Socio-Economic Services for European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

Deliverable D4.2
Final Dissemination, External Liaisons, and Exploitation Plan

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Document Control

Title: D4.2 Final Dissemination, External Liaisons and Exploitation Plans

Type: Public

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Doc ID: D4.2-v1.0.doc

AMENDMENT HISTORY

Version	Date	Author	Description/Comments
V0.1	Jan 25, 2012	Didier Bourse	First draft version
V0.2	Feb 28, 2012	Didier Bourse	Second draft version at T0+18
V0.3	Jun 25, 2012	Didier Bourse	Third draft version before SESERV quarterly meeting
V0.4	Jul 19, 2012	Didier Bourse, Michael Boniface, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger	Fourth draft version including sections up-dates
V0.5	Jul 26, 2012	Didier Bourse, Michael Boniface, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger	Fifth draft version including sections up-dates according to received partners inputs
V0.6	Aug 23, 2012	Didier Bourse, Michael Boniface, Daniel Field, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger, James Ahtes	Sixth draft version including sections up-dates according to received partners inputs
V0.7	Aug 27, 2012	Didier Bourse, Michael Boniface, Daniel Field, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger, James Ahtes	Seventh draft version including sections up-dates according to received partners inputs and reviews feedbacks
V0.8	Aug 29, 2012	Didier Bourse, Michael Boniface, Daniel Field, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger, James Ahtes	Eighth draft version including sections up-dates according to received partners inputs and reviews feedbacks
V0.9	Aug 30, 2012	Didier Bourse, Michael Boniface, Daniel Field, Costas Kalogiros, Patrick Poullie, Burkhard Stiller Martin Waldburger, James Ahtes	Ninth draft version including sections up-dates according to received partners inputs and reviews feedbacks
V1.0	Sep 4, 2012	Didier Bourse, Martin Waldburger	Final version and latest editorial customization

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Executive Summary

This document is deliverable D4.2, entitled “Final Dissemination, External Liaisons, and Exploitation Plan”, within the ICT SESERV Project 258138. The deliverable summarizes the key SESERV achievements in the areas of:

1. *Dissemination* covers relevant tools and activities, both in terms of dissemination material and dissemination channels. Dissemination material looked at ranges from various publications and on-line articles to presentations, banner, and flyers produced. Dissemination channels presented range from real-world dissemination activities at (co-)organized events like workshops, FIA (Future Internet Assembly) sessions, or Cluster/Concertation meetings to on-line dissemination channels like the project’s web site, the curated LinkedIn group on Future Internet Socio-economics (FISE), and the use of SESERV’s YouTube, SlideShare, and Scribd channels for rich multimedia content.
2. *External liaisons* covers a socio-economics (SE) driven outline of the European Future Internet landscape and the according engagement of SESERV in the community, such as interactions with other EC DG INFSO D1 (or DG CONNECT E1) and overall Challenge 1 projects, and related generated outcomes.
3. *Exploitation plans* covers both next steps in terms of consortium partner-individual exploitation and planned for joint actions ensuring project result sustainability within an active and fostered FISE community.

Deliverable D4.2 builds on deliverable D4.1 [1] which had a comparable focus while reporting on achievements out of SESERV’s first project year only. D4.2, in contrast, presents key achievements in the above areas over the complete SESERV project duration, and it provides full details on the second year period outcomes. This includes on the one hand the description of actions that have been carried out. On the other hand, special attention is given to benchmarking progress and achievements made in the second and final project year against the set of Key Performance Indicators (KPI) introduced in D4.1.

The analysis of SESERV’s performance in dissemination and external liaisons shows that the Coordination Action has contributed significantly to its overall objective: to bridge the gap between those who study and those who build the Future Internet by supporting discussion and debate within the multidisciplinary community of researchers and professionals working on FISE. The project further worked out its dissemination, external liaisons, and exploitation during the second project year, leveraging on the main pillars defined in D4.1: Identification of the relevant SE themes, identification of the relevant stakeholders, development of the FISE working group, and development of the network of contacts.

SESERV interacted very actively with several communities in EC DG INFSO (and CONNECT) Challenge 1 to analyze the socio-economic facets of their technology and to provide expert feedback on socio-economic questions. SESERV members attended diverse events, organized or co-organized several workshops, to establish and promote contacts and to stimulate discussions between different experts on Future Internet issues. Through these processes, a network of experts was built around SESERV, benefiting directly from SESERV expertise and providing information that allowed SESERV to draw a clear complete picture of SE in the Future Internet. The knowledge gathered was conveyed to the community in highly interactive SESERV-organized workshops that

allowed SESERV to arrange expert discussions on socio-economic topics that had been identified to be of interest to the community.

SESERV has evolved its dissemination strategy over the lifetime of the project in order to ensure that the FISE community could be supported most effectively. Specifically, the website was identified as the critical and most effective tool for engaging and supporting the community, being the first source of information visited by community members to find out about FISE and the SESERV project. Physical events have a more limited reach; therefore, sharing information resulting from events in a clear and engaging way was very important. It was also key for the website to convey and support the conceptual objectives (i.e., the dialogue between those who study and those who build) of the project – which was re-enforced continuously throughout the duration of SESERV by enhancing publications, on-line articles, and interactive components published on the website. To serve these purposes beyond the website, SESERV members also further developed the different communication channels, including prezi presentations, a banner and posters, flyers, and the up-to-date social networking dissemination means like LinkedIn, Twitter, SlideShare, and Scribd.

SESERV generated significant volume and variety of dissemination material, equally matched by the respective variety of dissemination activities performed. The implemented dissemination strategy benefited from an efficient approach based on (1) structured and thorough report templates to collect dissemination information from project partners (in the Quarterly Management Report), (2) dissemination activity reports collected from partners on a quarterly basis and (3) dissemination opportunities (e.g., call for papers, events) identified, collected and continuously advertised via the WP4 project mailing list and the SESERV on-line dissemination channels.

During the lifetime of the project, SESERV members actively engaged in external liaisons with the FISE community, including industry (ITU and ETPs), large events and their participants (Future Networks and Mobile Summit (FuNeMS)), FIA Working Groups (MANA and FISE), Clusters (Future Internet Cluster, FIArch WG, TechnoSocioeconomics WG and FINES Cluster), SE-oriented Projects (SEQUIOA, EINS Internet Science, PARADISO 2, CONCORD and FI3P), and the Digital Agenda Assembly (DAA).

Finally, each SESERV participant has identified a set of exploitation opportunities for themselves that have already arisen in the project and will be further pursued after its completion. These include the establishment of consultancy services, the extension of teaching and research activities and better positioning in and understanding of the FIA research landscape.

In assessment of the detailed achievements made throughout SESERV's project duration and as substantiated by the impact measured by its KPIs, the Coordination Action's goals with respect to dissemination, external liaisons, and exploitation have been successfully met. This led to a highly positive impact for the FISE community within the European research landscape: At the time SESERV faces its end as a project, it realizes that socio-economic dimensions have become well recognized in European Future Internet research. It also realizes that the network of contacts formed and strengthened throughout numerous joint activities has emerged as a vital and well established community. SESERV's dissemination and external liaisons activities contributed considerably to creating awareness about SE. SESERV's exploitation plans show that the project partners will now strive to fully establish SE in European Future Internet research – embedded in the FISE community that SESERV helped build and foster throughout the past two years.

1 Introduction

Dissemination, external liaisons, and exploitation were tackled by the SESERV partners as complementary activities to maximize the value of the Coordination Action, both for the SESERV project partners and for the different external stakeholders (EC D1 and Challenge 1 projects partners, workshop participants, FISE community) that SESERV interacted with.

The dissemination actions and the external liaising clearly helped make external stakeholders fully aware of the SESERV achievements, discussions, lessons learnt and contributed to the defragmentation of the socio-economic issues at EC D1 projects level and also possibly across Challenge 1.

