e-ScienceTalk

D4.5 ANNUAL REPORT ON FEEDBACK AND METRICS

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Abstract

This report covers the metrics for e-ScienceTalk's products, including e-ScienceBriefings, e-ScienceCity, GridCast, GridGuide and the Real Time Monitor, International Science Grid This Week, social media channels and the e-ScienceTalk website. It summarises feedback primarily from year 3, but takes an overarching view of previous feedback and metrics in order to assess project success from a quantitative and qualitative perspective. This report also includes an account of lessons learned, in addition to recommendations for future e-infrastructure communications initiatives.

I. COPYRIGHT NOTICE

II. DELIVERY SLIP

	Name	Partner/Activity	Date
From	S Janusz	QMUL/WP1	30/06/2013
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III. DOCUMENT LOG

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2	30/06/2013	First draft	S Janusz / QMUL
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4			

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 EU 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 about these areas, 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

e-ScienceTalk has met or exceeded its targets, and additionally undertaken new initiatives that align with the goals and objectives to communicate the successes of distributed computing to a broader audience. The project and activity metrics for e-ScienceTalk are outlined in D4.2 *Quality Assurance Guide* [R1]. The success of the e-ScienceTalk project has also been assessed using surveys, feedback sessions, feedback from the PMB, unsolicited feedback and canvassing at institutions and meetings. This report summarises the project level metrics used to track the progress of the project as a whole. Quantitative methods used for measuring feedback include surveys, web analytics, webometric tools, social media measurement tools and counting e.g. of downloads. Qualitative methods used include feedback sessions, surveys, expert advisory panels, unsolicited feedback and interviews. This report includes metrics and feedback from PY3 and, where they provide illustration of the project's evolution, summaries of metrics and feedback from previous project years. For this final report, the project members have also fed back on what has worked well and less well, and a summary of lessons learned is included towards the end.

e-ScienceTalk has increased circulation and broadened the scope of the e-ScienceBriefings. The e-ScienceBriefings are becoming increasingly recognised amongst individuals involved in grid computing. Feedback from one-to-one interviews from various e-science conferences attended by the e-ScienceTalk team indicate that e-ScienceBriefings are providing a useful information source for a range of different audiences including user communities, policy makers and network providers. People are increasingly sharing the documents across different social media platforms and the PDF version is downloaded by large number of countries across different continents. The techniques used to gather feedback are described.

GridCafé continues to be widely used as a reference by grid project websites. Feedback focuses on formative and summative evaluation from focus groups and online surveys of the intended audience. GridCast has attracted more readers and bloggers. There is good evidence of GridCast's impact as an important resource for the niche audience it serves. The number of unique visitors has increased slightly, and there is a larger percentage of new visitors. People rely on the GridCast for information for both the conferences they attend, and conferences they are not present at. E-ScienceTalk has used various methods to gather feedback on the blog such as focus groups and regular emails to bloggers.

GridGuide now has a greater number of sites with 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. However, our main focus this year has been on gathering feedback on the Real Time Monitor, at events and through contacting heavy users. We also received a number of emails from people interested in the RTM.

Feedback for iSGTW has been very positive, and our methodology for gathering is more extensive than the other products: analysing comments (website and Google+), authors' feedback, monitoring social media activity, examining unsolicited feedback, as well as carrying out focus groups and interviews with subscribers.

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1 INTRODUCTION

1.1 e-ScienceTalk Objectives

e-ScienceTalk's main aim is to build on the significant achievements of GridTalk in bringing the success stories of Europe's e-infrastructures to its audiences. The key challenges are to work with the new distributed computer infrastructures and maintain and enhance the quality of existing dissemination outputs, while simultaneously 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-Infrastructure and how these networks contribute to the European Research Area.
- To communicate good practices and key successes to other projects.

1.2 Metrics Overview

The overall project metrics for e-ScienceTalk are the top-level product-based metrics that demonstrate the total progress of the project. They are listed below, alongside targets. These targets and some of the metrics themselves were adjusted at the end of PY2 in response to feedback from the project reviewers, and based on the experiences during PY2. Additional individual work package metrics are also listed in the sections below, and these will be used to track the progress of the project, but without specific targets being set. The project level metrics achieved, and the progress towards the targets, are summarised in the section 3, as are the activity metrics for each quarter.

A summary of the overall project metrics for year three of e-ScienceTalk is listed in

~~Table 1~~, adapted from last year's *D4.4 Annual Report on Feedback and Metrics* [R2]. All metrics are continually monitored and reported quarterly. Target metrics were reviewed and increased last year due to the project having exceeded its targets.

Table 1 *Overall Project Metrics for e-ScienceTalk*

Work Package	Metric no.	Description	Target Metric PY3	Changes at the end of PY2
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

1.3 Gathering Feedback

1.3.1 Overview

In order to assess how successful the e-ScienceTalk project has been at meeting its objectives in the third year and overall, in terms of reaching target audiences and disseminating key messages, we have collated feedback from a wide range of sources, including solicited feedback from questionnaires and focus groups, unsolicited feedback from audience members, and internal feedback from within the e-ScienceTalk Consortium. We will also refer to the impact generated through e-ScienceTalk communications wherever this has implications for reporting of metrics or where this serves as an indicator for feedback (e.g. where a positive impact, such as a reposting of an article, is an indicator of good feedback). Where impact is measurable in more general terms, and concords with e-ScienceTalk's aims for sustainability, it is recorded in D1.5 *Final Impact and Sustainability Report*. [R3]

1.4 Quality Assurance

The quality assurance processes for e-ScienceTalk are outlined in D4.2 *Quality Assurance Guide* [R1]. This outlined a set of project and activity metrics for the project. In addition to recording a range of metrics the success of the e-ScienceTalk project is also assessed in these main ways:

- **Surveys of e-ScienceTalk's impact aimed at participants at conferences**. Surveys at the EGI User Forums and Technical Forums and e-Infrastructure Concertation meetings, and others as appropriate.

- **Feedback sessions.** These allow more in-depth discussion of users' experiences and views.

- **Acting on feedback from the PMB** to ensure that the project is implemented in an efficient, timely and cost effective manner.

- **Surveys of iSGTW's readers.** Conducted once a year by WP3, these solicit the readership's views, use and experience of iSGTW and are used to plan further developments in the newsletter.

- **Unsolicited feedback** (as it provides examples of how people in the community are using e-Science products and how they're making a difference).

- **Impact and sustainability reports** produced by WP1 based on the metrics and feedback gathered during both phases of the project

- **Other opportunities for feedback** including canvassing potential target audiences e.g. research, educational institutions

- **Quarterly reports and metrics** and six-monthly impact report and annual deliverables

- **Internal feedback questionnaire** conducted at the end of the project to give those working on the project until the end a chance to reflect on the strategies employed by e-ScienceTalk, the successes and potential areas for development, and to collate lessons learned from the project from individual perspectives. The questionnaire was conducted anonymously.

1.5 Quantitative Metrics for measuring feedback

e-ScienceTalk gathers data via a number of different methodologies such as surveys, website analytics and various social media measurement tools. The figures in this report cover PM1–PM33 inclusive. **NB: To produce this report and gather feedback, e-ScienceTalk has used the same methodology as had previously been described in the D4.3 *Annual Report on Feedback and Metrics* [R2]. You will find the same methodology is outlined in sections 1.5.3 and 1.5.4 below.**

1.5.1 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, the problem of partial responses, or general online survey fatigue from responders. Online surveys have been incorporated into Volunteer Garage and GridCafé. iSGTW also sent out a Readership survey to its users, the results of which are contained in D3.6 Report on iSGTW Readership Survey [R5].

1.5.2 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). 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. The e-ScienceTalk consortium has taken on-board comments from the PY2 review that Google Analytics should be considered alongside other web analytics tools, and subsequently other webometric and social media measurement tools have also been employed in assessing metrics.

1.5.3 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.

1.5.4 Social Media Measurement Tools

The global adoption of social media tools and platforms has increased dramatically over the last two years. Keeping up-to-date with this trend, e-ScienceTalk has grown its social media presence in the last year. Twitter tools (such as Tweetreach[1]) 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 Socialmention[2] and Klout[3]. e-ScienceTalk also examines social engagement through Google Analytics reports.

[1] http://tweetreach.com/

[2] http://www.socialmention.com/

[3] http://klout.com/home

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

e-ScienceTalk product	Metric
e-ScienceTalk	• *Google analytics* – page views/unique visitors, referrals from the e-ScienceTalk website to other e- ScienceTalk sites • *Twitter* – number of followers, mentions and numbers and types of tweets • *Klout* – monthly scores • *Email*- Deliverables submitted, milestones agreed, late Deliverable and Milestones • *Production*- e-ScienceTalk materials produced • *Alphagalileo*-Media releases issued • *Google Alerts*- Press cuttings • *Counting*- Events attended, media partnerships at events, number of MoUs signed • *Twitter/Facebook*-Social media subscribers
e-ScienceBriefings	• *Counting* – 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
GridCafe/e-ScienceCity	• *Google analytics* – page views/unique visitors, demographics • *Calculations* – Change in unique visitors to the GridCafé website, ratio of page views to visitors for the GridCafé website, • *Counting*-sites on GridGuide, areas of GridCafé
GridCast	• *Google analytics* – page views/unique visitors, demographics, unique visitors to the GridCast (% new), length of time spent on the GridCast • *Counting*-bloggers on GridCast, GridCasts per year, total blog entries, podcasts, • *YouTube* number of subscribers and viewers
GridGuide	• *Google analytics* – page views/unique visitors • *Counting*-sites on GridGuide (EU and US), GridGuide sites on RTM
Real Time Real RTM	• *Google analytics* – page views/unique visitors • *Counting*-countries on the RTM, numbers of delegates at events demo-ing the RTM

iSGTW	• *Counting* – 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 • *Google analytics* – page views/unique visitors, demographics, social engagement (shares, G+), countries or territories visiting the iSGTW website, time spent on the site per visit • *Klout* – monthly scores • *Social mention* – comparison with competitors etc. • *Facebook analytics* – numbers 'Likes'/followers, growth rate • *Zoomerang*-survey responses • Twitter/Facebook, Google+- Social media subscribers, stories shared on social media

(Table 2 continued)

1.6 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:

1.6.1 – 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.

1.6.2 – Surveys

An annual survey of iSGTW's readership was conducted in May 2013 (PM33) 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 Zoomerang[4]. 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.

1.6.3 – 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 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

[4] www.zoomerang.com

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.

1.6.4 – 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.

1.6.5 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.

Table 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 of featured 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**		**Grounded user test**
	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 keep informed of the latest technologies in e-science?		**iSGTW Survey**	**Interviews with readership**

(Table 3 continued)

2 PROJECT METRICS

2.1 Project-Level Metrics

A summary of the overall project metrics for Years 1–3 of e-ScienceTalk is listed below.

Table 4: Project-level metrics for e-ScienceTalk

Work Package	Metric no.	Description	Target Metric PY3	PY1 Achieved	PY2 Achieved	PY3 Achieved
WP1	1.1	Projects covered	40 per year	38 (190%)	76 (250%)	59 (148%)
	1.2	Reports and briefings circulated	4 per year	3 (75%)	4 (100%)	4 (100%)
	1.3	Countries where reports or briefings are distributed	30 per year	36 (120%)	32 (107%)	37 (123%)
WP2	2.1	Sites on GridGuide	100	38 (50%)	59 (78%)	102 (102%)
	2.2	Bloggers contributing to GridCasts	5 per GridCast	5 (100%)	6 (120%)	6 (120%)
	2.3	GridCasts per year	4 in Europe per year, 1 outside Europe	16 (533%)	16 (250%)	16 (250%)
	2.4	New areas in GridCafé	3, one new area per year	1 (100%)	2 (200%)	1 (100%)
WP3	3.1	iSGTW subscribers	30% increase	21% (70%)	28% (95%)	30% (100%)
	3.2	Articles on European projects	50 per year	108 (216%)	131 (261%)	71 (142%)
	3.3	Projects in the iSGTW/e-ScienceCity resources section	150 in total	194 (194%)	134 (89%)	64 (43%)
	3.4	iSGTW printed materials distributed	1000 in total	330 (33%)	610 (61%)	616 (62%)

Overall, e-ScienceTalk has largely either *achieved* or *exceeded* its targets in PY3. For WP1, 59 projects have been covered in the e-ScienceBriefings, 19 more that the target metric. Fewer projects were covered in PY3 than PY2, but if this is the sign of a significant and continual 'slowing down', it

can be explained by the fact that bulk of important e-science projects have already been covered in PY1 and PY2, or that fewer new projects are starting due to move from FP7 to Horizon 2020. e-ScienceBriefings have been downloaded in 48 countries, indicating a significant increase on PY2.
This may be due to having covered topics with a broader appeal, better marketing through social media, or increased subscription numbers and new contacts.

In PY3 GridGuide achieved its target of 100 sites, eventually reaching 102 in May 2013. Visits to the site have remained low, however, averaging 200 per month since the project start. In April 2013, GridGuide was mirrored in the e-ScienceCity website, with the addition of GridPort.[5]

The GridCast blog has proven to be a continuing success, featuring 15 events (GridCasts and mini-GridCasts) in PY3, in contrast to 16 events in PY2. Some of the highest viewing figures from the three years of e-ScienceTalk occurred since September 2012, and the highest of the project overall occurring in May 2013, thanks to Beatrice Bressan's post on the European Middleware Initiative.[6] The platform used, Blogger, also lists Google+ shares in its statistics page. Posts from PY3 had 43 '+s' (equivalent to shares) out of 131 posts, the same number as from PY2 but out of fewer posts (187 in PY2). It should be noted that the total of +s is cumulative over time. This, combined with the shorter reporting period for PY3 indicates a slight increase in positive response rates using the platform.

In PM29 (January 2013) the final new content area of e-ScienceCity, Data Park, was added. In total, four new areas have been developed and deployed over the course of the project, more than the target of three new areas. In addition, Communications Centre, a news aggregator for all of the e-ScienceTalk channels has been added, and GridCafé and GridGuide are now fully integrated into e-ScienceCity – the latter being split into People Bay (the faces from GridGuide) and GridPort (the places and people from GridGuide).

In PY2, iSGTW had reached a plateau in new subscribers, but was experiencing a growth in page views largely due to social media. This trend has largely continued in PY3. While a modest growth in subscribers was observed for PY3 (with numbers now almost reaching 8900), this does not account for the threefold increase in monthly page views: from 30,000 to 90,000. From the start of PY2 onwards, the number of Twitter followers has quadrupled, from 400 to over 1600, and the number of Facebook followers has tripled, from 400 to over 1200. The number of unique visitors to the site, meanwhile, has increased from just over 12,000 to just over 21,000 over the 3 years, with a monthly new visitor proportion of between 75%-65%. Taken together, it can be said that iSGTW readership is growing; the number of readers finding iSGTW stories through social media is increasing; and iSGTW readers are becoming more loyal – reading more articles in any month, which accounts for the increase in page views. Fewer printed materials than originally planned were produced, but this is because iSGTW's strengths lie in its format as a web-based publication, and so strategically it makes more sense to focus on web marketing rather than printed materials.

