've done an interview, can you cite our name. You can define how you want the visibility to be done. NN

Have you any ideas that may help us maintain a sustainable platform for our 1-year funding gap?

Ask for money and a legal sub contract for a given number of articles. Offer the services that you offer. Writing articles is a lot of help. People avoid doing it and when they are not mother tongue English it is not fun for them. They have to write articles for certain deliverables and it is not really what they should be doing. They should be doing research. It should be done by competent people who can do that, and also do it well. That's why I think there is definitely a margin. The European commission doesn't tell us that we have to do everything on our own. We can subcontract other people to do it. This is the same thing with impact assessment. It could be that specific funding is catered for impact or dissemination, and they choice someone to do this practice assessment or that company or entity. The website should be done by other people too. We offer our ERINA+ service as

consultancy. We offer a full report with more detail and value-added. If you draw up your sustainability plan add in consultancy. If you get super positive feedback it adds value to your service. I don't think anyone has anything bad to say about e-ScienceTalk. NN

How can we meet a wider user group?

I guess meet the right people and they'll do it for you. It's in the networking. You have to get into the mix at the EC-level. You have to get the idea across that where the commission says you have this much money for dissemination and e-ScienceTalk can help. You have to get into the right circles and be everywhere at conferences. You have to spend a lot of money on publicity. Most of your money is spent not even on the people that work the project, but on the marketing. There is definitely a need for mother tongue English speakers as European documents are all written in English. There is a huge market and slowly I think things are about to explode. It's the service model. Projects are going to start outsourcing as the EC will start asking for it in some ways. NN

Interview 5

Barbara Kieslinger

Technology and Knowledge, ZSI - Zentrum für soziale Innovation

Global Excursion



What do you find most useful about e-ScienceTalk communications? Please also explain which products you think have been useful, and provide reasons.

I think the other projects that are working with are quite difficult. We are not a research infrastructure but a collaboration action. We link scientific infrastructure and schools and labs together. Your project has been useful for us where you've distribute our leaflets at different events. Also, your online resources have been integrated (e.g. grid café) on to the website and we've included that for students. This is probably been the most useful product from the side. [*I mention the schools pack and will send on a copy*]. BK

We were funded within the program of e-infrastructures and since there has been a restructuring we are now part of a different area of science communication. We moved grid computing, which is probably the focus within Europe, into our offers and the wish list that we created for our virtual science hub. However, grid computing is somehow difficult to communicate. We have experienced that this target group of students/teachers it's easier to interest them in other areas/ infrastructures such as the lab and microscope and web cabs. We were always trying to define projects that show the benefits of grid computing. We only promoted a few of the resources such as the GridCafe to explain the projects a little bit more. The products that were least useful for us were the products that were too focussed on computing. Some ideas ofcourse we could realise better than others. The products that weren't computing focussed worked better for us. However, all that you did- announcing events, the online articles, and blogging from events has been helpful. BK