The exploitation actions contributed to enrich the SESERV partners experience and knowledge, e.g. research results being brought within the knowledge base of the institution and built upon and taken into consideration in subsequent research or/and for maximizing the socio-economic values of the running cooperative research.

1.1 Purpose of Deliverable D4.2

Deliverable D4.2 presents the overall achievements on dissemination, external liaisons, and exploitation activities. The purpose of the deliverable is to give the reader details of the achievements and the most significant key take away messages.

1.2 Document Outline

The document is set out in 8 sections. After the executive summary and introduction, Section 2 summarizes the project in a nutshell, Section 3 describes the overall dissemination tools that have been used in the project. Section 4 describes dissemination achievements. Section 5 describes established external liaisons with other relevant bodies and Section 6 describes the measures validating impact made by the respective set of KPIs. Section 7 details partner exploitation at individual and joint levels and the sustainability actions engaged by SESERV to ensure that socio-economic issues will be further developed after SESERV's contractual end. The document is then concluded in Section 8 and followed by references, abbreviations and acknowledgements.

2 Overview of the SESERV Project

SESERV is an EC FP7 D1 Call 5 Coordination and Support Action (CSA) project, which sought to raise awareness for the importance of socio-economic aspects when predicting and designing the Future Internet.

"Since our research group is mostly focused on strictly technical aspects, our interaction with SESERV gave us the opportunity to increase our awareness on socio-economic issues within the context of Future Internet research." (Dr. Georgios Gardikis - National Center for Scientific Research, Demokritos)

Therefore, SESERV interacted with several communities in Challenge 1 to analyse socio-economic facets of their technology and to provide expert feedback on socio-economic questions. In particular, SESERV members attended diverse events to establish contact and stimulate discussions between different experts on Future Internet issues.

"[...] SESERV has been a worthwhile and useful initiative in the field. It would appear to have been effective as a dissemination channel and has served an important role in broadening the perspective of FI research to value creation and impacts beyond the pure technical arena. These are important steps to help steer S&T research activity and their outcomes in the direction of business and even social innovation." (Man-Sze Li - IC Focus)

Through this process, a network of experts was built around SESERV, benefiting from SESERV expertise and providing information that allowed SESERV to draw a clear picture of the Future Internet. The knowledge gathered was conveyed to the community on large scale in highly interactive SESERV organized workshops that allowed SESERV to arrange expert discussions on socio-economic topics that had been identified to be of interest to the community.

"Thanks to the workshop, I have now a better understanding of the economic dimensions in the design of technical solutions for the future Internet and their evaluations, what will for sure have an impact on my future work." (Dipl.-Inf. Frank Lehrieder, Dr. rer. nat. Tobias Hoßfeld - Universität Würzburg)

2.1 Innovation and Assets of the Project

SESERV has determined several socio-economic areas that conflicts in the future will evolve around. In particular, eight societal themes and seven tussles categories were determined. By applying tussles analysis, a consolidated methodology to investigate how conflicting interests of Internet stakeholders will evolve, it was possible to render some of these tussles in more detail and thereby create awareness in the community for these problems. Not only that it was possible to develop an exhaustive map of (Future) Internet stakeholders, but also a merging of stakeholders roles could be predicted.

"The workshop made it clear to us that economic issues, such as the identification of the involved stakeholders and their interests, have to be an important part of this work." (Dipl.-Inf. Frank Lehrieder, Dr. rer. nat. Tobias Hoßfeld - Universität Würzburg)

SESERV identified ways of how tussles might be resolved in todays and tomorrows Internet. Furthermore, several risks (traffic contention, digital rights, transparency, identity, etc.) and opportunities (participation, inclusion, education, etc.) for the Internet have been determined.

Of course, such cross-disciplinary results could not have been achieved by experts solely within one scientific domain. SESERV almost exclusively worked in multidisciplinary teams

on problems, whether it was internally or at official workshops, including presentations, panel sessions, breakout discussions, focus groups and the like..

"[…] the discussion within the focus group […] will serve as a very good starting point […]" (Dipl.-Inf. Frank Lehrieder, Dr. rer. nat. Tobias Hoßfeld - Universität Würzburg)

Thereby, not only interesting results on socio-economic aspects of the Future Internet were achieved, but it also was confirmed that interesting and valuable work comes at the intersection of disciplines. However, it also became evident that, in order to enable such multidisciplinary exchange the lack of common vocabularies and definitions between the disciplines has to be addressed. Related deliverables (D2.2 and D3.2) list specific recommendations, opportunities and challenges associated with this discussion are listed and described in greater detail. In the sections below, some of the highlights are summarised.

2.2 Identification of Relevant SE Themes

The first major step to be taken, when investigating aspects of a largely unknown area, is to get a broad overview of it. Therefore, SESERV, when determining and investigating socio-economic topics of the Future Internet, began by rolling out a broadly targeted survey of socio-economic priorities and a somewhat more targeted questionnaire addressing stakeholders and tussles in the Future Internet. The survey listed sixteen socio-economic topics selected by WP3 and was answered by 92 experts from the FISE community. A highly balanced valuation of the selected socio-economic dimensions among respondents became evident, which indicated that these dimensions reflect the range of European research projects and their diverse scopes well. Therefore, based on the survey and discussions with the research projects, it was reasonable to select the top-ranked topics, namely: Cloud computing, Privacy and data protection, Security of communications, Internet of things, and Online identity. While the survey enabled an overview of key interests in the Future Internet, the questionnaire was targeted at identifying its key stakeholders and the tussles between them. By applying tussle analysis, SESERV identified content owners, technology makers, connectivity providers, information providers, infrastructure providers, users, and policy makers as the main stakeholders.

"During the two years of the project, SESERV had allowed to increase the awareness on socio-economic issues related to on-going and future technical developments, with the innovative methodology of the Tussle modeling" (Nicolas Le Sauze - Alcatel-Lucent Bell Labs France)

Network security, interconnection agreements, routing, responsibility for agreement violation, allocation of scarce resources, controlling content/service delivery, and controlling access to sensitive data were identified as the seven most important tussle groups. It was shown that many Challenge 1 projects have to deal with the same tussles, maybe from a different technological perspective.

While the approach during the first year was clearly bottom up (starting from tussles and then consolidating them) the opposite direction was adopted within in the second project year [3], where generic functionalities of Internet technology were identified first and only afterwards involved stakeholders and any tussles which arose. This approach allowed mapping a prominent taxonomy of Internet functionalities to the tussle groups determined in the first year and even identify prominent tussles for each of these correspondences. In particular, network security was found to be mostly related to AAA (Authentication, Authorization, Accounting), interconnection agreements to transmission functionalities, allocation of resources to traffic control, and responsibility for agreement violation to QoS

and Security with respect to monitoring. Of course, also the other tussle groups could also be successfully related to Internet functionalities, but are not mentioned here.

From discussions facilitated by SESERV between socio-economic experts and FI technology developers eight cross-cutting societal priorities for the FI ecosystem were identified, which include (i) the call for increased transparency (data use and systems), (ii) the call for more user-centricity and control, (iii) the continuing need for further multi-disciplinary and cross-sectorial bridging, (iv) striking balances between outer-poles in debates and design, (v) facilitating further digital literacy development, (vi) addressing the lack of common vocabularies and definitions, (vii) the need for clarifying digital rights (including digital choice), and (viii) inviting global regulatory frameworks. In the framework of SESERV Digital Agenda investigations [4], a gap between a set of high level policies and incentives, that are particularly focused on infrastructure and complex regulatory processes, and society, using or about to use the technologies being developed, was found. In particular, it transpired that some regulations seem to ignore a number of citizens' concerns.

2.3 Identification of Relevant Stakeholders

A stakeholder was considered anyone or any group that had an interest in the work performed in the SESERV project. SESERV clearly identified in detail (1) Who were the projects stakeholders, (2) What they wanted/expected to know/learn and (3) How best to tell them and interact with them.

SESERV stakeholders were broadly categorized into those who provide restrictions on the functionalities of Future Internet technologies and those that develop them. The following figure illustrates the main stakeholders of the SESERV coordination action [3].