[5] www.e-sciencecity.org/EN/gridport

[6] http://gridtalk-project.blogspot.co.uk/2013/04/a-new-era-for-post-emi-all-together-for.html

2.2 WP1: Impact and Sustainability

2.2.1 Summary of Metrics

Table 5: WP1 Metrics

Metric no.	Description	Comments	Q9	Q10	Q11	TOTAL
1.1	**Projects covered**	**In the e-ScienceBriefings**	**12**	**30 (19+11)**	**17**	**59**
1.2	**Reports and briefings published**	**In print or by email**	**1**	**2**	**1**	**4**
1.3	**Countries where reports or briefings are distributed**	**In print or by email**	**13**	**46**	**10**	**37**
1.4	Policy articles published	In print or online	2	4	2	**8**
1.5	Printed policy reports circulated per briefing	To policy makers	100	200	100	**400**
1.6	Policy events organised	Number organised	0	1	0	**1**
1.7	Attendees at e-ScienceTalk organised policy events	Number of delegates	0	132	0	**132**
1.8	Policy events attended by e-ScienceTalk	Number attended, physically or virtually	3	3	2	**8**
1.9	Delegates at policy events attended by e-ScienceTalk	Number of delegates at events attended.	500	400	350	**1250**
1.10	Downloads of policy documents (cumulative)	Measured from the e-ScienceTalk web site	9128	11054	13119	**13119**
1.11	Training Sessions/talks delivered	New metric	2	1	1	**4**

2.2.2 Trends and Analysis

In PY3, e-ScienceBriefings has included case studies, quotes and information from 59 projects. Four e-ScienceBriefings were published, on the topics of Knowledge and Technology Transfer, Big Data, e-Science and Security, and Horizon 2020.

e-ScienceBriefings were downloaded from 37 different countries, an increase on PY1 and PY2, despite a slight decrease in the number of international meetings where they were physically distributed.

The team organised one policy event, the 10th e-Infrastructures Concertation meeting, which attracted 132 delegates from across the full spectrum of EU e-infrastructure projects. 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. Andrew Purcell's spotlight in iSGTW (E-infrastructure success stories) received 5 'Likes' on Facebook, and 201 page views (147 unique pageviews) with average time of four minutes and thirteen seconds spent reading the content.

e-ScienceTalk tweeted 49 times during the two-day period attracting and engaging a number of influential new and longstanding followers. New followers included Morten Brugard, a project manager of an EU project about entrepreneurship (@mbrugar, 17,522 followers); Inge Van Nieuwerburghm, coordinator of Digital projects; Helmut Heller, and Virtual Campus Hub. There were also several retweets.

The greatest number of attendees were from the UK (26) followed by Italy (18), Belgium (17) and the Netherlands (16). Before the meeting, 61 people registered for track 1, 33 for track 2, 19 for track 3 and 22 for track 4. However, track 4 proved more popular during the meeting itself.

During PY3, e-ScienceTalk signed MoU's with three new partners: CRISP, i-Mentors and BlogForever, helping to ensure that e-ScienceTalk's communications are disseminated. iSGTW has independently recently signed a MoU with UbuntuNet. Additionally, e-ScienceTalk training workshops were delivered at the EUDAT 1st conference, the Institut Laue-Langevin for the CRISP team, and at the CRISP 2nd annual meeting. e-ScienceTalk's Stefan Janusz also gave a talk on quick and easy video production at the EGI Community Forum 2013. These initiatives help to disseminate the lessons learned by e-ScienceTalk over its three years as a project.

2.3 WP2: e-ScienceCity (GridCafé), GridCast and GridGuide

2.3.1 Product Breakdown, Summary of Metrics

Table 6: WP2 Metrics

Metric no.	Description	Comments	Q9	Q10	Q11	TOTAL
2.1	**Sites on GridGuide**	**Number of new sites included**	**0**	**10**	**17**	**102**
2.2	**Bloggers contributing to GridCasts**	**Average number of bloggers on GridCast**	**6**	**3 (mini)**	**5**	**6**
2.3	**GridCasts per year**	**Including major and mini GridCasts**	**4**	**5**	**7**	**16**
2.4	**New areas of GridCafé**	**Covering topics other than grid computing**	**0**	**1**	**0**	**1**
2.5	Change in unique visitors to the GridCafé website	From Google Analytics	3608 (+86% from 1935)	3357 (-7%)	4324 (+29%)	**3763 average (+69% from 2224)**
2.6	Ratio of page views to visitors for the GridCafé website	From Google Analytics	3.13	2.79	2.58	**2.83**
2.7	Number of bloggers for GridCast	Total number of bloggers	7	5	8	**20**
2.8	Blog entries on GridCast	Total number	44	32	39	**115**
2.9	Podcasts on GridCasts	Total number	7	5	19	**31**
2.10	Unique visitors to the GridCast (% new)	From Google Analytics	75.3	82.3	76.7	**78%**
2.11	Length of time spent on the GridCast	From Google Analytics	1:17	1:11	1:42	**1:23**
2.12	EU sites on GridGuide	European based sites	36	45	53	**53**
2.13	Non-EU sites on GridGuide	Non-European located sites	23	26	49	**49**

2.14	Unique visitors to the GridGuide	From Google Analytics	296	114	149	**559**
2.15	Page views of the GridGuide	From Google Analytics	403	157	383	**943**
2.16	GridGuide sites on RTM	Total number	59	59	59	**59**
2.17	Countries in the RTM	Total number[7]	54	54	54	**54**
2.18	Numbers of delegates at events demo-ing the RTM	Including events attended by collaborating projects demo-ing the RTM	300	10400	40	**10740**

(Table 6 continued)

2.3.2 Trends and Analysis

e-ScienceCity

Following a temporary decline in visitors from the GridCafé standalone site, which was traced back to a change in policy on link forwarding to external sites from CERN, the numbers of people visiting the GridCafé pages each month has begun to grow again. GridCafé was the original metric, as it was the original site serving as a 'seed' for the rest of the e-ScienceCity. In 2013, however, the original GridCafé site was closed down and the content was migrated to e-ScienceCity, making analysis difficult. The e-ScienceCity website experienced its highest viewing figures in January 2013 (PM29), with 2000 views for the month (see Figure 1: e-ScienceCity Traffic). This shows a steady build of traffic from the duration of the project, and although reasonable for an educational website, numbers are lower than peak figures for the GridCafé site from the GridTalk project (in excess of 10000 views per month). In order to build traffic, directed learning through the distribution of a teachers' pack, and marketing alongside a social media presence on Facebook[8], has been implemented to increase visitors to the site. At this stage it is too early to state by what extent these methods have worked, other than that the traffic has grown. Another way to assess the success of GridCafé and e-ScienceCity is to reflect on the growing proliferation of educational materials on distributed computing infrastructures that now exists on the web. GridCafé and e-ScienceCity are licensed under Creative Commons Attribution Noncommercial Share-alike licence and are referenced in the Wikipedia page on Grid Computing.

Though not a reporting metric, the level of engagement with e-ScienceCity audiences is very high, with visitors spending over 10 minutes on the site on average. GridCafé and CloudLounge have the highest viewing figures. The newer areas are receiving traffic and this has built over the last few months.

[7] http://gridportal-ws01.hep.ph.ic.ac.uk/dynamic_information/egee-locations.xml

[8] http://fb.com/esciencecity

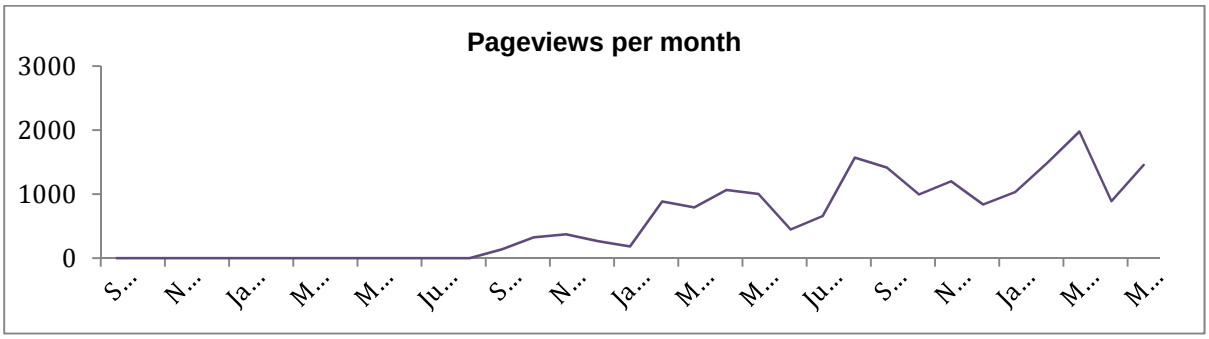


Figure 1: e-ScienceCity Traffic

GridGuide and RTM

During PY3, an effort was made to increase the number of sites within the GridGuide to 100. In Q11, a number of new sites were added from both grid-only and grid/e-science sites from around the world. In doing so, it is hoped that researchers at those sites and new sites that are set up will be encouraged to maintain their pages, which they are able to do easily with a simple content management system.

The number of visitors to GridGuide remains low, however. In Q10, an effort was made to greatly expand on the number of sites to reach areas and audiences from areas of the globe where grid and distributed computing infrastructures are still in relative infancy, such as Africa. In order to further build page views and to ensure a degree of sustainability for the content that has been uploaded, GridGuide is now mirrored within e-ScienceCity in the new GridPort and People Bay areas.

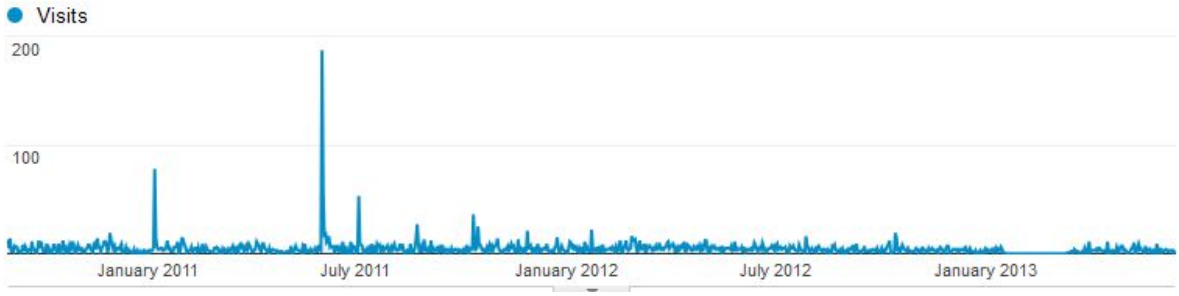


Figure 2: GridGuide Traffic

The RTM is a valuable tool for demonstrating the grid, and continues to be shown at high level events where the potential audience is very high. In Q11, RTM developer Janusz Martyniak is working in collaboration with the London Science Museum to design an RTM demo as part of their LHC exhibit, *Collider*. Table 1Table 7 records the events at conferences displaying the RTM, plus the number of delegates at those events. Number of attendees at events were not recorded during PY1, but if comparable to PY2 and PY3, over 30,000 people may have seen the RTM at an event over the project lifetime. At the end of PY3, the RTM is being included in an exhibition at the London Science Museum that will run from November 2013 to April 2014. According to their 2011–2012 report,[9] the

[9] http://www.sciencemuseum.org.uk/about_us/smg/~/~/media/9A2AC1D349674D1CAAA0D3AC75D6E201.ashx

Science Museum Group welcomed 2.95 million people over the year to its London museum, indicating that for its six-month run, the RTM could be seen by 1.5million people – 50 times the number that have seen it at e-science conferences.

Table 7: events at which the RTM was displayed

Month	Event ~approx. numbers of people
Sept 2012	EGI TF Prague ~300
Mar 2013	Supercomputing'12 ~10,000
Mar 2013	EGI CF Manchester ~400
Multiple dates	UK Particle Physics Masterclasses various locations ~40
June 2013	ISC 2013
July 2012	European Conference Computational Biology
July 2012	9th European Biophysics Congress.

GridCasts

GridCast has recorded very positive page views during the final project year. In fact, views during Q11 were unprecedented – PM33 had the highest GridCast page views of the entire project; PM32 and 31 were 2nd and 3rd highest, respectively. Despite efforts being made to expand on the number of regular bloggers, however, there remains a small dedicated group who tend to blog at most meetings they attend. One of these bloggers, Beatrice Bressan, wrote the most viewed blog of PY3, achieving 1654 page views and accounting for much of the peak traffic during PM33. Posts on GridCast are promoted by social media (usually always on Twitter, but often also Google+ and/or Facebook). In this instance the viewing figures were unprecedented. Beatrice says she promotes her posts '*ad hominem*' – and suggests that by building individual excitement about a post it is easy to leverage successive *ad hominem* promotion, and subsequent social media promotion by a network of colleagues, leading to a much larger potential audience.

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+. However, 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.

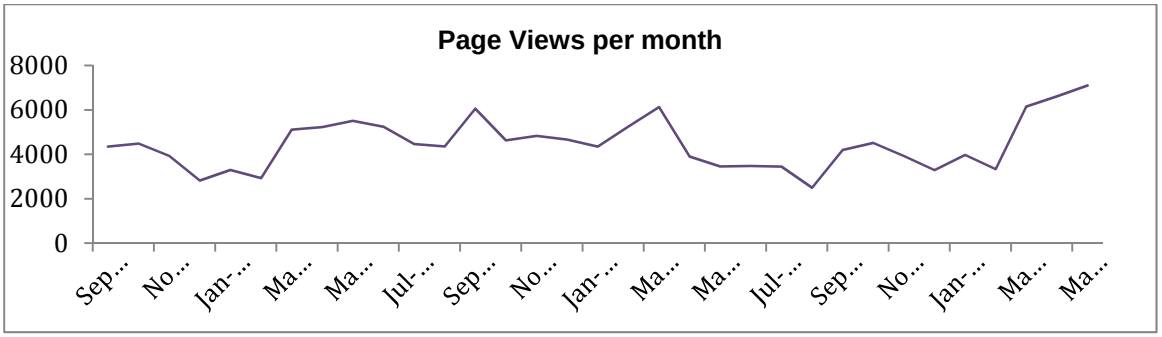


Figure 3: GridCast Traffic

Despite PY3 having a marginally shorter reporting period, the number of GridCasts in PY3 is the same as for PY2. The number of bloggers for coordinated GridCasts and during reporting period quarters is roughly equivalent to the same period in PY2. Video podcasts continue to attract a lot of page views continue, with the YouTube channel also seeing over 30,000 page views for PY3. For the EGI Community Forum 2013, 13 videos were made, featuring interviews with key invited speakers and demonstrations from booths. The videos are also featured independently on our Youtube Channel, videos on which were viewed a total of 29,141 times in PY3.

Analysis of the types of audience GridCast attracts has thrown up some interesting findings. GridCast's reach is global, and despite e-ScienceTalk being an EU project, a large proportion of our audience come from outside Europe. Shown below left are pageviews by country from the whole of e-ScienceTalk and GridTalk (unfortunately it is not possible to separate the two projects for this analysis.)

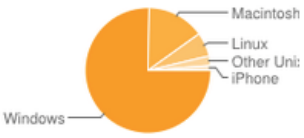
In-keeping with the function of GridCast as a communications product aimed at the distributed computing community, a higher proportion of the audience uses Linux or another UNIX derivative as their operating system – about 6–8%, see below. The proportion for a non-specialist website is about 0.5–0.7%[10], indicating a tenfold greater prevalence of this operating system in our audience.

Pageviews by Countries

Entry	Pageviews
United States	43246
United Kingdom	13768
Russia	11725
Germany	9134
France	8805
Ukraine	4179
Netherlands	3809
Taiwan	2717
China	1498
India	1366

Pageviews by Operating Systems

Entry	Pageviews
Windows	117957 (74%)
Macintosh	23084 (14%)
Linux	10594 (6%)
Other Unix	3603 (2%)
iPhone	1372 (<1%)
Android	910 (<1%)
iPad	822 (<1%)
Windows NT 6.1	384 (<1%)
compatible	129 (<1%)
BlackBerry	106 (<1%)



[10] http://www.netmarketshare.com/

2.4 WP3: International Science Grid This Week

2.4.1 Summary of Metrics

Table 8: WP3 Metrics

Metric no.	Description	Comments	Q9	Q10	Q11	TOTAL
3.1	**iSGTW subscribers**	**Registered in the database**	**8249**	**8706**	**8770**	**8770**
3.2	**Articles on European projects**	**Based on EU funded projects**	**27**	**18**	**26**	**71**
3.3	**Projects in the iSGTW/GridCafé resources section**	**Total number**	**64 (non added this quarter)**	**64**	**64**	**64**
3.4	**iSGTW printed materials distributed**	**At events attended by e-Science Talk or by collaborating projects**	**Total of 616 (up 6 this quarter)**	**616**	**616**	**616**
3.5	Issues published	Issued to subscribers and posted on the website	13	11	13	**37**
3.6	US articles published	Based on US projects	44	18	23	**85**
3.7	Worldwide articles published	Based on non US or EU projects	12	4	8	**24**
3.8	Unique visitors to the website	From Google Analytics	43,235	54,038	54,011	**50,428**
3.9	Page views of the website	From Google Analytics	88,752	141,325	207,247	**145,775 average**
3.10	Countries visiting the iSGTW website	From Google Analytics	179	176	182	**179 average**
3.11	Marketing materials distributed	In print or by email or at events	4	5	7	**16**
3.12	Survey responses	Through Zoomerang survey tool	0	113	0	**113**

3.13	Social media subscribers	On Twitter and Facebook	1394 Twitter + 709 Facebook	1545 Twitter + 925 Facebook	1724 Twitter + 1152 Facebook	**1724, 1152**
3.14	Time spent on the site per visit (minutes)	From Google Analytics	1:55	2:11	3:20	**2:29 average**
3.15	Stories shared on social media	Via all social media channels	495	494	327	**1316**

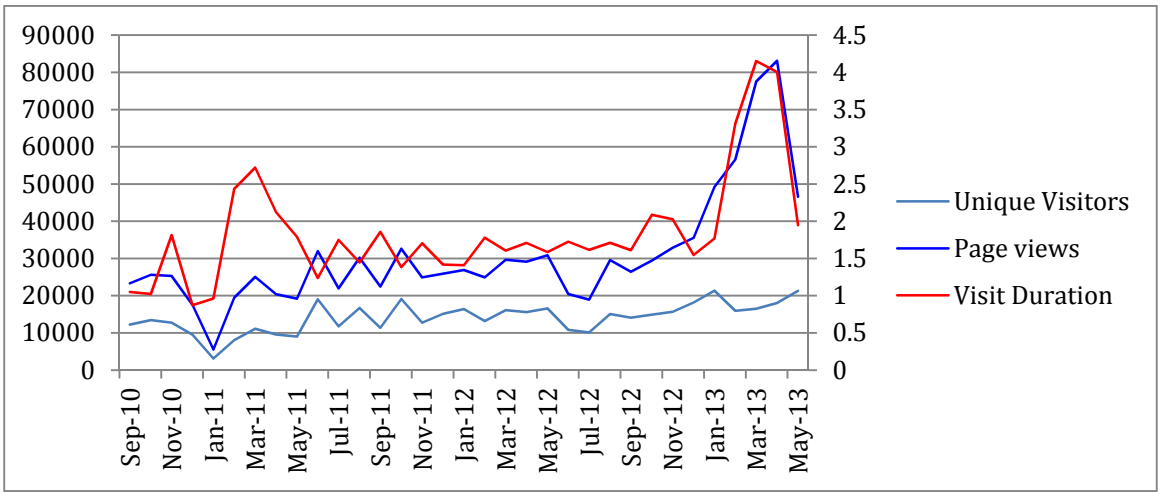


Figure 4: iSGTW Traffic and Visitor Behaviour

2.4.2 Trends and Analysis

During PY3 the trend for more rapid social media growth and more modest growth in weekly subscriptions that had begun in PY2 continued, reflecting a change in the habits of our readership largely in line with trends reported by other online news sources[11]. A greater proportion of the audience arrives at iSGTW articles through links from Twitter and blog posts. While readers are reaching iSGTW in a more piecemeal fashion, therefore, the audience is very likely broader and more diverse. This is an excellent development in terms of getting stories 'out there', growing support for e-infrastructures and related funding and building the reputation of the iSGTW brand.

Despite WP3 having lost effort in PM29, the publication has continued to send out a high quality issues with a spread of articles from across the globe. In PM27, a new US Desk Editor was hired though the NSF, based at the University of Indiana. iSGTW has managed both of these changes in PM3 to deliver a consistently high-quality publication. Q11 actually saw peak unique visitor numbers, page views and visit duration for the entire project. iSGTW's audience is not only much larger than at the start of the project, but readers are also more enagaged (spending longer on visits, and reading more pages per visit).

[11] e.g. http://www.guardian.co.uk/media/pda/2009/oct/21/bbc-huffington-post-social-news and http://www.entrepreneur.com/article/227178

2.5 WP4: Management

2.5.1 Summary of Metrics

The project and work package level metrics for WP4 are below:

Table 6: Metrics for Work Package 4

Metric no.	Description	Comments	Q9	Q10	Q11	TOTAL
4.1	Deliverables submitted	By email and online	1	3	1	**4**
4.2	Milestones agreed	By email and online	4	3	0	**7**
4.3	Late Deliverable and Milestones	Submitted or agreed after the date agreed with the EC	0	0	0	**0**
4.4	e-ScienceTalk materials produced	Included printed materials, pens, banners etc	500 pens 200 badges	0	300 lanyards	**1000 items**
4.5	Unique visitors to the e-ScienceTalk website	From Google Analytics	409	357	447	**1213**
4.6	Referrals from e-ScienceTalk site to other e-ST sites	From Google Analytics	145	115	133	**393**
4.7	Media releases issued	Issued via Alphagalileo and by email	0	0	0	**0**
4.8	Press cuttings	Measured by Google Alerts	1[12]	0	1[13]	**2**
4.9	Events attended	By e-ScienceTalk project team	6	3	6	**15**
4.10	Social media subscribers	On Twitter	2059	2143	2217	**2217**
4.11	Media partnerships at events	Number of events with e-ScienceTalk as media partners	3	1	3	**7**
4.12	Number of MoUs signed	With collaborating projects	0	1	1	**3**

[12] http://www.zive.cz/clanky/osm-zivych-map-ktere-vam-popisou-co-se-deje-ve-svete/sc-3-a-166010/default.aspx (Czech technology news site featured RTM)

[13] http://www.scienceworldreport.com/articles/7661/20130620/coordinated-approach-science-europe.htm

2.5.2 Assessment of Project Performance

e-ScienceTalk met all its deliverables targets for PY3. Deliverables D4.4 Final Impact and sustainability report and D4.5 Final Feedback and Metrics Report (this report) were deferred until PM35 and PM34 respectively, in order to extend the reporting period to give a fuller picture of metrics and impact of e-ScienceTalk over its third year.

Despite changes in the e-ScienceTalk team over its three project years, overall the project has met all its deliverables and milestones with few exceptions (specifically delayed e-ScienceBriefings publication in PY2, and fewer issues of iSGTW than planned in the same year), which were mainly due to the amount of time needed to recruit effort by the project partners.

In addition to meeting agreed target milestones and deliverables, the project has also delivered communications initiatives that were in-keeping with the goals and objectives of the project but were not in its original scope. Initiatives such as communications training, conference proceedings, and the development of e-ScienceCity as a standalone version that can run off a memory stick, with an accompanying Teachers' Pack, are all examples of e-ScienceTalk being a highly dynamic project with a lot of momentum and relevance to the needs of the global e-infrastructure community.

3 FEEDBACK ON E-SCIENCETALK PRODUCTS

3.1 e-ScienceBriefings and Communications Training

3.1.1 Background

e-ScienceTalk's e-ScienceBriefings (previously called 'GridBriefings' in the GridTalk project, when they had a narrower focus) are aimed at policy makers in all layers of government and industry in the EU and beyond. They 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.

In PM26, e-ScienceTalk (WP1 in conjunction with WP4) initiated a new series of training sessions designed to share best practice with European e-infrastructure projects. A total of three such sessions have been held to date, in addition to a short talk on the use of video to get a message across given by Stefan Janusz at the EGI Community Forum 2013. These were: EUDAT 1st Conference, Barcelona (PM26), ILL for CRISP Coordination Team (PM27), and CRISP 2nd Annual Meeting (PM31). Catherine Gater also shared some of the main points assembled as part of the training at a talk presenting e-ScienceTalk to the 10th e-infrastructure Concertation Meeting in Brussels.

3.1.2 Summary of Feedback

e-ScienceBriefings are distributed in a wide range of countries in the EU and beyond. Aside from the monthly mailshot, which includes subscribing addresses from most EU member states, the four e-ScienceBriefings of PY3 have been downloaded from 22 non-EU states. Link tracking through v.gd indicates that downloads from Twitter links (likely to be the source of most downloads) occur across the globe, with a large audience (approximately ¼) coming from the US. Summaries of the Briefings were featured in iSGTW as articles throughout the project to attract new audiences to the Briefings, and content was also repurposed for the e-IRG newsletter. The iSGTW summary of the last issue of the Briefings, on Horizon 2020, was republished by Science World Report.[14]

e-ScienceBriefings were more difficult to get feedback on than some of e-ScienceTalk's other products. At meetings where physical copies are distributed, it is not always possible to track who has picked up the Briefings, and how they make use of the information contained in them. Nevertheless, a number of methods have been used over the course of the project to collect feedback. In this section, a brief overview of the kinds of *external* feedback we have collected is given, followed by *internal feedback* from the e-ScienceTalk team.

[14] http://www.scienceworldreport.com/articles/7661/20130620/coordinated-approach-science-europe.htm

External Feedback

Informal feedback at events

- John Dyer from TERENA liked the look of the e-ScienceBriefings (e-IRG, Dublin)
- Silvia Olabarriaga from the Academic Medical Centre, Amsterdam, said she was pleased with the article in which she featured on Technology and Knowledge Transfer, alongside 'big names' such as Tony Hey of Microsoft Research (EGI Community Forum 2012)
- Ian Osborne from the ICT Knowledge Transfer Network thought that the introduction to the Technology and Knowledge Transfer briefing was "great". (CloudScape V)

Further comments are included from PY2 in the appendix.

Formal Feedback Gathering

At the 10th e-infrastructure concertation meeting (PM31) in Brussels, WP1's Zara Qadir took a poll of attendees to see which issues of the e-ScienceBriefings had been most read.

Issue	# respondents who had read the issue	
Desktop grids: Connecting everyone to science	3	14.3%
Research Networks: global connectivity	9	42.9%
Visualisation	4	19.0%
Open Data,Open Science	14	66.7%
Transferring Technology and Knowledge	8	38.1%
Big data	12	57.1%
The Security Issue	7	33.3%

Comments collected at the same time included:

'Nice!' ; 'I'm a regular reader of the e-ScienceTalk editions and I do like them, including also the above ones.' ; 'I didn't know they existed but I'll take a look' ; 'I've actually provided comments on them in the past.'

Surveys taken after the EGI Technical Forum 2012 (PM25) and Community Forum 2013 (PM31) indicated that 62% and 69% of respondents were interested in subscribing to the Briefings. Printed copies were widely distributed at both of these meetings.

Following training sessions held at EUDAT, Institut Laue-Langevin (ILL) for the CRISP[15] coordination team, and the CRISP 2nd Annual Meeting, web questionnaires were sent out to attendees. Unfortunately the response rate was usually low. In terms of collecting feedback at such sessions, it may be better to have attendees fill these out at the time. However, feedback that was collected was positive. After the training at ILL for the CRISP coordination team, responses were that the 'training was very good' and 'fully met expectations', with all those responding saying they would recommend the training sessions to others. One attendee said, 'I don't know when I'll have the chance to write for or talk to the public media. Furthermore, I'm interested in research papers, but IMHO several techniques, which we learned at the training, can be applied for research papers as well.' This is a very positive response and shows that the attendee could apply best practice communications techniques to aspects of their work other than dissemination: namely in writing academic papers.

Unsolicited feedback

Grant Davies from the Queen Mary, University of London's *Copy Shop* (reprographic services) said the following: "You know I don't usually read the stuff that comes in to the shop, but I always have a good look at the e-ScienceBriefings when they come in for printing. I really like them. My favourite was definitely this one [points to Big Data briefing]. I hadn't heard about how the super earth had been discovered and that was certainly very interesting. I also didn't know about the term metadata and the significance of data about data... so, then what exactly is data about metadata called... Is that super metadata?" This demonstrates that the Briefings can reach out to anyone with an interest for science and technology, even outside of the policy, industry and e-infrastructure communities who are its intended audience.

Internal Feedback

Five of six responses indicated that *e-ScienceBriefings achieved their aims very well*, with one response stating that, *on the whole, e-ScienceBriefings partially achieve their aims*. The aims are: '…to introduce policy makers in EU government and industry to relevant concepts from e-Science in neutral way, and to highlight the success story projects that have resulted from long-term investment in e-infrastructures.' It is possible that the respondent thought that the articles were, on occasion, necessarily biased in favour of a particular argument – for example, having a tone that is *pro* open access. Internal comments, again anonymised, stated the following:

What has worked well?	• *The short visual format and the focus on a particular topic, especially those that are identified as being a priority for funders* • *Many short text, quote and images that make the whole easy and pleasant to read* • *It was easy and pleasant to read, whereas there were a lot of interesting infos.* • *Tying stories to news-events gives them context and makes them seem more relevant* • *I think the case studies are very effective. Most people remember the briefings. Very helpful to those new in the field. Explains challenging topics in an interesting and absorbing way.* • *Good authoritative overview. Works very well as an entry point to subjects.*
What could be improved?	• *Perhaps make the focus of each one even tighter on a particular topic, reduce the text in the briefing itself and add more extra reference materials on the website instead. Infographics would also be a good area to explore* • *Work on a tablet version* • *Nothing*

[15] Cluster of Research Infrastructures with Synergies in Physics

	• *More quotes from experts. Need to target people at an earlier stage – this requires better planning.* • *Maybe less text more visuals but I realise this is difficult. I think there might be too many people on the review board, which makes curation quite a difficult process. This does mean everyone is generally happy with the content, but the downside is the copy can lose some of its original charm.* • *Not much; I think it's an excellent product.*

Overall, the respondents thought that e-ScienceBriefings was the third most important e-ScienceTalk product for a future project out of six products in total, placing it behind iSGTW and GridCast. Exactly half of respondents thought that it was the second most important product.

3.1.3 Assessment of e-ScienceBriefings

Feedback on WP1 output has been very positive over the 3 years of e-ScienceTalk. Printed copies of e-ScienceBriefings have continued to be popular at meetings, and very often editions run out and are reprinted to keep up with demand.

Throughout the course of e-ScienceTalk, concerted efforts have been made to not only communicate e-science policy issues to a broader audience, but to simultaneously share what has worked, and what hasn't, with regard to communications initiatives with the e-infrastructure community in Europe. By doing so, the overarching goal of communicating the success stories of e-science and encouraging debate around e-science subjects are sustained by projects, individuals and organisations with whom we have worked. In this regard we have delivered a number of training sessions for European projects and in PM35, we will deliver *D4.6: Guide to Dissemnination for the EC* [R6].