Figure 1: Updated SESERV Taxonomy for Internet Stakeholder Roles

The role of SESERV was to provide a fertile ground where major Internet stakeholders would have the chance to agree on the functional requirements of Future Internet technologies. The main participants in this dialogue, and thus major SESERV stakeholders, are the following:

- Research projects that develop and/or evaluate new technologies for the Future Internet. These can be further categorized into those belonging to the Future Networks objective or Other Research Challenges (such as 'Future Internet Research & Experimentation' or 'Internet of Services and Cloud Computing').
- The EC, who as a financier of the project, has interest both in the procedure followed by the project and the quality of results. Furthermore, it organizes and supports several events where SESERV can contribute significantly to the event's success, such as FIA, Cluster meetings and workshops like FuNeMS.
- The requirements of users and especially those that will be the target group for Future Internet technologies should ultimately drive technology creation.
- Industry Standardization Consortia, such as ITU-T and ETSI that decide on the functionality of Internet protocols and technologies and are interested in major Internet socio-economic issues, as well as best practices for taking those into account.
- Edge ISPs and Transit ISPs who provide Internet connectivity services and will consider deploying Future Internet technologies by research projects or will have to adapt their offerings in order to cope with the threats that can appear by such projects. They are also in a great position to provide valuable input to Research projects about what they need from Future Internet technologies.
- Information Providers, such as Gaming Providers offering interactive games, who need advanced Internet connectivity to meet their requirements
- Infrastructure Providers, such as Network Component Providers, Sensor Operators, Venue owners and Cloud Operators who play an increasing role in Future Internet technologies and their incentives must be carefully considered at design-time.
- Regulators who are in charge of setting and enforcing competition and privacy policies and thus having the ability to make a new technology obsolete
- Researchers who study aspects of the Internet and affect decisions of other Policy makers and can provide useful input to the discussion on Socio-Economic priorities for the Future Internet.

2.4 The FISE Working Group

The FISE Working Group is a multidisciplinary community of researchers and professionals working at the intersection between technology, society, regulation and the economy. Members of the group are connected by the common desire to discover new perspectives on Future Internet research challenges, by considering insights from multiple and complex interconnected domains that reflect current and future operational environments of Future Internet systems. By designing, developing and applying technology with increased socio-economic awareness research outcomes are likely to be delivered with increased relevance, durability and impact.

Beyond SESERV, Paradiso2, FI3P, and Sequoia are projects in the framework of the FISE working group. SESERV co-organized three events at two FIAs. The first event was the informal FISE discussion at FIA Budapest on May 18th, 2011.

"The session was a success and I really appreciate SESERV's support and participation, in particular in creating awareness to socio-economic impacts of technological issues of the Future Internet." (Dr. Tuan Anh Trinh - Budapest University of Technology and Economics)

The discussion stimulated the exchange of ideas for the Poznan FIA and how the FISE working group could support the FIA objectives. The discussion was mostly related to building (e.g. Resilient Communities and Digital Jail) and studying the Future Internet (e.g. Studying the impact of the Future Internet). The first of the FISE WG events at Aalborg FIA was a FIA session entitled “Value creation, value flows and liability over virtual resources” and looked at "virtual resources" which are considered a small part of the FI ecosystem. The conclusions from the session provided input to a wider discussion on answers and solutions targeting the overall FI. The second event at Aalborg FIA was the FISE Workshop on “How Disruptive Technologies Influence the FI Business Ecosystem". Motivated by the fact that many FI projects are assessing the FI Business Ecosystem and the dynamics of stakeholders in relation to technological results (e.g. UNIVERSELF, SESERV, SEQUOIA, FI-PPP, etc.), the purpose of this workshop was the sharing of analyses and the discussion and debate of how disruptive technologies will influence the FI business ecosystem. The workshop provided an opportunity to explore techniques for analysing FI ecosystems and how impact is achieved. The outcome was a shared understanding of the FI business ecosystem, its stakeholders, and a comparison of methodology used to understand both baseline and future scenarios.

“As a member of the FIA Steering Committee I would like to recognize the contributions made by SESERV to FIA. I have attended SESERV sessions at several FIA events and these stimulate much interaction across the different domains and raise awareness and understanding about socio-economics issues in the Future Internet.” (Mr. Nick Wainwright - HP Labs)

2.5 A Network of Contacts

In addition to the specific workshops and sessions being organised by the SESERV project, SESERV members participated in many meetings, workshops, and other kinds of events discussing Internet technology.

“I really enjoyed the collaboration and the commitment of the SESERV partners, being of great help in the preparation, realization and documentation of […] events.” (Prof. Dr.-Ing. Markus Fiedler - Blekinge Institute of Technology)

By these activities not only insights about current and future Internet trends, socio-economic aspects, and technological directions were gained, but also latest insights on socio-economic issues channelled to the event participants, allowing the name SESERV to be established within the ICT work programme under Challenge 1 and the wider European Internet community.

“It was a pleasure to be involved into the work of the SESERV team which helped extend the awareness about socio-economics even in my local environment.” (Karoly Farkas, Associate Professor - Budapest University of Technology and Economics)

From these numerous engagements, a network of contacts arose, that provide answers to SESERV in their particular area of expertise, when needed, or, vice versa, will contact SESERV members, whenever the opinion of a socio-economic expert is needed, even after the end of the project.

"I am aware that with the conclusion of the EC funding, SESERV is attempting to continue at least some of its activities via crowd sourcing and voluntary community contributions. To my mind, this is certainly worth pursuing, [...] Should there be opportunity for the FInES Cluster, as a community, to contribute to the community activity of SESERV post EC funding, we would certainly consider it with enthusiasm." (Man-Sze Li - IC Focus)

To qualify, quantify and certify SESERV's impact in the FI community, project partners asked contacts for letters of appreciation and support, which resulted in a lot of responses. Quotes of these letters are spread across this section to give a glimpse of how well received the work of SESERV is. The actual letters can be found in Appendix A.

"I support the continuation of such actions in the future, in order to motivate and ease future technical choices, in particular in complex situations [...]" (Nicolas Le Sauze - Alcatel-Lucent Bell Labs France)

To draw a clearer picture of where SESERV contacts within the ICT work programme under Challenge 1 may be found, Figure 16 illustrates SESERV engagements in the Future Internet Community. The figure aligns the objectives in Challenge 1 horizontally and assigns each community within this objective to one of five groups (aligned vertically). It is then indicated with which of these communities SESERV engaged. With this illustration, it becomes clear that SESERV has the strongest engagement in Objective 1.1 Future Networks, which is obviously due to the fact, that SESERV is anchored in Future Networks. However, SESERV also had close interactions with several communities focusing on other objectives to provide much of the socio-economic context and demand drivers for networking innovation. A prominent example is from OII (and particularly Bill Dutton, who is part of SESERV), which is leading on developing a proposal to be a Strategic Partner in the UK TSB (Technology Strategy Board) Digital Economy Catapult.[1]

Despite the network of contacts, that closely interacted with SESERV, the broader multidisciplinary community created by SESERV may be quantified as follows. Approximately 175 people participated in the three SESERV workshops, the five FISE sessions at the FIA saw around 200 attendees, and SESERV's online community currently consist of 212 subscribers. Counting the people reached through the 70 projects engagements roughly another 100 people were engaged with plus around 50 people through 4 ITU meetings. In total more than 300 individuals were involved in the project's activities, where 75% were from the technical and 25% were from non-technical domains.

"I would like to thank you for the support and contribution to the ITU-T SG13 work […] Expertise of the FISE community members is excellent." (M.Sc. Alojz Hudobivnik - ISKRATEL)

[1] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2096819

3 Dissemination Tools

SESERV mainly used three tools for dissemination (1) communication material (logo, website, prezi presentation, posters, flyers), (2) social networking (LinkedIn, Twitter, slideshare and YouTube) and (3) conferences, papers and events. This section focuses on the communication material and social networking, while Section 4 details the conferences, papers, and events.