3.2 e-ScienceCity

3.2.1 Background

e-ScienceCity (www.e-sciencecity.org) is the online educational resource portal for e-ScienceTalk, aimed at the higher-level secondary education, further education and early stage higher education sectors. It integrates GridCafé, the educational resource initially developed at CERN and later expanded upon by GridTalk, into a virtual city of websites and a virtual learning environment accessible from OpenSim. Over the course of e-ScienceTalk, four new learning areas have been developed, covering cloud technologies, citizen cyberscience, supercomputing and research data. These are complemented by an e-science news aggregator, directory of e-science research centres, projects and researchers, links to further resources including videos and games. The in-debate section has now been re-imagined in the form of a Facebook page, fb.com/esciencecity, which also expands upon the social dimension of the site.

3.2.2 Summary of feedback

We reacted to the responses of focus groups assembled in PY2, and feedback gleaned from candidates for the e-ScienceTalk internship, to focus the design and content of e-ScienceCity towards 14–18 year olds. We continued to elicit feedback from a number of audiences in PY3.

External Feedback

In PY2, PM14, Zara Qadir and Manisha Lalloo (both WP1) held a formative evaluation focus group at Queen Mary, University of London, with 16–18 year old students from Simon Langton Grammar School for Boys in Canterbury. The comments captured are covered in detail in D4.4 Feedback and Metrics Report from PY2, and are included in Appendix II. This was used to inform the focus of new content and design for the site.

In preparation for generating the content for HPC Tower, added at the end of PY2, a small informal focus group was assembled consisting of physics postgraduate students at Queen Mary, University of London. The group was first asked to look at the existing content of the site, and told that a new section on high performance computing was needed. They were then asked to brainstorm on what needs to be included to attract and retain the attentions of a 14–18 year old age group, write down ideas on flip charts, and to report on their conclusions. The following is a summary of what was said:

What makes a supercomputer super?
–What are the distinctions?
–Where does HPC sit among other computing technologies?
What are the most powerful ones?
How much do they cost?
–How long do they last?
How green are they?
How much do they bring to the economy?
What useful results can they provide?

–Why do you need them? History and Timeline –People like facts Video clips and quizzes draw people in

During PY2 and PY3, feedback was collected on e-ScienceCity by featuring a drop-down questionnaire on the site. This was viewed as a non-intrusive way to glean feedback from a more random sample. A prize laptop sleeve was offered for selected respondents. However, responses were low (4 in total) considering the traffic and high level of engagement with visitors. Nevertheless, there were some interesting responses. One respondent hadn't found what they were looking for – they were actually looking for information on how to build a grid. This seems to indicate that GridCafé comes high in search results *about* grids. Another respondent, however, was very pleased, stating: "The information led to other useful sources. I was looking for a well-organized, information reach resource for my CIS majors, to begin research work on this topic."

In light of the low response rate, a more targeted approach was needed. Undergraduates at Queen Mary, University of London, were offered book vouchers for their time to take part in a directed website navigation and structured assessment of e-ScienceCity. Their responses are presented in full in Appendix III. To summarise, respondents thought that, on *first impression*, the e-ScienceCity looks 'slick and professional', 'captivating for teenagers' and that the site looked like an educational site 'for high school students', indicating that the general look and feel of the site was targeted towards its intended audience. On being asked about the *motivations* behind the site, respondents thought that it was 'to inform people about computing networks', 'to get involved for those who are interested' and to 'inspire them to learn more'.

Respondents thought the site loaded 'quickly' or 'instantly', with 'nice animations', 'nice graphics and design' and 'nice colours'. Praise was given to the GridCafé and Volunteer Garage sections, these tending to be the favourite areas of most respondents – GridCafé was said 'to have a bit of everything'. Another favourite was 'the virtual world demo' which 'looks exciting'. Instructions on how to join the virtual world have subsequently been included on this page.

Regarding navigation, there was general consensus in a number of responses to questions giving the indication that the multitude of navigation methods is actually confusing – while some 'like the tabs [menu bar]' others thought the addition of the map and carousel at top right 'confusing' and 'inconsistent'. In total, 60% of respondents thought that the inclusion of a hyphen in the URL, which historically was implemented for search engine optimisation purposes, made it harder to remember. Another criticism was that some sections had more images than others, which is partly due to having only planned for three additional sections and actually having exceeded this target.

The most insightful comments were perhaps those relating to ideas for things that could be added to e-ScienceCity. More graphics, including infographics, was one suggestion. Another idea was to include the RTM in e-ScienceCity alongside GridPort, which is a mirror of content from the GridGuide site presented inside e-ScienceCiy. This idea was being explored in PY3 (though it wasn't a deliverable). However, work needed to integrate the RTM into the Science Museum' *Collider* exhibition took precedent, meaning that this may not be possible in the remaining project time.

Internal Feedback

Based on the internal questionnaire conducted at the end of the project, five of six respondents thought that '**e-ScienceCity explains topics and issues well, and is at the right level for high school-aged students**' whereas 1 respondent thought that the information was comprehensive but possibly too technical. Assessing the level of technical difficulty is a subjective matter, but if the majority of the site is understandable, it may not require any alteration. It is worth nothing that, in contrast to this comment, one of the undergraduate students thought the level was patronising at times.

What has worked well in e-ScienceCity?	• *The breadth of material covered in a neutral way i.e. not from the point of view of particular project or e-infrastructure. The graphics are also very striking.* • *Find a coherent and pleasant way to present many different subjects* • *The concept of city is working well, and mostly every needed information is there* • *I think the characters are good now that they change on each section* • *The content is great and the characters are cute.* • *The content is well written and there is a good selection of links for accessing further information.*
What could be improved?	• *Improve traffic and interactivity with the site. Bring in the GridCast blog and discussion areas.* • *Continue to improve graphic add new subject (digital manufacturing)* • *Nothing* • *More time for graphics design and for marketing of website* • *People have said the site is a little outdated now. Only small changes to the design including more photos It needs a more clear value statement at the top of the site. Hard to find within the text underneath. Site needs more promotion.* • *I'd be tempted to make the site easier to navigate by replicating the links in the horizontal black bar on each page at the bottom of the introductory text for each topic.*

e-ScienceCity was ranked 4th most important out of 6 products for a 'future' version of e-ScienceTalk if effort could be funded. This ranking should be considered carefully in the context of the positive responses: respondents were asked to rank in order, which is a fairly crude method of assessing the success of the product. It could also be the case that the development is complete and therefore effort would not be required in the future, in contrast to iSGTW, GridCast, Briefings (all ranked ahead) which require constant input of new content.

James Cook, the e-ScienceTalk intern for the duration PM24–PM25, was also asked to review the site during his internship. His critique is included in Appendix III.

3.2.3 Assessment of e-ScienceCity

In PY3, the final section of e-ScienceCity, *Data Park*, was added. The new section covers open data, big data, and the research networks that underpin e-science. Graphical and interface tweaks were also made so that the site appears more dynamic, with different characters from e-ScienceCity appearing on each section. Along with the new Facebook page, these changes have increased the number of visitors to e-ScienceCity. The upward trend continues, indicating that it could continue to grow even after the project ends, due to links from e.g. *Wikipedia* pages.

Feedback on the site has been mixed. It has been suggested that some of the new sections contain large blocks of text that can impinge on ease of digestion of material. Accordingly, the text has been split up where appropriate and the colour of the text has been changed slightly to make it easier to read. Hyperlinks now change colour when hovered over with the mouse cursor, to make it obvious where links are and improve navigation.

Only a small amount of feedback was collected from the drop-down menu survey link, which appears to visitors to the site. Taken together with an assessment of the website traffic, efforts were made to increase visitor numbers using Twitter and Facebook. Traffic has increased over the past two quarters especially.

In addition to the work undertaken to increase visitor numbers to the site, a Teacher's pack has also been developed. A standalone version of the site, which runs from a USB stick, has also been developed to allow e-ScienceCity to be used in a classroom where internet access is limited. A lesson plan is included in the pack to allow teachers to run a directed learning session, which asks students to look for specific information on the site as part of an assignment.

3.3 GridCast

3.3.1 Background

GridCast (www.gridcast.org) combines blogs, videos and interviews from major distributed computing and e-infrastructure-related events, providing scientists with an opportunity to blog and podcast about their experiences. e-ScienceTalk has built upon the site's reputation and improved its interactivity by providing additional social media channels such as Twitter[16] and Facebook (as part of the e-ScienceTalk and iSGTW websites). The YouTube site, which contains the GridCast videos, is also now a popular channel in its own right, with over 220,000 views over the three project years.

3.3.2 Summary of feedback

GridCast has recorded very positive page views during the final project year. In fact, views during Q11 were unprecedented – PM33 had the highest GridCast page views of the entire project; PM32 and 31 were 2nd and 3rd highest, respectively. Page views peak at or around events, with a tail following as

[16] http://twitter.com/#!/e_scitalk

both attendees of events and those who could not attend catch up, often by following Twitter hashtags or simply by searching the web.

External Feedback

To determine level of use of GridCast at events, a questionnaire was distributed at the EGI Technical Forum 2012 and Community Forum 2013. In the surveys, 22% and 24% of respondents, respectively, had used the blog at these events. Respondents to the questionnaire at the Technical Forum 2012 said that they looked at the blog: "Out of curiosity"; as "A good source of information on sessions I could not attend"; and "To look at recordings of demos". At the EGI Community Forum 2013, one particularly effusive response was: "My interview on my project was great thanks!"

Comments on the blog itself are another way of gauging engagement by the audience. A post by Stefan Janusz in PM33, on IT as a Utility in Emerging Economies, received the following positive comment from the workshop organizer, Steve Brewer: "This is a really interesting report back from the Emerging Economies workshop. Not only has Stefan captured the ideas that emerged during the workshop, but he has also developed these with some fascinating supplementary research which is exactly what the ITaaU Network+ is aiming to motivate."

Internal Feedback

Four of six respondents said that '*GridCast achieves its aim of keeping the community up-to-date with the latest goings-on and builds a sense of community with plenty of new writers*'. We saw that 2 of 6 respondents said that 'Gridcast reports well on goings on, but the writers are often the same'. GridCast has a large number (100) of currently registered bloggers, and the cumulative number overthe years of the project exceeds this number, as inactive bloggers must be removed once the maximum of 100 users is reached, to allow new contributors to blog. However, it is often the case that there are some members of the community who see greater value in contributing to GridCast. Efforts are always made to reach new members who would like to blog, and some of the regular bloggers towards the end of the project were recruited in late PY2 and PY3. Additionally, there are individuals who are keen to blog, but as representatives of their organisations are worried they need authorization from superiors for their words to be published. This can present a barrier both in terms of recruiting new bloggers and, once recruited, them being able to blog with any frequency.

What has worked well for GridCast?	• *The diversity of events attended and the videos* • *Very lively, when you cannot be at the conference it will transmit the mood/ambiance of the conference and the place* • *The fact to follow events was a good way to be up to date* • *Explaining what's going on at conferences but also putting it into a wider research context* • *Recruiting different voices to report on different aspects of the conference. Giving people feedback on their blog posts.* • *It's an interesting way to find out what's going on at conferences (or sessions at conferences) one is unable to attend oneself. The thing which makes GridCast really good is the fact that it's so immediate (i.e. there are no barriers to publishing). The videos (particularly recently) are excellent, too. They're always well shot and the content is of a very high level of quality.*
What could be	• *Increase the level of posting between events, encourage more 'opinion' blogging as well as straight reportage. Increase readership as visitor numbers are still*

improved?	*relatively low* • *Maybe some live webcast, or virtual conference in parallel* • *The design is quite old* • *My own GridCasts are sometimes not 'live' enough. Could be solved by reading up on the speakers more…but not always possible* • *Moving the Blogger platform to Wordpress. More promotion at conferences Change the name so the focus is more on e-science Tag level of technical interest Provide more links to more information within blog posts More promotional items to encourage bloggers to contribute*

GridCast was internally rated the second-most important e-ScienceTalk product, behind iSGTW but ahead of e-ScienceBriefings. GridCast is seen both internally and externally as one of e-ScienceTalk's most important products, providing a rich source of content that can feed into the other e-ScienceTalk products.

3.3.3 Assessment of GridCast

GridCast has remained extremely popular throughout the three project years, receiving consistently positive and encouraging comments from the community and beyond. Most of the content on GridCast is generated in bursts focusing on announcements at conferences and workshops. Feedback obtained in PY2 indicated that members of the e-science community, who are either unable to attend a session or the entire meeting, read the blog to 'catch up' on what they have missed. Video blogs featuring interviews from keynote speakers are particularly well-received, as are those of demos. Internally, GridCast is seen as an important component of e-ScienceTalk's communications products.

3.4 GridGuide and Real Time Monitor

3.4.1 Background

GridGuide (www.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 ongoing 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. For these reasons, the GridGuide is useful for engaging with policy makers who are able to find out more detail about work going on in their local regions or areas of responsibility, as well as the general public and other scientists.

In PY3, GridGuide was integrated into e-ScienceCity. GridGuide was inititated as a complementary product to GridCafé, giving real-world examples of grid sites and projects around the world. Integration now cements that relationship. In addition, the GridGuide reached maturity with a directory now listing over 100 sites, each with at least one science project dependent on the site, or piece of information about the site.

Throughout the course of e-ScienceTalk, 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 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. 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. This work is described in more detail in *D2.4 Annual Upgraded RTM* [R4].

3.4.2 Summary of feedback

GridGuide contains detailed information on individual grid sites. Unfortunately, it has not always been easy to attract new member sites, and subsequently it is very difficult to collect feedback. An analysis of why this may be the case is given in Section 2.3.2. RTM has been widely seen by attendees at a number of high-profile events and has also featured in web articles about Grid Computing.

External feedback

During PY2, the UK Science Museum expressed an interest in including the Real Time Monitor in their LHC exhibition, *Collider*. *Collider* will open on 13 of November 2013 and run for six months. 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 includes technical improvements (e.g. optimising the code and solving issues with the JAVA code for the map), but it also includes some general aesthetic improvements requested by the museum (e.g. a full screen version, a globe that automatically jumps between locations, a recorded offline version, more data sources CMS-Phedex). This should be implemented by the end of the project in time for the exhibition.

Summary of Feedback from PY2

In June 2012, the top 100 Internet Protocol (IP) addresses were obtained from the RTM for analysis. An IP address is a unique number that every computer connected to the Internet is assigned. This data went back to 6 May 2010. From these numbers, the country of origin and institute of origin was acquired using various online tools (iptrackeronline.com/). The top five users are based in Italy, UK, Germany, France and Spain. 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).

Forty emails were sent to various institutions to solicit information on how the RTM is being used. From these investigations, e-ScienceTalk found that the RTM is being utilised for both outreach, educational and demonstration purposes over a wide geographical spread. From this survey, the RTM received a positive reinforcement of its importance, and useful feedback for improvements. All users found the RTM straightforward to use.

In PY2 an extensive survey was conducted to find out about users' experiences of the RTM. The following table gives a sample of those responses.

Table 9: Responses for PY2 survey (abridged)

1. How often do you use the RTM?	• *"I use the RTM 5-10 times per year."* David Britton, University of Glasgow. • *"Two RTMs are installed at ASGC now. The purpose of RTM is mainly for demonstration, training and education purposes mainly. Frequency is about once in a week."* Eric Yen, ASGC • *"When needed to demonstrate the functioning of WLCG or when I am publicising the GRID to some countries not yet involved (North Africa for example)."* Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France • *"I do use RTM from time to time. People at KFKI (the BUDAPEST Tier 2 site) are using it often."* Agnes Szeberenyi
2. How easy is the RTM to use?	• *"It is very simple now.*" David Britton, University of Glasgow. • *"The installation is quite straightforward and very easy to use."* Eric Yen, ASGC • *"The latest versions are just perfect. One click and it works!!"* Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France
3. What do you use the RTM for?	• *"I use the RTM to demonstrate the world-wide computing Grid - typically when I give a talk to a public or non-specialised audience."* David Britton, University of Glasgow • *"We setup some displays to monitor WLCG activities globally/locally in our office. RTM is a global one. It helps to give us an overall dynamic knowledge of WLCG running status and it's also a good tool to show what we are doing to others."* Erming PEI, University of Alberta, Canada • *"Showing the WLCG success. It is a tool, which is nearly "on time" and this is really amazing for many people. Seeing the data transfers and the CPUs consumed real time."* Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France • *"My colleagues and I mostly use it for visualizing. When we have a conference or a meeting and we try to explain Grid and why is it good, what is it for, and especially if we would like to involve the tier 0-1-2 hierarch."* Agnes Szeberenyi
4. What features are you using?	• *"I am using the so-called "bleeding edge" version, and open all the layers, especially the gLite and Panda layers."* Erming PEI, University of Alberta, Canada • *"We are coordinating the work of Serbian NGI AEGIS and hosting two Grid sites, and therefore RTM is quite a useful*

	resource for us - thanks for developing and maintaining it!" Antun Balaz • *"We use the Grid RTM zoomed in on Europe, showing all data (all jobs, etc.)."*
5. What extra information would you like to see on the RTM?	• *"People are always interested in data transmission status in a distributed system like the RTM is watching over. So, when a site is selected, the data status from the internet, such as the input data rate from what site now, and the output data rate to what site, would be helpful."* Eric Yen, ASGC • *"I don't know if you have the ambition to make RTM an all-in-one monitoring tool. For example, I think such stuff as storage information, data transfers, software releases, site VO-specific running status, etc., could be considered. Also, to display some general mouse-over information of a site will also be helpful, e.g., site name, running/queuing jobs."* Erming PEI, University of Alberta, Canada • *"It is detailed enough as we can zoom, click on a site and have plots etc. This is perfect. I don't need more information."* Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France
6. What do you like (and don't like) about the RTM?	• *"It's very good."* David Britton, University of Glasgow. • *"RTM is a very comprehensive tool to really 'see' the Grid, especially good for site and world-wide grid demonstration and education and training."* Eric Yen, ASGC • *"We are very happy with the current evolution of RTM."* Isabel Campos Plasencia, Cientifico Titular del CSIC, Instituto de Fisica de Cantabria, Spain • *"I like the fact that we can zoom, go from a place to a place, make a whole journey around the world. It would have been nice to be able to know what are the "yellow" lines, the green one etc ... only when moving the mouse. It is a little heavy to go to see the explanation that you forget immediately and try to remind them if you want to explain to people why Geneva is a big torte, half green, half pink and why the heart is beating etc ... This part could be improved."* Fairouz Malek from the Centre National de la Recherche Scientifique and LCG-France • *"We would like to see the option to animate the globe, i.e. automatically revolve it, allowing the non-interactive viewing of detailed data across the world. Also, the visualization of data transfers could perhaps be improved, e.g. with an FTS layer giving the possibility of seeing where transfers from (for*

	example) RAL are going."

Internal Feedback

GridGuide

For GridGuide, 4 of 6 respondents said that there was a '*huge variance in quality and quantity of information on a site*', perhaps reflecting the fact that sites are allowed to post their own information, with quality/editorial control. 1 respondent said that they could '*…find sites from around the world easily, and each site has something of interest'*. 1 respondent said they never used GridGuide. Taken alongside the metrics in 2.3.2, actions were taken to preserve the information in the 100 sites, but there are also lessons learned about GridGuide that perhaps reflect more the changing web landscape rather than any failing of GridGuide.

What has worked well for GridGuide?	• *The link to the RTM showing real-time traffic on the grid* • *A place where you can find a basic info about grid computing project.* • *There's a lot of sites there* • *It has information in easy-to-read sections* • *I thought the old version looked good.* • *Really good, authoritative list. It's important that this tool exists. Also, has a very nice UI.*
What could be improved?	• *Improve the update rate for the content, add more use cases.* • *Add in parallel of grid related subject content about other computing method (cloud, volunteer computing...)* • *It is quite difficult to say...* • *GridGuide would be better (and more sustainable) if integrated into LinkedIn/ResearchGate as a project (the latter has only been available as an option for a couple of weeks).* • *Has already been incorporate into e-ScienceCity More promotion and maybe linking to LinkedIn Advertise e-ScienceCity and revamped GridPort area* • *Not much at all - it's a very useful tool.*

GridGuide was ranked as the 6th most important e-ScienceTalk product. Five of six respondents ranked it 6th; one respondent ranked it 4th most important. Again, this does not mean that GridGuide was seen as unimportant to the project– simply that the other e-ScienceTalk products were seen as more important for a future e-ScienceTalk project, possibly because they require more regular input and continual generation of content.

RTM

For the RTM, 4 of 6 respondents said: '*RTM is excellent, hard to install, but is definitely worth it'*. 2 of 6 respondents said: '*RTM is excellent, easy to install/use and always has a 'wow' factor with audiences'*.

What has worked well for	• *The real time display of data, the range of data displayed* • *Very nice to illustrate a "virtual" concept. It gives an image to the grid.*

the RTM?	• *That is beautiful* • *Showing the grid infrastructure visually is a great way of making it seem relevant and dynamic* • *Looks great. Very impressive* • *RTM looks great and it is without a doubt the single best way to get people to understand what the grid is really about.*
What could be improved?	• *Usability - it does take a bit of practice to get the most out of it. Create an app version.* • *Change the globe layout to make it different than usual "google earth like things.* • *Make it easier to install...* • *Perhaps have a live streaming version from an always-on machine?* • *A lot of this is being done. Maybe a intro video telling you a bit more about what the RTM is.* • *The difficulty of installing it and getting it to run properly will undoubtedly put many people off, unfortunately. This is a shame, because it is a fascinating visualisation tool.*

The RTM was ranked 5th most important product overall. RTM always receives excellent feedback from those who see it, and definitely has a future, perhaps integrated into other communications channels.

3.4.3 Assessment of GridGuide and RTM

The GridGuide is the newest of the e-ScienceTalk products. In PM33, the site featured 102 grid and e-science focused locations around the world. Many of these sites are in new locations outside Europe and the US. Feedback on GridGuide sites is difficult to obtain due to fairly low traffic, hence its recent inclusion into e-ScienceCity as GridPort, an initiative which, it is hoped, will increase audience exposure to GridGuide.

The RTM, however, continues to be used to demonstrate the grid to new audiences at a wide range of events. The number of attendees at grid computing events who see the RTM is high. By being incorporated into the Science Museum's *Collider* exhibit, the RTM will reach a new younger and potentially more diverse audience (through schools visits and the museum's focus towards young families), increasing the number of views post-project end, and hopefully encouraging a new generation to follow science and technology careers.

3.5 iSGTW

3.5.1 Background

During e-ScienceTalk the weekly electronic newsletter, International Science Grid This Week (www.isgtw.org) broadened its scope significantly to cover e-Infrastructures such as supercomputing, distributed computing, networks, data and cloud/volunteer computing and their impact on grid development. The newsletter now covers a broad range of national and regional grid projects, as well as related developments in the wider world of modern science and research. New interactive features were introduced during e-ScienceTalk such as the facility for readers to comment on and rate stories, to share them with other websites and social media sites, and to take part in polls and surveys.

3.5.2 Summary of feedback

External Feedback

e-ScienceTalk has a very structured way of inviting feedback from its readership and the results are detailed below. However, iSGTW is a well-known 'brand' and often receives unsolicited informal feedback. At the CRISP 2nd Annual Meeting, Andy Götz, Software Group Leader at ESRF, said: "*iSGTW is my main source of news for what's going on is computational science. I read your stories, which I think are pitched at an accessible level, but I also use it to find other stories coming out of HPC Wire and other publications. I ignore other newsletters in my inbox, but I always find time to read yours*"

Both iSGTW and GridCast were present at the CloudScape V event in February 2013 (PM30). Stephanie Parker from Trust IT Services, one of the organisers of the event, thanked iSGTW particularly:

> I just wanted to say special thanks for the great job you all did for Cloudscape V.
>
> The iSGTW interview, article, blogs and YouTube channel are all excellent. It was great working with you.
>
> I really believe that your cooperation, professionalism and sense of fun played a key role in making Cloudscape V a success and this is very important for a self-sustained event.
>
> We look forward to working with you again in the future and hope to find other ways of doing this.
>
> Thanks again and enjoy the Easter break.
>
> All the best,
>
> Stephanie

iSGTW is in many ways the e-ScienceTalk product with the broadest reach. As such, its readership is the most useful source of feedback. The results iSGTW readership survey for PY3 are contained within *D3.6: Report on Annual Survey of iSGTW Readers and Annual Metrics* [R5]

113 readers responded to the survey in PY3 – lower than the 226 responding in PY3. However, the questions in the new survey were tweaked to provide room for a more qualitative analysis. 110 of 113 surveys were complete, suggesting that respondents gave the survey their full attention.

To pull out some of the most illuminating figures, 61.5% of iSGTW readers responding to the survey said that they read iSGTW regularly, defined as 3 out of 4 issues. 71% of respondents said they 'use iSGTW to keep up-to-date with technical developments in all areas of e-science', and 56% said they 'use iSGTW to keep informed about events and announcements', indicating that news stories and events announcements are big draws to regular readers. Splitting articles into two groups –academic research-related and infrastructure-related – physics and astronomy articles were the most popular academic stories, and future computing was the most popular area for infrastructure articles.

Results from several survey questions suggest a highly engaged audience, with 80% of respondents saying that they have forwarded an article or issue. Nearly half (45%) of respondents said they would 'consider writing, contributing or posting news and/or announcements to iSGTW'. This suggests that the audience is extremely engaged in terms of wanting to contribute. Although those responding to the survey may be more engaged than the average reader, page views and time spent on the site indicate that the audience is highly engaged.

One reason for such a high level of engagement may stem from the fact that, though reaching a broad audience, iSGTW is one of the most prominent voices of the computational research community. Over a third (36.4%) of respondents said that iSGTW had helped them with their own research work, whether by helping to generate ideas or finding research partners. iSGTW is very likely to be recommended by readers to their colleagues: over half (51.9%) said they would recommend it to others, with 'interesting or informative content' being cited as the primary reason for recommending it. Below is a summary of some of the comments from the survey.

- Information interesting for me and interesting for people working on the same topics
- I find iSGTW interesting–it also gives me some very good ideas for topics to discuss in my own articles.
- Informative, highly relevant, very interesting! Always really current topics, saves me sifting through tens of other news resources. As know I will get the top ones here.
- Great for the non-technical but interested reader
- Good source of information about what is going on in the science community
- It is a nice way to read about what it is going on
- It is an important source of news about projects using distributed computing to solve problems in scientific research.
- Because iSGTW maybe is one the best compendium of information about e-Science.

Overall, 89% of respondents agreed that iSGTW helps to increase the visibility for e-science projects. A comment made this year that has been made over the course of the project is that iSGTW features grid in its title, but grid is often not the most prominent type of infrastructure, by number of articles, in the publication. There are good reasons for changing the title of iSGTW to reflect the broader content

featured in it over the course of e-ScienceTalk, but also very strong arguments for keeping it as it is, based on the well-established brand.

Internal Feedback

5 of 6 respondents agreed with the statements that '*iSGTW succeeds with news stories that are timely and engaging, and bring the successes of e-Science to a broader global audience; it is a one-stop-shop for events in the global community*'. 1 respondent agreed with the statement, '*iSGTW has excellent newsworthy stories but isn't somewhere I'd look for events or announcements*'. This last response is in agreement with a small minority of the readership who are simply unaware of this feature of iSGTW.

What has worked well for iSGTW?	• *The frequency of publishing and the breadth of geographical and scientific subjects covered.* • *Very interesting even for non-technical or scientist public. It wake curiosity for many unknown subjects* • *Stories are interesting, and the newsletter give me an opportunity to follow e-science each week* • *Great editorial direction and a strong sense of brand. It's much better than many 'paid' publications.* • *Writing, editing and content Strong visuals and short articles Catchy titles* • *Research covered appeals to wide audience drawing in those who might not usually visit a computing news site. Also, promotes work of other European projects well.*
What could be improved?	• *More opinion pieces, breaking more news that might get picked up by other media outlets.* • *Maybe a nice "slide show feature" to present archive... But difficult to improve, many some tiny layout details.* • *Nothing* • *It would be nice to be able to establish a sense of independence and freedom, although that would open up new risks* • *More writers - pay writers for freelance copy Review process is quite lengthy therefore less editorial flexibility Keep the name but add a value statement underneath the title* • *Publication schedule could be more frequent, with articles uploaded several times a week.*

iSGTW was ranked as the most important of the e-ScienceTalk products: 4 of 6 respondents ranked it first outright; 2 ranked it 2nd. Clearly iSGTW is a very well-known brand and is the gateway product by which e-ScienceTalk's audience often finds its other products.

3.5.3 Assessment of Feedback on iSGTW

iSGTW has had an overall positive response in terms of feedback from surveys, general attitude towards the publication at conferences, and visitor numbers, which have continued to climb over the course of e-ScienceTalk's three years. There remains a good level of support for the publication among the academic and e-infrastructure communities, but iSGTW's growing social media presence indicates that the publication is on an upward trajectory in terms of amassing a growing global readership.

3.6 Assessment by ERINA+ Webtool

At the end of PY2 and beginning of PY3, e-ScienceTalk submitted metrics for analysis into the ERINA+ webtool. The full report is included in Appendix I. The tool takes a broad measured approach to numerically analysing project success based on what is expected. The report 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 normalized 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".

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."

3.7 Appraisal of e-ScienceTalk by MoU partners

e-ScienceTalk has Memoranda of Understanding with a number of projects. A number of MoU partners have responded to a request for feedback, and their responses are shown in Appendix III. A recurring theme in their responses is how much value e-ScienceTalk's partners are able to extract from their relationship with the project. Alexandre Bonvin from WeNMR had the following to say:

"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)."

4 LESSONS LEARNED

Taking a broad view of e-ScienceTalk's activities and products as both communications and dissemination channels and platforms for testing various strategies with regard to content, style, and promotion through social media, this section summarises *lessons learned* over the three project years. These lessons are expanded on in *D4.6: Guide to Dissemnination for the EC*, to be delivered in PM35.

Social Media

The evolving social media landscape used by e-ScienceTalk to promote its products has allowed the project to test various strategies. Like most endeavours, successful social media strategies require constant input. Critical mass of users, and ensuring that a platform is tailored to the type of audience, are both crucial to using a platform successfully. Twitter, Google+ and Facebook have all been used in multiple ways to promote e-ScienceTalk's products. e-ScienceTalk actually has two Twitter accounts, @e_scitalk and @isgtw. The reason for having two accounts are manifold: iSGTW is a global publication and, in-keeping with trends, has an account to create a strong brand; iSGTW also has input from the National Science Foundation in the US, and has in the past also been supported by effort funded by ASGC in Taiwan. The two accounts are used in a coordinated fashion and are intended to complement each other: @e_scitalk has previously tweeted interesting distributed computing or general computing-related stories from other sources, but these have on rare occasions pre-empted iSGTW articles or comments on these stories. In order to avoid this occurring, WP1 (the main administrators of the @e_scitalk account) check upcoming stories in iSGTW to ensure that pre-emption of articles, which could lessen impact, does not occur. One concern is that there is a risk of social media identity fragmentation or perceived fragmentation when multiple accounts are registered on any platform, particularly among the community that knows e-ScienceTalk best. However, it is possible to generate a dynamic interplay between both accounts that benefits both – increasing both the reach and impact of tweets.