3.1 Dissemination Material

As detailed in D4.1 [1], several vectors were developed and used by SESERV to reach its dissemination targets: Project logo, website, prezi presentations, posters and flyers. This sections details the key achievements during the second year period of the project. The common colour schemes and formats throughout the overall SESERV material successfully ensured the SESERV brand identity and consistency.

3.1.1 Website

The SESERV website is the primary channel for engaging the Future Internet Socioeconomics community in the conversation. The website is organized into three sub-channels (Study, FISE, Build) related to the core objective of the project “bridging the gap between those that study and those that build the Future Internet” (See Figure 2).

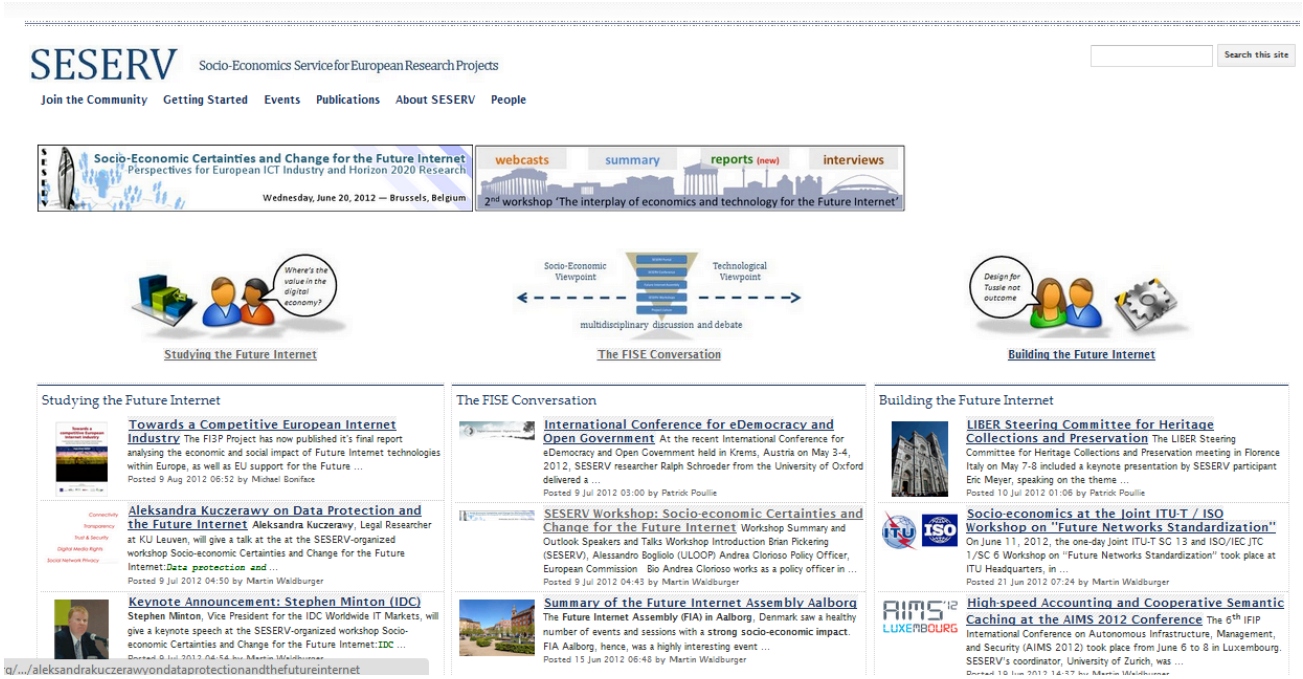

Figure 2: SESERV Website News Channels for Bridging the Gap

The site is designed to provide news content related to FISE and curated content resulting from SESERV scientific workshops (e.g. Oxford, Athens, and Brussels). It was a priority for SESERV to publish high quality material resulting from these events to maximize the reach for those in the community who could not attend in person. The use of rich media (video, audio, photos) was essential to ensure that the discussions and debates were captured and presented alongside workshop reports from SESERV providing comment and conclusion on what was said, as displayed in Figure 3.

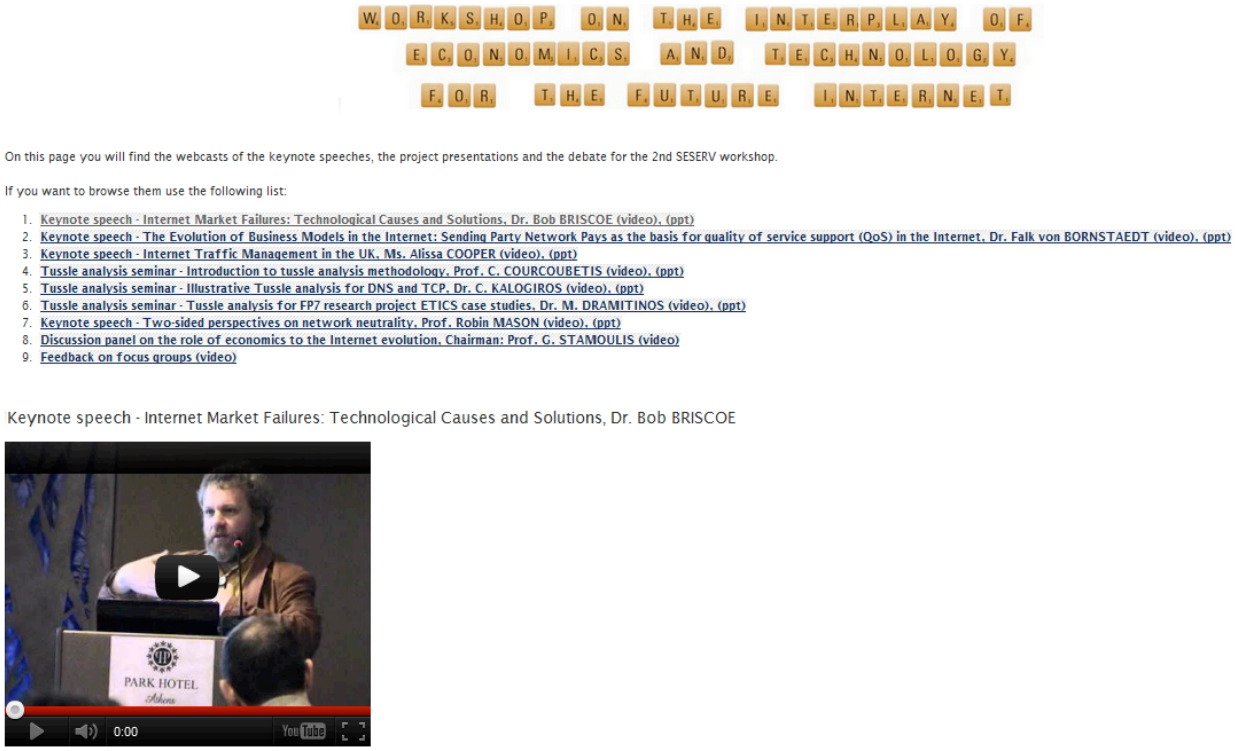

Figure 3: Rich Media Used to Reach the FISE Online Community

Curated content resulting from workshops was widely promoted within the online FISE community and easily accessible through top level advertising banners (See Figure 4).

Figure 4: Curated Content Easily Accessible Through Top level Banners

Throughout the 2nd year:

- SESERV has continued to publish on the news channels socioeconomic reports, results from FISE workshops and technical developments with a socio-economic emphasis. In summary, 9 posts were made to “Study”, 25 posts were made to the “FISE” and 22 posts to “Build” conversations.
- The “getting started” was updated based on SESERV year 1 results describing the Future Internet Ecosystem and Socio-Economic Priorities, resulting from D2.1 and D3.1.
- All media related to SESERV Oxford, Athens and Brussels workshops have been published online in year 2.

3.1.2 PREZI *Presentations*

The prezi presentation (interactive flash videos) are also available on the SESERV website, and provide relevant information about the relation between the Future Internet, society and economics, by way of consolidated and interpreted conclusions based on the outcomes of the associated event or meeting.

prezi was initially used to describe the objectives of the SESERV project in year 1. In the 2nd year prezi was used to provide an interactive online presentation of the results of the Brussels workshop[2], as displayed in Figure 5.

Figure 5: Use of Prezi for Dissemination of Brussels Workshop Results

3.1.3 Banner/Poster

SESERV created a general purpose banner/poster to use at workshops and events. This banner, presented in Figure 6, was designed and procured during the 1st year but was used extensively at events throughout year 2. The messages on the banner were designed so that they could be applicable for the entire duration of the project, avoiding the cost of making new banners. The use in year 2 proves that the design goals were achieved.

3.1.4 Flyers

Flyers were used to advertise SESERV workshops online and distributed in physical copies at events. The Flyers of the three SESERV workshops are shown in Figure 7, Figure 8 and Figure 9.

[2] http://www.seserv.org/fise-conversation/seservworkshopsocio-economiccertaintiesandchangeforthefutureinternet

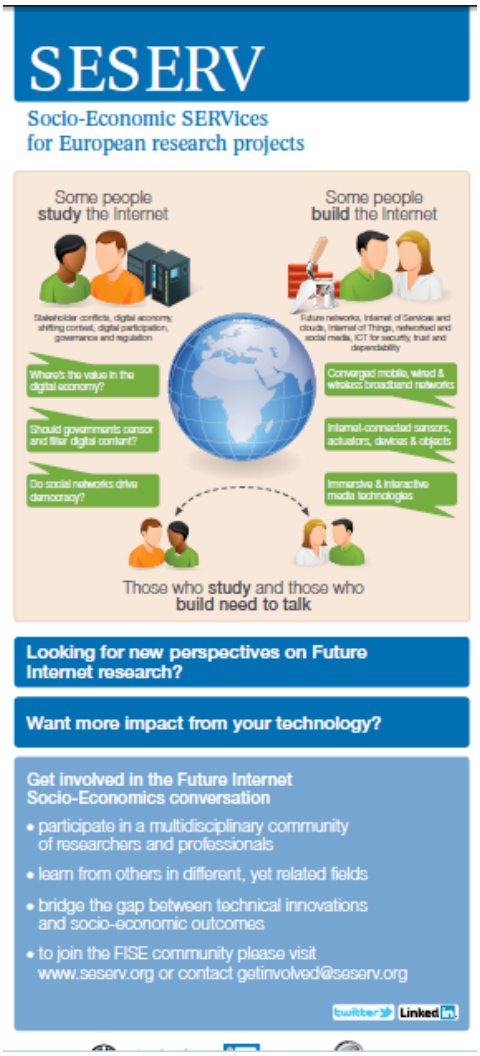

Figure 6: SESERV Banner

Figure 7: Oxford Workshop Flyer

Figure 8: Athens Workshop Flyer

Figure 9: Brussels Workshop Flyer

3.1.5 Dissemination Strategy Evolution

SESERV has evolved the dissemination strategy throughout the lifetime of the project to ensure that the FISE community is supported most effectively. Specifically the website was identified as the critical tool for engaging and supporting the community, being the first place people go to find out about Future Internet Socioeconomics and the SESERV project. Physical events have a more limited reach and therefore sharing information resulting from events in a clear and engaging way was important. The website needed to also convey and support the conceptual objectives (i.e. the dialog between those that study and those that build) of the project and this needed to be re-enforced again and again. The point being that online community interaction must support/represent real community interaction/communication. Mimicking the real conceptual model online makes navigating the content much easier. Outcomes must appear on the website as they happen. Attention of the community shifts quickly and unless content is published in a timely way the opportunity for strengthening engagement is lost. Finally, it is important that dynamic content appears in primary places on the website to show that there is activity in the project, especially for people who a revisiting the site.

3.2 Social Networking Dissemination

The SESERV partners further developed and enriched the social networking activities mainly through LinkedIn and Twitter. The social networking activities helped spreading project news and events and promoting discussion on selected topics.

Figure 10 shows the implementation of SESERV's social networking strategy. The key was to link publications on the SESERV website directly to the online FISE community. The primary community used by SESERV was the LinkedIn group. This group was not identified as SESERV but as the FISE WG so that it existed independently of the project. It was recognised that project affiliation could be a barrier to joining for some people who may see projects with a limited lifetime or those people seeking to establish competing communities. We also wanted a group that could be established beyond the lifetime of the project.

The implementation was created to make use of free services, in order to avoid the challenge of "Who's going to pay for hosting?" after the lifetime of the project. Content was stored in various application specific hosting services (Slideshare, Scribd, etc) and linked to the SESERV Google Sites website which has a maximum storage capacity of 100 Mbytes. This is sufficient for linked content but obviously cannot and is not intended to be used for videos and large documents.

The final important element for efficiency is to provide automatic mirroring of content to the FISE community through content syndication. Each of the social networks subscribes to an RSS feed from each "Channel" on the Google site. This means that SESERV partners could publish once and that the content appears in various communities depending on how community members want to receive their content.