Facebook has been used by iSGTW since 10 August 2009. Articles in iSGTW feature a Facebook 'like' button, alongside ways to post to other social platforms. To date, iSGTW has 1167 likes in total. Facebook is a popular sharing method for iSGTW, thanks to the constant generation of new material. A Facebook page was also set up for e-ScienceCity, to increase exposure and to serve as a platform for discussion creating a more dynamic version of the 'forum' section, which allows comments and contributions from our audience. However, this initiative, begun in PM30, has been slow to take off. It may be that e-ScienceCity's audience sees the site more as an information resource and is unlikely to post questions or comments on the Facebook page.

The Google+ platform has had a slower uptake than either Twitter or Facebook, but this is true of the platform in general, which is now described by Google as a 'social layer' rather than a social network.

In PY2, a 'Women in e-Science' Pinterest board was developed to coincide with International Women's Day, to promote ICT and STEM as careers for girls and women. Despite being tweeted from the @e_scitalk account, this initiative was not met with great success, gaining no 'likes' or 're-pins'. However, Pinterest is a fairly new platform (having launched its mobile version in March 2011) and it may be that members of the e-science community, or indeed the intended audience, had not subscribed to the service by March 2012. Pinterest itself provides no metrics to standard users, but does feature (retail-related) analytics for its premium users.

e-ScienceTalk products

The GridCast blog is built upon the Blogger platform, a Google product. It is very easy to administer, to add new bloggers at events, and presents a light-weight interface to new users, presenting few obstacles to writing and publishing a blog post. However, the platform does have some limitations that are worth bearing in mind for future initiatives with a similar objective. Only 100 bloggers can be registered at any one time, and while it is possible to remove registered bloggers who rarely or never blog, that does run the risk that bloggers who attend few events are removed from the registered author list just as they are about to write a post. This can require the GridCast blog administrator to check on not only the regularity of posts from a particular author, but their status in the community and likelihood to blog in the future. Additionally, the Blogger platform is not as customisable as some alternatives. Chief among these is Wordpress, which by the ease with which it can be installed on a server in any location, is extremely popular in the community, highly customisable, and independent of the services (if not the software) of an external provider, namely Google in the case of Blogger. There are also many other platforms that are equally lightweight but less restrictive than Blogger, Tumblr being a notable example. In all cases where a community-oriented blog is being set up, it is important to consider the number of users, the extent to which customisation may enhance the blog, and the overheads in terms of maintenance associated with choosing any particular platform.

GridGuide is the newest of the e-ScienceTalk products and has experienced slower growth than some of our other products over the three project years. As a specialist directory of grid and distributed computing sites, it is possible that GridCast has so far failed to reach critical mass. There are a growing number of academic social networking sites (such as LinkedIn and ResearchGate) that feature the possibility of setting up ‘projects’ – pages that link individuals working together in a virtual organisation or topic. It is possible that the community is using sites such as these to build a network of colleagues working in the e-science community as a whole, or their own topic of research. In order to change this situation, a lot of effort would be required to promote the site and its unique benefits to the community (such as its specialisation in grid and distributed computing infrastructures).

New areas were added to e-ScienceCity at a rate of more than one per year, overreaching the target metric. This is excellent from the point of view of useful learning content. However, it may be the case that not enough time was allowed (or available, from the point of effort allocated) to promote the site to the extent allowed for GridCafé. Graphics development for the website version and the virtual world also takes a substantial amount of time, and not every page has a graphic for this reason. This is partly due to the total number of pages in each area of e-ScienceCity. Though the text is as simple as it can be in order to communicate technical concepts, illustrations – especially those involving 3D graphics – are highly complex.

5 CONCLUSIONS

Despite a shorter reporting year and some staff changes, the project has largely met or exceeded its deliverables and milestones targets in PY3. Feedback for the range of e-ScienceTalk's communications products has remained very positive. Praise was received for iSGTW, e-ScienceBriefings, GridCast and RTM in particular, with positive remarks and constructive suggestions for improvement being given for GridGuide and e-ScienceCity. Some of these changes have either already been made or can be made in the remaining time available. e-ScienceBriefings have continued to be popular throughout the three project years. Feedback collected from PY3 and previous years suggests that delegates attending conferences like the format and find the single topic focus very useful. Both externally gathered feedback from across the three years and internal feedback suggests that e-ScienceBriefings are an important part of e-ScienceTalk's communication package – giving the facts and background on particular issues in a succinct document that features real-world examples of success stories from European projects.

e-ScienceCity has grown far beyond GridCafé, the site for 'everyone to learn about the grid' that existed before e-ScienceTalk. Now covering cloud, supercomputing, volunteer computing and big/open data, e-ScienceCity is a complete learning landscape covering the main ideas, debates and success stories of distributed computing technologies. Feedback from surveys and focus groups has indicated that the new areas of e-ScienceCity are seen as adding value to the site as a whole. The Virtual World demo video is a popular area, especially with newcomers to the site. The page containing the video now features instructions explaining, in simple terms, how to install the software to access the Virtual World.

GridCast has received positive feedback for its coverage of e-science events from the three project years. Viewing figures of towards the end of PY3 are at an all-time high, and feedback indicates that the community is familiar with GridCast, especially at events. The blog is always well-supported by tweets from @e_scitalk or @isgtw, depending on which partner is attending an e-science event. GridGuide has been developed to include over 100 sites, pages for each of which feature information about the location and a grid-related scientific project undertaken there. Content from the GridGuide standalone site is also now mirrored in e-ScienceCity, increasing access to this wealth of information. The RTM has had a successful three years and has been displayed at events where its potential audience is over 30,000. From November 2013–April 2013, the London Science Museum's *Collider* will feature the RTM and bring in a potential audience of 1.5 million people.

iSGTW has continued to be a successful publication, growing its readership, page views and audience loyalty over the three project years. iSGTW will continue after the end of the e-ScienceTalk project, with e-ScienceTalk partner CERN covering 0.75FTE for the iSGTW editor with a further years' funding. Over this period, the publication will continue to champion the successes of e-science around the world and to sustain the legacy built during GridTalk and e-ScienceTalk

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6 REFERENCES

R 1	D4.2 Quality Assurance Guide https://documents.egi.eu/document/262
R 2	D4.4 Annual Report on Feedback and Metrics (PY2) https://documents.egi.eu/document/1328
R 3	D1.5 Final Impact and Sustainability Report https://documents.egi.eu/document/1874
R 4	D2.4 Annual Upgraded Version of the RTM https://documents.egi.eu/document/1845
R 5	D3.6 Report on iSGTW Readership Survey https://documents.egi.eu/document/1814

7 APPENDICES

I. ERINA+ REPORT

a. ERINA+ Report

e-ScienceTalk - Supporting Grid and High Performance Computing reporting across Europe

This brief report examines the data provided by the collaborating project, its users and, in case of need, publicly available data. The report is composed of three main sections. After a short description of the project, a section is dedicated to the project's efficiency, i.e. to the financial and economic evaluation of project's outputs. The analysis is based on the data inserted by the project in the ERINA+ Project Self-assessment Webtool. The following section is dedicated to the analysis of project's effectiveness in terms of competitiveness and excellence of research, innovativeness and transfer outside the domain and cohesion. Also this section is based on data inserted in the ERINA+ Project Self-assessment Webtool. The last section considers the more qualitative aspects of effectiveness and compares the self-assessment made by the project with the opinion provided by project's users. Project's users entered their opinion in the User Data Gathering Interface. Annex 1 provides the definition of the main economic indicators used in the report.

The aim of this report is to support the collaborating project in analysing the self-assessment results it can see in the last section of the ERINA+ Project Self-assessment Webtool and to provide an external view on project's outputs and potential impact.

i. Project short description

www.e-sciencetalk.org

e-ScienceTalk is a support action and aims at giving high visibility to the success stories of European e-Infrastructures through different dissemination activities.

The project uses different means to ensure that the European e-Infrastructures projects' results are widely disseminated:

- briefings which summarize reports and key issues about European e-Infrastructures in a non-technical language;
- e-ScienceCity, which explores issues linked to grids, volunteer computing, supercomputing and networks in a simple way. It features for example GridCafé, Cloud lounge, a Communication Centre, etc.;
- GridGuide, which offers information about the grid, the exiting sites and their repartition worldwide;
- GridCast, which gives information about grid computing events in the word;
- the Real Time Monitor, a visualization of the activity on the grid computing infrastructure;
- participations in conferences and preparation of articles for Internet sites about science;
- social networks such as twitter and YouTube.

eScience Talk started on the 09/01/2010 and will end, following a two month extension allowed to carry out further work, on the 08/01/2013.

ii. Project's efficiency

Summary	Project	Projects Mean
ENPV	**€ 3.197.120,00**	**€ 35.092.900,00**
ENPV (Actual Cost)	**N/A**	**€ 35.875.600,00**
ENPV*	**N/A**	**-**
B/C	**3,195**	**6,278**
B/C (Actual cost)	**N/A**	**6,588**
B/C*	**N/A**	**-**
WtP/C*	**1,025**	**-**

Some changes are suggested:

- Scenario 1:
  - Number of users (without comma)
  - Time saving = 7,33 h/y
- Scenario 2:
  - Number of users (without comma)
  - no values
- Scenario 3:
  - No values
- Scenario 4:
  - Number of users = 850 (average)
  - No values
- Scenario 5:
  - Number of users (without comma)
  - No values
- Scenario 6:
  - Number of users (without comma)
  - No values
- Scenario 7:
  - No values
- Scenario 8:
  - Empty

The scenarios - with the exception of the first one - are not reporting enough data to be assessed. This probably explains why, in terms of B/C, the project results below the projects' average.

However, the outputs generated by scenario 1 are able alone to pay the costs of the project and report a positive result (ENPV >0 and B/C > 1).

We would like to underline that the initial findings from the users' answers (4 up to date) report a positive WtP/C* ratio (equal to 1,025). If the involvement of more users in the survey will confirm this ratio, or will improve it, the project's services are potentially marketable. But the profits margin

(if the willingness to pay is confirmed) could be too thin. We suggest analysing more precisely this aspect in the business model, if the project intends to commercialise its services.
The ENPV* and B/C* are not evaluable because indication about the users' time saving is missing.

Offered Efficiency

Total budget

General Information

The last assessment has been run on with the following results:

Total number Project assessed	number User response for this project	number of Users responses
21	4	181

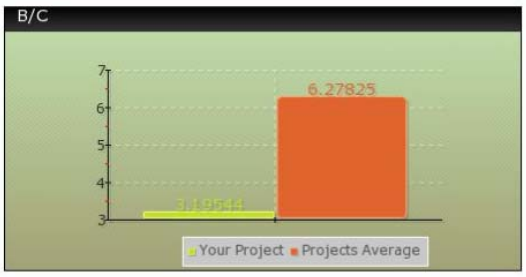
Efficiency

The total offered efficiency is calculated according to the information provided by the project and shows Economic Net Present Value and the B/C ratio which are the summary of the benefits that the project expects to produce through its services.

Definition:

- economic net present value (ENPV): the difference between the discounted total social benefits and costs;
- B/C ratio, i.e. the ratio between discounted economic benefits and costs.

	Your Project	Projects' Average
ENPV	3,197,120	35,092,900
B/C	3.195	6.278



Efficiency per scenario

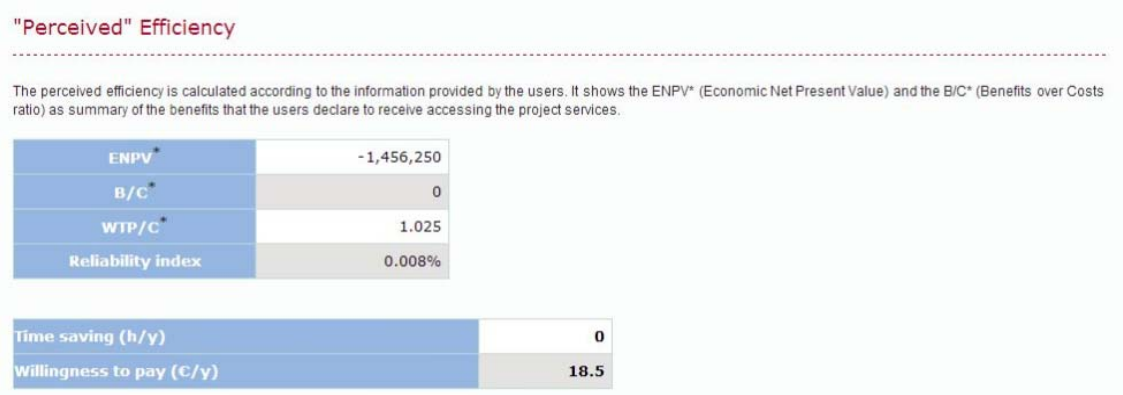
The offered efficiency as defined before is calculated for each scenario according to the information provided by the project.

Name	Number of users	% of Budget	ENPV	B/C
iSGTW	10,600	35	4,143,680	9.130
GridCafe/eScienceCity	25,888	31	-451,438	0
e-Infrastructure Concertation meeting	450	2.700	-39,318.800	0
eScienceBriefings	850	10	-145,625	0
GridCast	10,000	10	-145,625	0
GridGuide	3,018	2.500	-36,406.200	0
Real Time Monitor	30	8	-116,500	0
	0	0	0	0

Actual Cost

Perceived Efficiency

Total budget


"Perceived" Efficiency

The perceived efficiency is calculated according to the information provided by the users. It shows the ENPV* (Economic Net Present Value) and the B/C* (Benefits over Costs ratio) as summary of the benefits that the users declare to receive accessing the project services.

ENPV*	-1,456,250
B/C*	0
WTP/C*	1.025
Reliability index	0.008%

Time saving (h/y)	0
Willingness to pay (€/y)	18.5

Actual Cost

No data is available.

iii. Project's effectiveness

Competitiveness and excellence of research[17]

Indicators	Value	Value normalized on the project's budget	Normalized mean value
n. of peer reviewed articles with Impact factor	0	0	1,34
n. of peer reviewed articles without Impact Factor	1	0,69	0,83
n. of non-peer reviewed articles	1	0,69	2,57
n. of technical deliverables/milestones	N/A	N/A	5,88
n. of conference proceedings	3	2,06	0,87
Average ranking of academic institutions represented in the consortium	125	N/A	163,4[18]
n. of patents and patent applications	0	0	0
n. of other IPRs	8	5,49	0,84
n. spin-offs or starts-ups created following the project development	0	0	0,04

[17] The values regarding the number of peer-reviewed articles without impact factors and the number of conference proceedings have been up-dated in January 2013 by the project.

[18] This value is not normalised on the projects' budget because independent from the amount of the budget.

The project is likely to open up and/or establish new types or fields of research (likert scale from 1 to 6, where 1 is not likely and 6 very likely)	3	1 out of 21 projects selected 5 or 6 for this indicator.

Being a Support Action, the focus of the project is not to produce new scientific outputs, but to make existing ones available to a large number of users. Therefore the values in this category are relatively low compared to the average of all projects.

In fact, the project published only 1 peer-reviewed article without impact factor, and 1 non peer-reviewed article. The project participated also in 3 conferences with dedicated papers.