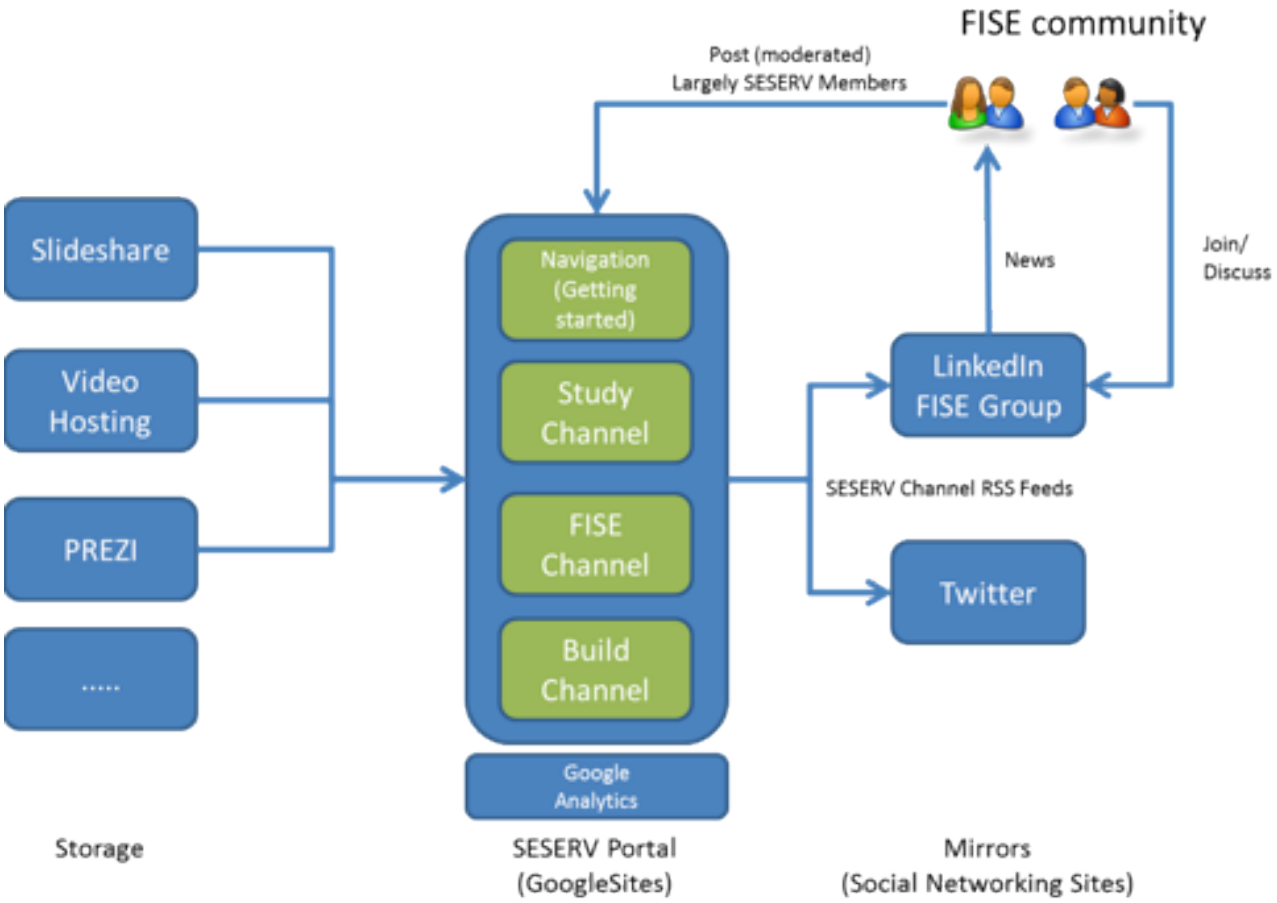

Figure 10: Implementation of SESERV's Social Networking Strategy

3.2.1 LinkedIn

After the creation of the "Future Internet Socio Economics" LinkedIn group[3], on 14 April 2011, the group counted 221 members on 28 August 2012. LinkedIn has proven to be the most effective way of engaging with the online community. Most of the interaction focuses on the dissemination of material in a similar way to what one might expect to achieve through an email distribution list. Translating members to contributors has been limited to those people who are individuals that are chairing or driving related socio-economic activities. For example, Man Sz Li who chairs the FInES cluster and Alessandro Bogliolo who chairs a Net Neutrality LinkedIn group.

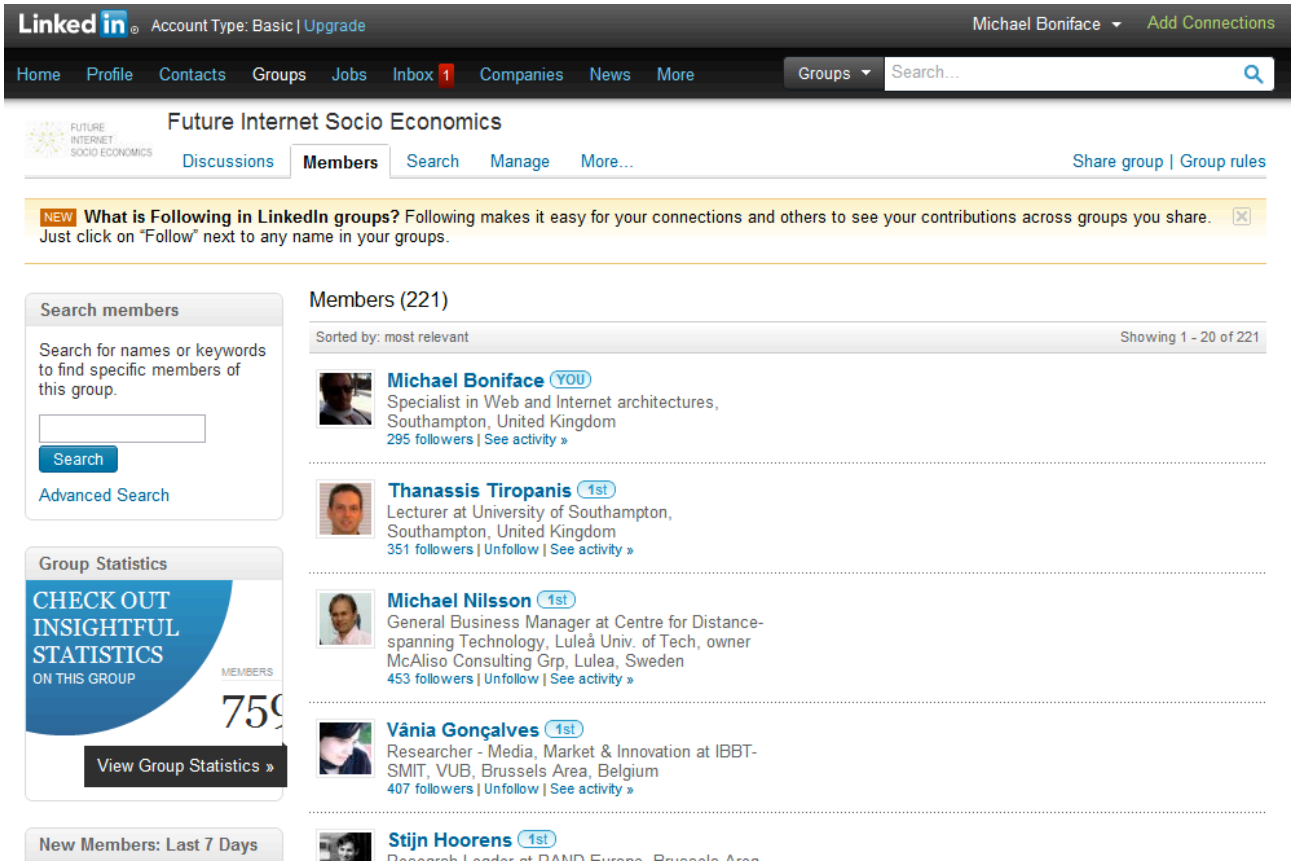

Figure 11: LinkedIn Group

3.2.2 Twitter

The goal of SESERV tweets[4] was to post comments related to the project, share events to attend and news related to the Future Internet and SE. Twitter was also used to disseminate the conferences and discussions of the workshop organized by SESERV. SESERV has continued to publish posts through Twitter in Year 2 but it was recognised that Twitter is not a suitable channel for engaging with the FISE community. The interaction model is not one used by most people for business/research interaction.

[3] http://www.LinkedIN.com/groups?about=&gid=3870856
[4] hhttp://twitter.com/#!/SESERV

3.2.3 Slide Share

SESERV further developed its slideshare domain[5], up-loading presentations and documents presenting SESERV material and related socio-economic material, as depicted in Figure 12. SESERV used Slideshare not only because the content storage is free, but also the service provides a good metadata capability and ensures content gets indexed quickly and effectively within Google. For example, some presentations from the Brussels workshop have had approximately 250 – 300 views, which is a good online readership for the results of an event and goes significantly beyond the approximately 50 people who attended the actual event.

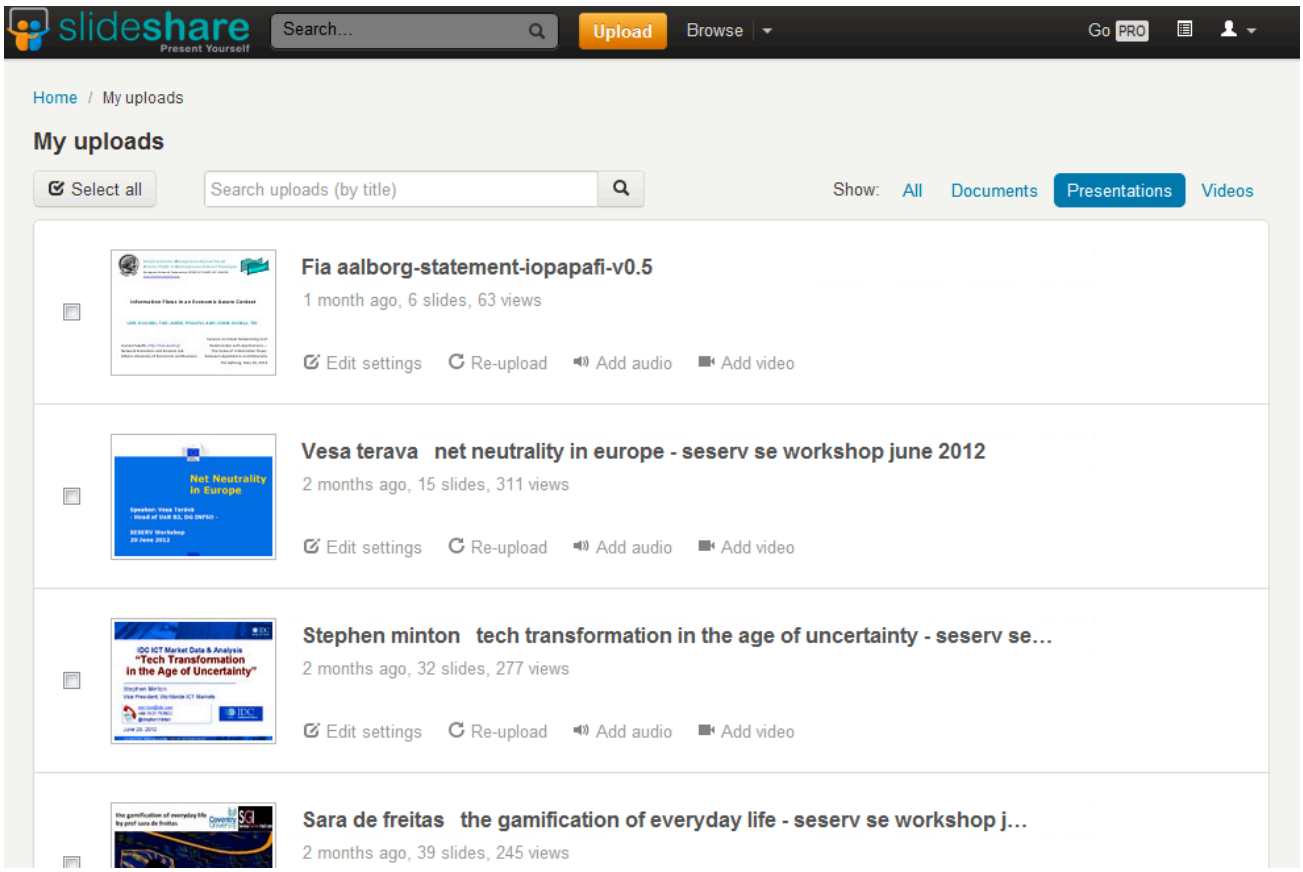

Figure 12: SESERV Slideshare Contributions

3.2.4 Scribd

SESERV used Scribd to host reports, deliverables and white papers, as depicted in Figure 13. SESERV used Scribd not only because the content storage is free, the service provides a good metadata capability and ensures content gets indexed quickly and effectively within Google. SESERV has published 35 documents on Scribd and achieved a total of 6,187 reads. This reach goes way beyond what is typically achieved by deliverables published on an EC project website.

[5] http://www.slideshare.net/ictSESERV/presentations

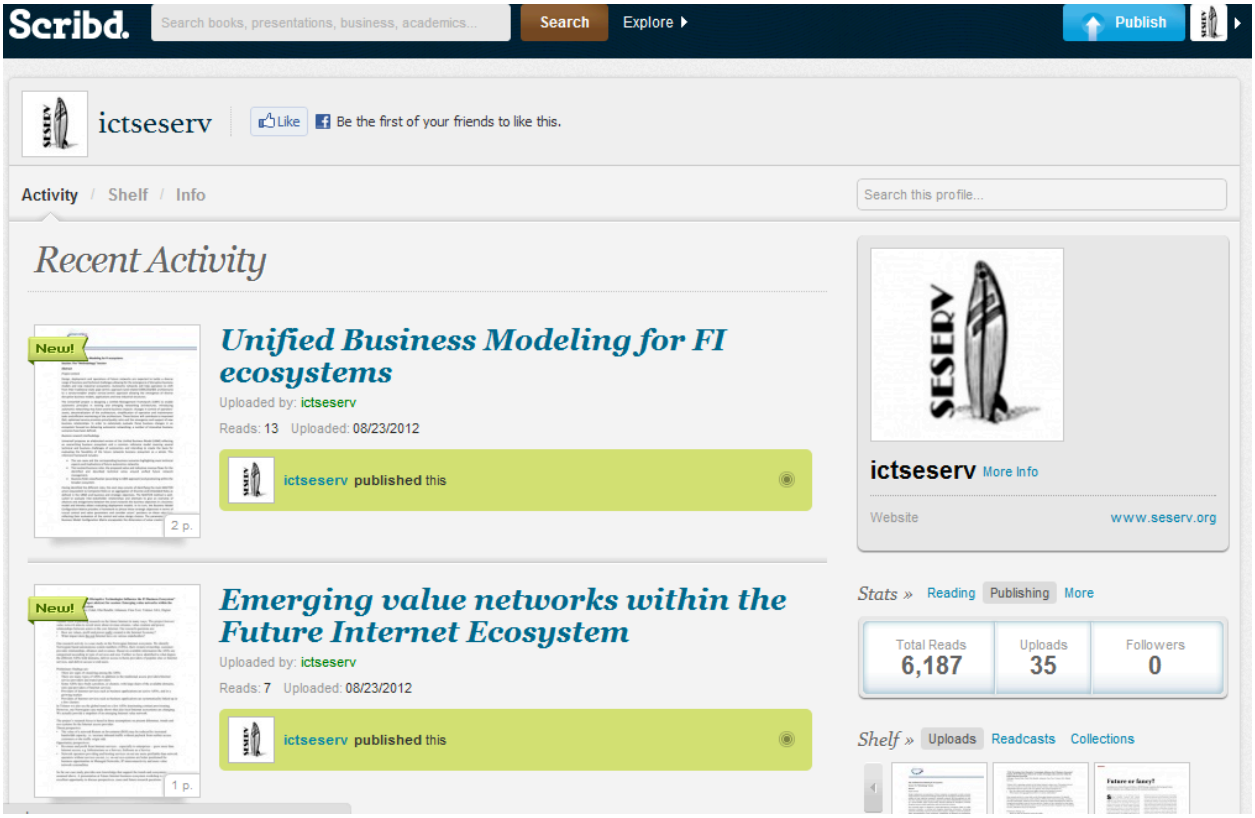

Figure 13: SESERV Scribd Contributions

4 Dissemination Activities and Achievements

This section describes the overall achievements of the SESERV dissemination activities. Specific care was taken by the SESERV partners to align and dynamically enrich the dissemination actions with the general project plan, further engaging with the scientific community (EC D1 and Challenge 1 projects) and the broader audience from the FISE research.

The following steps have been further implemented [1] to develop the SESERV dissemination strategy:

- Structured and thorough report template to collect dissemination information from project partners (in the Quarterly Management Report).
- Dissemination activity reports collected from partners on a quarterly basis.
- Dissemination opportunities (e.g. call for papers, events) identified, collected and continuously advertised via the WP4 project mailing list.

4.1 Objectives of the Overall Action Plan

As detailed in the SESERV D4.1 [1], the SESERV Dissemination Plan had been divided in two phases:

- Phase (1): M3-M12 aimed to raise awareness and position the project.
- Phase (2): M12-24 devoted to active participation at events, workshop organization and the dynamic enrichment of the defined plans.

The different vectors detailed in Chapter 3 were set-up and developed in Phase 1:

- Creation of the website.
- Presentation of information about project goals, work and gained knowledge produced in the project for the general public through the web site.
- Publication of papers within journals and book chapters.
- Contribution to conferences and events: Papers, presentations, posters, participation on panels.
- (Co-)organisation of workshops.
- Contributions to EC D1 Concertation and Clusters meetings.
- Creation of the LinkedIN group and the Twitter account.
- Creation of the YouTube Channel.
- Creation of the slideshare channel.
- Creation of the flyer and poster.
- Running of surveys and conduction of interviews.

Phase 2 was devoted to all dissemination and promotional actions, building on the developments and experience of Phase 1. The timeline introduced in D4.1 (cf. Figure 14) served as a basis for the key events identified by SESERV, including the interests of the project, FISE WG and FI Community.