The project did not provide any information about the number technical deliverables produced, but looking at the project's website both seem available in a consistent number.

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 normalized 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".

Another outstanding strength, looking at the aspect of competitiveness, is for sure the strong potentiality of the consortium, as one university partner is ranked at number 24 among the first 500 universities at international level and a second one at number 226. However, according the project's self-evaluation, is it likely to open and/or establish new types or fields of research (3 out of 6 on the likert scale).

Innovativeness and transfer outside the domain

Indicators	Value	Value normalized on the project's budget	Normalized mean value
n. of public events outside the domain (to a wider typologies of stakeholders)	0	0	0,49
n. of training materials	5	3,43	3,49
n. of training events	4	2,75	1,04
n. of trained persons	3	2,06	16,20
n. of industrial partners and SMEs inside the consortium	1	0,69	0,32
n. of collaboration agreements outside the e-Infrastructures domain	2	1,37	0,30
n. of knowledge repositories or instrument fostering collaboration and knowledge exchange for users	8	5,49	0,67
n. of dissemination activities	6	4,12	3,84
Total audience	47.350	32.515,02	3.857,61
The project is likely to have outputs which lower entry barriers to economic markets for our users (likert scale	2	4 out of 21 projects selected 5 or 6 for this indicator.	

from 1 to 6, where 1 is not likely and 6 very likely)		

E-Science Talk has a positive potential impact in terms of innovativeness and transfer outside the domain, in line with the projects' average.

Having as a main project focus the wide dissemination of success stories of European e-Infrastructures, we expected a high number of dissemination activities. The project indicated 6 main dissemination activities, which all have individually a wide impact in terms of dissemination since they involve a large number of participants. For example, part of the project's activities consisted in developing a e-ScienceCity/GridCafe, a Gridcast and a Virtual Word, or in elaborating e-Science Briefings. Therefore, 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.

From the numbers on training materials, events and persons, it can be deduced that training was not planned to be one objective of the project. However, some training activities were performed and 598 people were trained. This can potentially have a positive impact on the enlargement of e-Infrastructures community and the transfer of community outputs to other domains.

The project has also established 2 collaboration agreements outside the e-Infrastructures domain, with Virtus. Such collaboration agreements are strong potential means to transfer the project's results outside the e-Infrastructures domain.

Regarding the number of knowledge repositories or instruments fostering collaboration and knowledge exchange for users, the number of e-ScienceTalk is very high compared to the average (5,49 normalised on the project's budget, in comparison to 0,67 as average value). Also this elevated number is clearly in line with the planned project objectives of launching various dissemination means.

The quality and outreach of these repositories and instruments are underlined by the number of total audience (about 47.350 persons), which is highly above the average and indicates a high transfer outside the domain, as planned in the project.

Cohesion

Indicators	Value	Value normalized on the project's budget	Normalized mean value
n. of nations represented in the consortium	4	2,75	1,32
n. of partners from new EU members States	0	0	0,35
n. of partners from outside the EU	1	0,69	0,60
n. of agreements with actors outside the consortium representing countries outside the EU	3	2,06	0,36
n. of European countries covered by dissemination activities at national level	0	0	0,32

n. of dissemination activities with an audience at European level	6	4,12	2,44
n. of dissemination activities outside Europe	4	2,75	1
n. of women in research-related role	1	0,69	0,8
n. of young researchers	4	2,75	1,96
The project is likely to connect and provide exchange opportunities for users from different domains (likert scale from 1 to 6, where 1 is not likely and 6 very likely)	5	5 out of 21 projects selected 5 or 6 for this indicator.	
The project is likely to expand their range of services to audiences outside the research domain (likert scale from 1 to 6, where 1 is not likely and 6 very likely)	5	7 out of 21 projects selected 5 or 6 for this indicator.	
The project is likely to expand the geographical range of their users and of their collaboration activities (likert scale from 1 to 6, where 1 is not likely and 6 very likely)	5	9 out of 21 projects selected 5 or 6 for this indicator.	
The project is likely to allow for coordination of scattered community (likert scale from 1 to 6, where 1 is not likely and 6 very likely)	4	6 out of 21 projects selected 5 or 6 for this indicator.	

Regarding the indicator of cohesion the e-ScienceTalk data is higher than the average which shows a positive impact on networking as well as disseminating information beyond EU boundaries: 1 of the 5 partners is from a new Member State. 2,06 (normalised value) agreements have been signed with actors outside the consortium representing countries outside the EU in comparison to the average of 0,36. And 2,75 (normalised value) dissemination activities have been organised outside Europe in comparison to the average of 1. This is in line with the main aim and with the typology of the project (Support Activity).

Both numbers of dissemination activities within and outside Europe are higher than the average and exchange opportunities for users from different domains were high as e-ScienceTalk provides a vehicle for the exchange of ideas through both the blog (GridCast) and the newsletter (iSGTW). Both tools were evaluated internally and showed to be very successful. No dissemination has been organised at national level, but this is due to the fact that the all the activities and events had a broader audience, at European or global level., with a positive impact in terms of cohesion.

Additionally, according to the self-evaluation made by the project, it is very likely to expand its range of services to audiences outside the research domain (5 of 6 on the likert scale) and it partly allows for coordination of a scattered community (4 of 6 on the likert scale): “Our iSGTW surveys have revealed that people contact experts through the profile section. 78% of our iSGTW readership keeps up-to-date with technical developments in all areas of e-science/cyber-infrastructure. 67% of the readership has found out about tools, services, resources, projects, initiatives, and/or potential collaborators of which they were previously unaware of. Our GridCast YouTube channel has had 204,924 channel views from those outside the domain. Our GridCafe provides information on grid computing to thousands”.

It was also evaluated to be very likely to expand the geographical range of its users and of their collaboration activities (5 of 6 on the likert scale): “ US, Asian editors for iSGTW; remote Gridcasts from Latin America/ SE Asia since the start of the project, over 123,388 visitors to our newsletters website have been from the US. 14,539 have been from India and 12,000 from Canada. Our Real Time

Monitor is used across Europe and the world (Canada, Asia). e-ScienceTalk makes the work of researchers in Europe visible to researchers around the world."

Regarding the participation of women, this is slightly lower than the average, and this becomes more relevant when looking at researchers and WP leaders (0,69 normalised value in comparison to 0,8). Regarding young researchers, their involvement was higher than the average of the projects (2,75 normalised value in comparison to 1,96 on the average). Overall, more attention to women in the research would be recommendable.

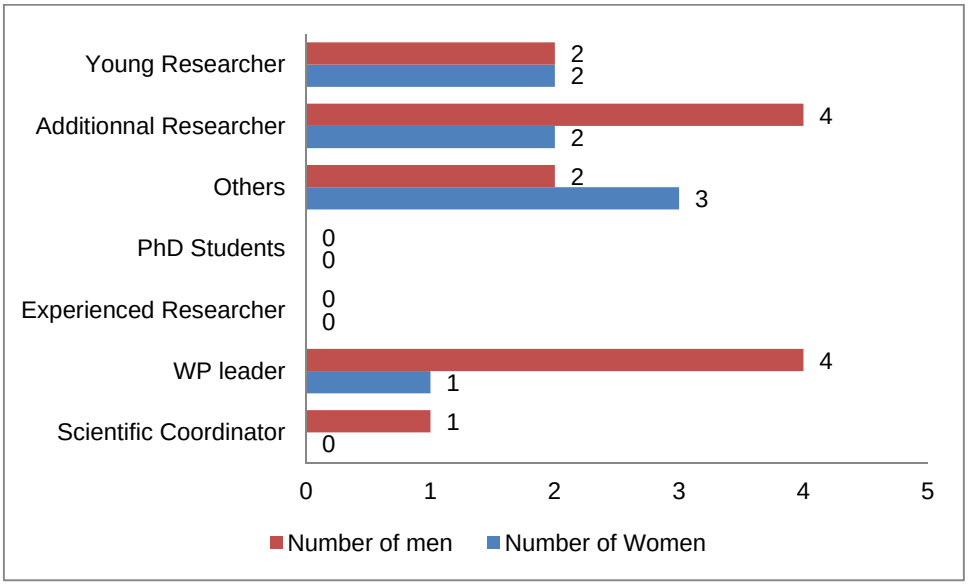


Figure 5 Men and women in specific roles of e-Science Talk consortium

iv. Evaluating Effectiveness by projects (self-assessment) and users' point of view (5 users)

As we have seen, e-ScienceTalk aims at giving high visibility to the success stories of European e-Infrastructures through different dissemination activities. The collaboration effects are considered innovative as well as the opportunity to join communities outside the domain.

The evaluation of user' responses (figure below on the right) shows the importance of cohesive effects. It is interesting that the increase of competitiveness is not as well perceived as it is by the project. This might be due to an already high level of research agendas in this community.

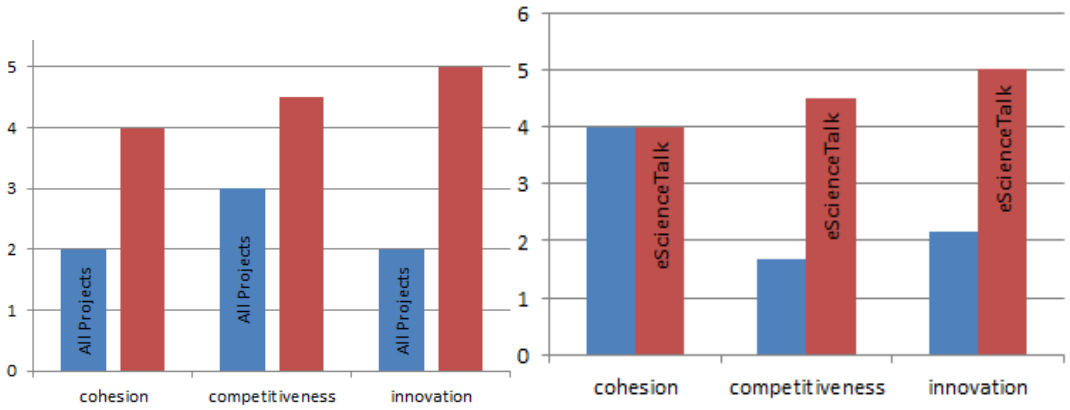


Figure 6: Median responses compared to all projects (left); user's evaluation compared to project's (right)

On the qualitative indicators of effectiveness the project scored higher than the other collaborating projects, especially in term of innovativeness and transfer outside the domain. But from the point of view of project' users the most interesting benefit is in term of cohesion, while they tend to see eScienceTalk less effective in terms of competitiveness and innovativeness. In this sense the project can use the output of this analysis for better orient their message towards these two categories. Moreover, the number of users engaged is still very limited so the analysis here provided should be considered partial.

II. E-SCIENCE CITY FEEDBACK SURVEY

The results of the feedback questionnaire conducted with undergraduate students at Queen Mary, University of London in Q11.

What are your first impressions of the home page?	• Looks good - slick and professional website. Lots of content. Captivating for teenagers • Love the banner at the top of the page although the square that allows you to flick through images (grid,cloudlounge etc) seems out of place and ruins the banner. Love the inter-activeness of the page though alot of white... (inter-activeness would stand out more with a different background) • It is quite nice. I like the banner at the top, and the mind map layout of the topics. The colours are nice and the robot on the left is fun. It makes you think of technology and the future. • Looks like one of those interactive educational website (for high school students).	
What do you think is the purpose of the site?	• To explain what grid computing is to novices and provide more information and ways to get involved for those who are interested. • explain what is grid computing • to inform people of computing through networks and the different types of computing there are. • The purpose of the site is to introduce people to the idea of grids, and give information about it. By showing the uses of it, and what it could be used for the idea is that people may volunteer their own computers for use in the grid. This would further scientific research. The other aims are to inform people about science in general, and perhaps even inspire them to learn more and find out more about science in general by having information on a variety of topics. It wants to take science to the public and get them interested • Learning some basic information about e-ScienceCity, aimed at a younger audience than undergraduates.	
Is the URL memorable and intuitive?	YES: 40% NO: 60%	
– If not, why?	• It's OK but you need to remember to put in the - and no gap between science and city. • cant remember the - in e-science • the hyphen adds more to remember . • I can't put my finger on exactly why. My intuition just says it isn't. I think it could be because using the prefix "e" is commonplace now.	
Does it make you want to explore further?	YES:100% NO: 0%	
Does the site load quickly? How long did it take to load?	• Yes, ~1s • Yes, instantaneously • The site was very fluid and loaded really quickly on my system • The site loaded within a minute. A similar time to most other websites • Yes, a fraction of a second (with QMUL eduroam)	
How easy is it to navigate e-ScienceCity?	Extremely Easy: 0% Very Easy: 60% Moderately Easy: 40%	Slightly Easy: 0% Not at all Easy: 0%
– Comment?	• Pretty good. I like the tabs on the top. I was trying to work out the mapping between tabs and the icons in the circles on the image as they are in a different order and a few are different. • a lot of subsections from the menu! • everything was smooth and clear to navigate through. the titles of the sections were clear to	

	understand and i knew what i would find before i even clicked it. Very easy to navigate • The box on the left hand side which is the map, mimicking the mind map is not intuitive. At first it is confusing. There should be a "next" button to make it easier to go through the sections in order. I did not immediately notice the list on the left hand side list of subsections. I think it could be improved by having the banner with the links to the main sections, as well as the subsection banner. This would be in addition to having the minisections on the left hand side and the next buttons. • Perhaps a more interactive map like those involving flash and other programs.	
Are all internal/external links working?	YES: 40% NO: 60%	
– Comment?	• I found an empty volunteer-computing link on one page, the links to different international collaborations from grid cafe, grid powered projects don't go anywhere (could scroll to right point on page?). The digital systems link -> a Russian 403 error and the In Debate link from the image on the front page doesn't work. Top right hand corner scroll through - the forum page doesn't link anywhere. • some hyperlinked words are misleading... ie http://www.gridcafe.org/ EN/grid-architecture.html the words "the " "network" and "resource layer" all lead to "the hardware"page. Also got this page http://www.e-sciencecity.org/wait.php#multimedia which isn't very useful • communication centre had a broken link for the picture. Part of the page seems to be not loading properly. Some urls are missing on the HPC tower.	
Do you think the content is easy to understand?	YES: 100% NO: 0%	
How clearly is the information presented?	Extremely Clearly: 0% **Very Clearly: 60%** **Moderately Clearly: 40%**	Slightly Clearly: 0% Not at all Clearly: 0%
– Comment?	• I think the explanations and succinct and clear with not too much per page. However, on the grid port page it took me a long time to work out the links were at the top - I expected something below or on the image. • A more concise page and then growing level of "complex info" would be better. • lingo wise very clear. However i find that the drop down menus are too light and hence reading the white font inside the dropdown menu just strained my eyes. • It is also patronising, and written in a very simple way which is not entertaining. I don't think it is aimed properly at any specific target audience. Some of the sections are better written than others, but effort should be made to keep it fun. I liked the history of grids, but perhaps it should be nearer the introduction to the topic? • Some pages only contains a brief paragraph about the specific topic. Perhaps adding hyperlinks to other related webpages and adding more stock images would help.	
Is the information helpful and relevant to the topic?	• Yes generally good • typically yes • I really like the analogies , they make things much easier to understand... Such as the carpool. I also really like the "".....in 30"" nice and quick explanation of the concept and really basic. No jargon. • The information is mostly relevant but some of it is very boring, particularly in the way it is presented and the writing style. • Yes, but a bit brief on some pages.	
Which is your favourite section and why?	• GridCafé: This section seemed to give a good overview with a bit of everything. • GridCafé: Because it explains what grid is. This is the most important thing to give to public. Gives the idea science brings development for common people too. • Volunteer Garage: All pages have pretty much the same look and feel to them. So looks wise there was no favourite. Information-wise I liked gridcafe and volunteer garage but the "get involved" section is the reason I liked Volunteer Garage more. The explanation was exciting and made me want to get involved.	

	• GridCafé: It was the first section, and it introduced what the website is all about. The history was interesting and I particularly enjoyed the quotes of predictions of future technologies. The cloud lounge is interesting too, but seems less novel as clouds are more known than grids, for instance "storage in the cloud" offered by various mobile companies e.g microsoft. The people section didn't contain much to entertain. The data park contains massive blocks of information. The presentation is very important to how interesting something seems. More figures would be good here. • The virtual world: The video clip was good, it made me wanted to download the virtual world. I like the image of the grid cafe and the related pages were more complete.	
How professional is the look and feel?	Extremely Professional: 0% Very Professional: 40% Moderately Professional: 60%	Slightly Professional: 0% Not at all Professional: 0%
– Comment?	• Nice drop down boxes, interaction features, well proportioned text boxes and good layout • Design, images, figures • The people page is quite unprofessional because the photos are not taken in the same way. There is one in particular which is not at all professional.	
What do you like about the design?	• It looks neat and professional and is easy to interact with. • The animations • Banner, the drop down menus although they can be better by changing the colour. there seems to be too many ways to navigate to the same page (clicking the photo box on the top right, clicking the relevant bar on the homepage or the map on the left of the page, it seems any one of these makes the others redundant) • The colours are quite nice. The banner at the top is good. The logo at the top left corner is nice. The thing at the top right of the banner is not great as it is difficult to see it is there at all, and seems pointless. It could be achieved much more efficiently by simply keeping the banner with the sections • The images and designs were good and looked very pro.	
Are graphics relevant and appropriate to the content?	• The graphics aren't really my cup of tea but I can see the links, though sometime tenuous. Not sure what I would put instead.... • a bit to teenager, would prefer more technological look • At first glance definitely so. I thought it was an actual 'SimCity'-type website environment, however after reading the information on the pages I understand the city references. Slightly misleading though the images do make the website easier to look at. • The robot is good because it has connotations of technology, so the site seems futuristic which is nice as it is a science website. • Yes	
How do you think we can improve the site?	• Mend a few broken links Add more pictures to the people section Not always clear what each section includes and why they are different - are there maybe too many sections? • make a shorter catching page to understand what' this is about * more levels of details: little going down to full info, more "tree branching like" info * more professional • There is quite a lot of information and sometimes it is spread over quite a few pages , with the white background and a dark font its like reading a book. If the information could be truncated a little with a "read more" the site may look a lot better. • I think the top right hand corner thing should be got rid of. The style is inconsistant across the sections with typos. There are large blocks of text in various parts, which need to be broken up. The information should be set out in a more pleasing way, making better use of the space. On the left hand side a lot of room is taken up by the website map, which is badly done because it is unintuitive and is far too big. It causes the rest of the site to seem cramped, the information all piled up and not pleasing on the eye. In "Cloud Projects" there is a very good example of inconsistencies in the style of presentation. Sometimes it says synopsis: with a line break, and sometimes no line break. More figures are definitely needed here. There are large tables and lists of data. Maybe there is a nicer way to show it. There could be more variation between the text body and headings so they stand out better and in a nice way. The list of links to external sites appears twice which seems odd. The font is bad. I think it is because the lines are too close together and so it looks like a lot and	

	this would make people not want to read it. The people bay needs some work. Several areas of science are discussed (grids, clouds, etc) and the people are just dumped in one place and there are a lot of them. It is not simple to find someone to consult on a particular project if you wanted to from the site. • I have a feeling that those images tend to suggest I am a too mature audience for the webpage.The 'map of the islands' on the left hand side of the page should have a make over, perhaps add a bit of colour or add the relevant buildings. Add some backgrounds behind the texts. A search bar should be on every page and should at a noticeable place on the page.
What would you be interested in seeing on the site?	• How about some graphics showing real time grid usage to illustrate the level of use? Pictures of what the hardware etc actually looks like (this may of course remove some of the glamour...) Indication of what content has changed over time - eg 'new' labels • make a shorter catching page to understand what' this is about; more levels of details: little going down to full info; more "tree branching like" info; more professional • the games and animations are hidden, it would be great if they were in a section of their own that can easily be navigated to from the home page. games that can be navigated straight from the webpage rather than downloading them. possibly a virtual tour of the "city" with the basic explanations being spoken by the tour guide. • It could be fun to have a graph of use of grids over time, or clouds over time etc. It would be fun to have a live figure showing current use of a certain grid if it is possible. It would be good to have a section with more detail. It would be nice to see the people bay more ordered so if one wanted to find an expert on a certain topic it would be feasible. • More interactive tools or even games as the images gave me the feeling there should be some. Simulations or demos. Maybe some photos or real people
What extra information would make you stay on site longer?	• Its not always clear where to look for things - maybe a n FAQ section? • make a shorter catching page to understand what' this is about * more levels of details: little going down to full info, more "tree branching like" info * more professional • an advanced section for those that want to know the more intricate details. The process of setting up a grid. • Discoveries made using grids in the past. More information about the science grids are used in. It could be used to introduce a range of interesting topics in many fields. People would perhaps be interested in learning a small amount about other fields, such as biology if they are a physicist, or chemistry if they are a biologist. • Add an introduction video clip on the homepage. Some mini apps on the side of the webpage to play with.
What is the most interesting thing you find out about on the site?	• Interesting to see the extent of grid work and involvement and how big the projects are. • that grid is widely used by companies • Grids , the information on the grid section allowed me to comfortable understand the cloud computing, volunteer computing and super computing. Really good thing it was the first section. • The virtual world • Learning about cloud grids.

III. E-SCIENCECITY CRITIQUE

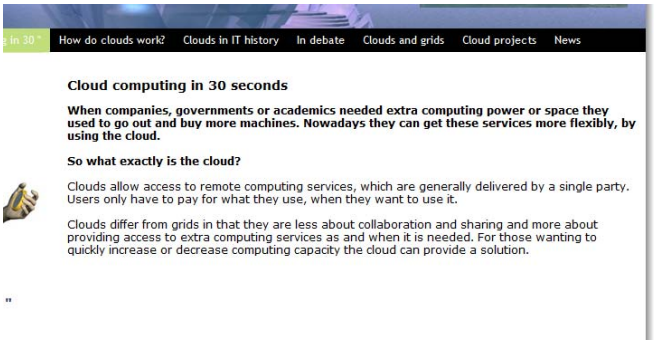
An analysis of e-ScienceCity conducted by e-ScienceTalk intern James Cook in August 2012.

General

- Searching escience city returns no results for e-Science City, you must search e-Science City.
- When you first splash onto the e-Science City page there is no immediate definition of what e-Science actually is.
- The site is not very tablet or phone friendly because of the way that the menu system works.
- When scrolling through the menu bar, any menu with a single drop down menu implies that the sub menu is the actual tab. For example on the "how clouds work" tab there is a "virtualisation" sub menu which led me to believe that the sub menu was the whole content.

Cloud Lounge

- The term "We hope you enjoy finding out more!" on the introduction page seems unnecessary and removing it would allow the text on the page to be larger.



The piece of text underneath the "Cloud computing in 30 seconds" should not be in bold.

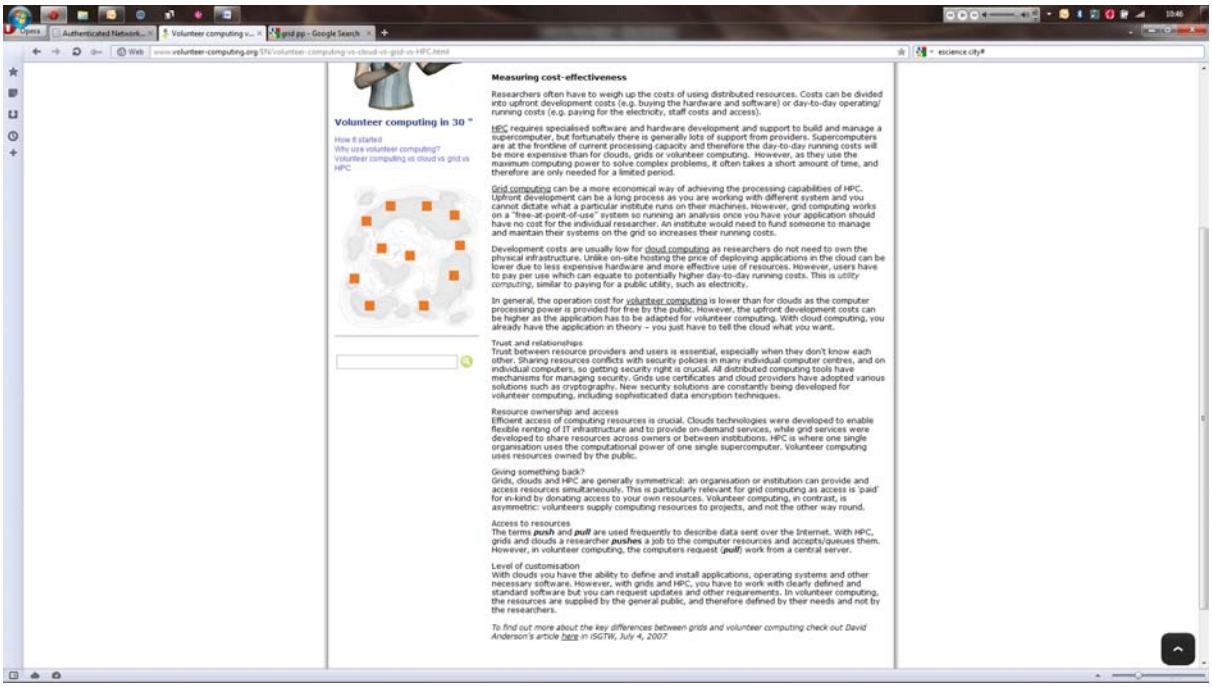
- On the "cloud computing in 30'"" tab it would be clearer if it was "cloud computing in 30s"
- The definition for cloud computing is hidden away under the "cloud computing in 30'"" tab. Somehow the "what is cloud computing tab" should be brought onto the main menu bar.
- "- Choice of applications. This allows flexibility for cloud users to experiment and choose the best option for their needs. Cloud computing also allows a business to use, access and pay only for what they use, with a fast implementation time" – under the "why use clouds" tab there is no full stop at the end of this sentence.
- Under the "clouds in IT history tab" – "The actual term "cloud" borrows from telephony." – the term telephony should be changed.
- "The first scholarly use of the term "cloud computing" was in a 1997 lecture by Ramnath Chellappa [1]." – Needs more sources
- Under the "are clouds safe" tab "However it pays to read the small print in your contract. Users often use clouds to store data they no longer use but may need in the future. But a study by experts at Queen Mary University of London, found that cloud contracts sometimes waive

responsibility for data storage or delete data if it hasn't been used in a while." – the hyperlink should either be removed or made more clear.

- Could the news tab somehow move its way to the left as at the moment it seems like an afterthought.

Volunteer Garage

- The orange and then bold text looks wrong together.
- The space between title and body text seems too large.



- The sub titles down the page should be in bold, as at the moment the text becomes hard to read because of its mass.

- The Intel graph deserves a hyperlink to its source.

Additional information

What is e-Science?

E-Science is the underpinning infrastructure that allows many terabytes of data to be processed easily and efficiently. [2] But why do we need such a facility? Everyday many disciplines produce such vast amounts of data that need to be analysed and correctly managed. A famous example of such a large amount of data production is the experiments at CERN. However the use of e-Science is far larger than that of particle physics. It also includes earth sciences, social simulations, art (animation and rendering) and bio-informatics [1a] (The study of biological data, for example gene sequences and nucleic acid). [1b] E-science has successfully managed to bring about the rise of affordable and fast data processing. [3]

The term e-Science was first coined in 1999 by John Taylor, who at the time was the Director General of the UK's office of Science and Technology.

How e-Science is currently promoted

By simply searching the term e-Science a stumbled across some interesting things. For one the project e-Science Talk does not appear in the first pages of the Google search, it is only by a direct search of e-Science Talk in which the site appears. However Google does suggest the appropriate search criteria in the "related searches" part of the site.

At first search Wikipedia appears to have a definition of e-Science, however the definition is somewhat confused. If I had never heard of the term e-Science I would leave this website with little further understanding. A useful avenue to explore would to maybe talk about editing the Wikipedia page, and providing a link from it to e-Science City.

As I stumble onto the next website, STFC, the term e-Science becomes easy to understand. As you first glance at the page there is a very clear and concise definition of e-Science. Even though the rest of the site looks more difficult understand, I feel more inclined tor read it because of the easy definition I have received. When comparing to e-Science talk, and city websites, when you first approach the sites you still don't have a "first glance" definition for what the site is trying to teach you about. I think it is important to have such a definition, then underpin that definition with the deeper layers of information in which e-Science city has.

The Screenshot above is a good example of a website with good content but with lacking the aesthetic appeal. - http://www.gridcomputing.com/

When searching for terms like grid computing you find that the quality of the information available is vastly superior. Although lots of the information found is presented in a way that is not aesthetically pleasing. This highlights an issue that the term e-Science is just not often used.

Moving away from the search engines to more specific websites indicates some problems. For example I trawled the BBC's website for an article containing the term e-Science, and the closest result came up from 2009. A search of Facebook groups flung up some more information about e-Science, however these groups appear to be more aimed at conveying news stories within the e-Science world.

Changing tactics and searching the term cyber science did not produce anymore websites that were of value.

There are many absolutely shocking website that attempt to describe e-Science. I found a few with broken links and confused information. As a user this puts me off continuing the search to discover what e-Science is. If the e-Science talk/city website came a lot higher up in the search for the e-Science I would be more inclined to read up more into the matter. Furthermore there are many websites about e-Science which have no educational value to them. This emphasises a need for a website like e-Science City.

What can we learn from how e-Science is currently promoted

From these websites and searches it is very clear that to find out information about e-Science from a "casual point of interest" is a rather difficult task to achieve. Unless you know a specific website before hand to go onto the general sites are poor. From what good sites which I did find they provide an easy to understand definition at first to lure you into the deeper layers of content buried within the site. As mentioned before e-Science city would benefit from an easy to understand definition on the site landing page.

With regards to site design, the current array of sites searched are clearly very "sciencey". This means that they are not generally designed to be attractive. E-Science city could benefit from some of these simpler design features as when first looking at the page your eye tends to bounce about, as it is unsure where it should settle. Furthermore, the e-Science city site could benefit from using some of the ideas from the grid computing sites as the quality of information and amount of it is very high.

The e-Science city website would also benefit from having cyber science mentioned so that anyone from America can still easily understand that cyber science is the same as e-Science.

[1a] - http://en.wikipedia.org/wiki/E-Science
[1b] - http://en.wikipedia.org/wiki/Bioinformatics
[2] -http://www.stfc.ac.uk/e-Science/default.aspx
[3] - http://www.escience-grid.org.uk

IV. Appraisals of e-ScienceTalk by its MoU Partners

What our partners have to say about us?

e-ScienceTalk MoU Interviews

Interview 1 **Kitti Varga** on 20.06.13 Research associate at MTA SZTAKI Projects: SHIWA, GlobalExcursion, ER-Flow, SCI-BUS	

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 ii 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 some how 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 can not 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.

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**