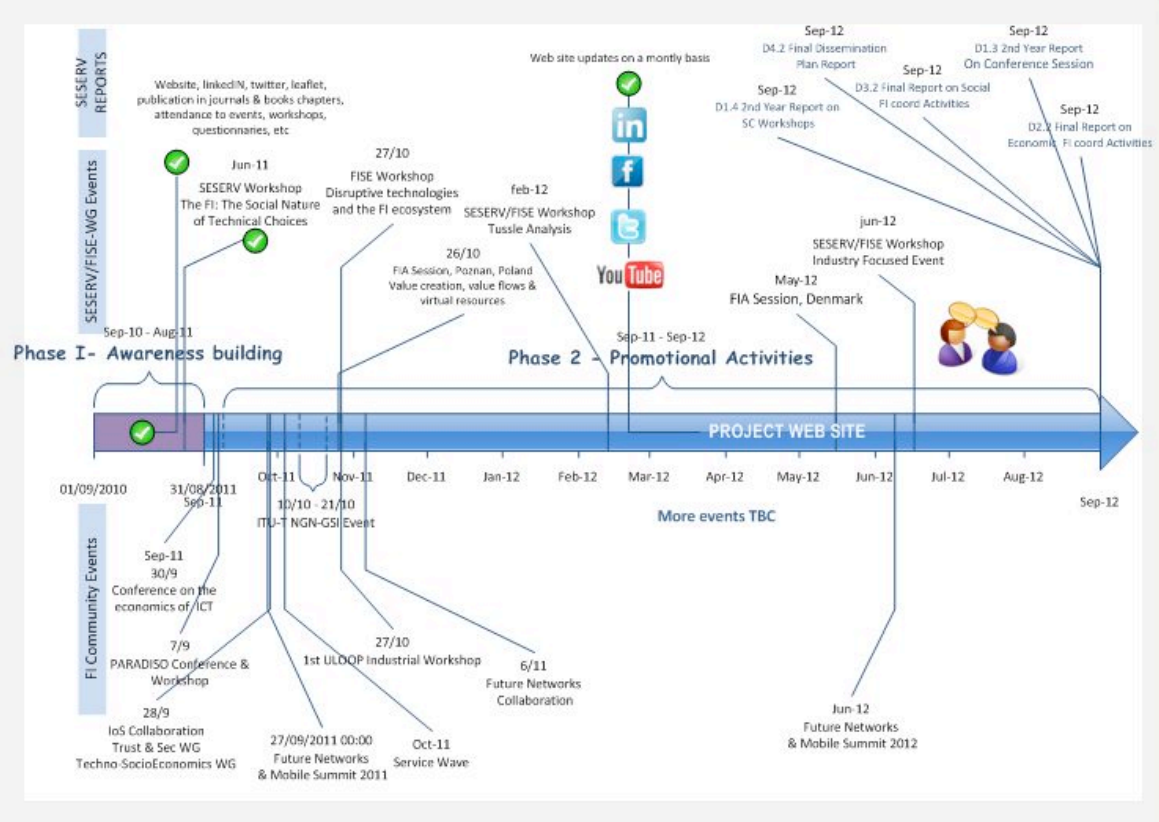

Figure 14: Overall Dissemination Strategy and Timeline

The up-dated timeline (Figure 15) presented during the EC review organized at T0+18 captured the latest up-dates for the second period of the project.

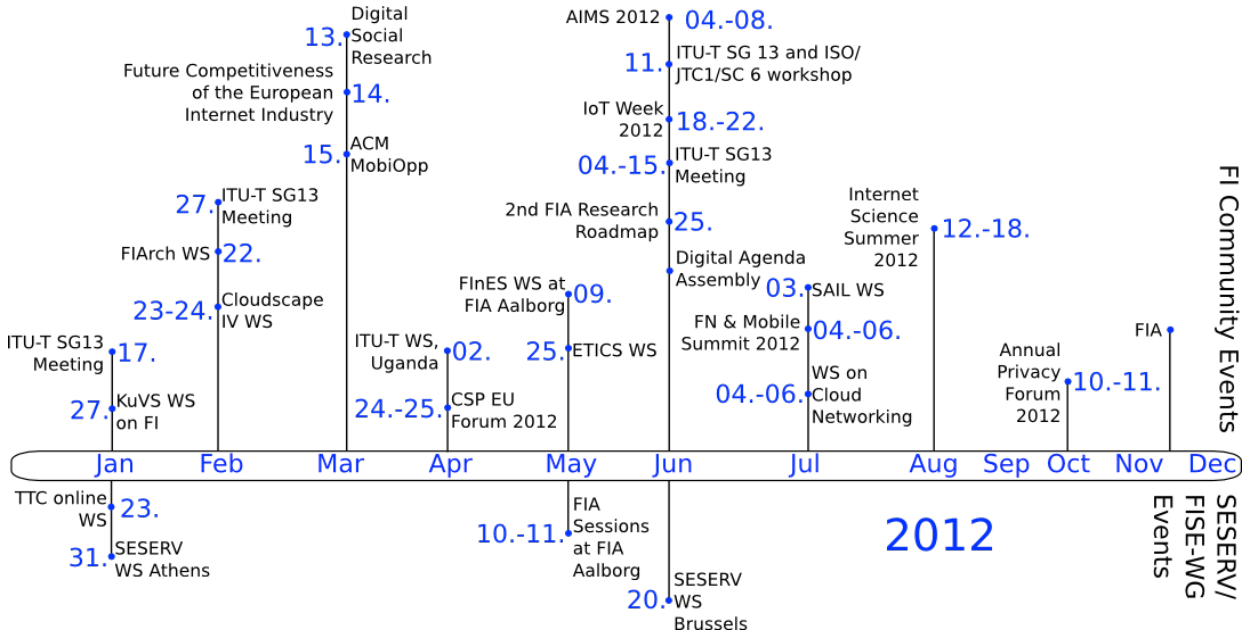

Figure 15: Overall Dissemination Strategy and Timeline (Second Year)

The following section provides the details of the SESERV dissemination in the second year period.

4.2 Events and Key Dissemination Achievements

This section details the SESERV contributions by way of (1) presentations at conference sessions and workshops, (2) workshops organization, (3) FIA session organization, (4) publications, (5) on-line releases and (6) deliverables.

4.2.1 Conference Sessions and Workshops Presentations

D4.1 [1] and D5.2.1 [2] report on SESERV's presentations at conference sessions and workshops during the first year period. Table 1 details the 33 presentations achieved during the second year period.

Table 1: Conferences and Workshops

Event	Date	Presentation Name	Type of Audience	Name or Partner Attending
"New ICTs + New Media = New Democracy? Communications policy and public life in the age of broadband". An "experts' workshop" organized by New America Foundation (Washington, DC) and the Institute for Information Policy of The Pennsylvania State University, USA	2011/09/20	Networks for Citizen Consultation and Citizen Sourcing of Expertise: Exploring Innovations in the Public Sector	Industrial and Academic	Cristobal Cobo (OII)
FIArch Workshop, Brussels, Belgium	2011/09/23	Future Internet Design Principles – New Seeds	Industrial and Academic	Ioanna Papafili (AUEB)
Techno-Socio-Economics WG, Brussels, Belgium	2011/09/28	Collective and Participative Experiences in Real-world and Online Communities. Internet of Services Collaboration	Industrial and Academic	Michael Boniface (ITI)
ULOOP Workshop, Berlin, Germany	2011/09/29	SESERV – Socio-economic Analysis of Networks and Services	Industrial and Academic	Burkhard Stiller (UZH)
IEEE CS TCCC Execom Meeting, Bonn, Germany	2011/10/06	SESERV – Socio-economic Analysis of Networks and Services	Industrial and Academic	Burkhard Stiller (UZH)
8th Concertation meeting, Brussels, Belgium	2011/10/06-07	Update on Recent SESERV Results and Upcoming Events	Industrial and Academic	Costas Kalogiros (AUEB)
6th International Workshop on Charging and QoS Technologies (ICQT'11), Paris, France	2011/10/24	Steering Committee Chair, Interviewer of Andrew Odlyzko	Industrial and Academic	Burkhard Stiller (UZH)
Poznan FIA, Poznan, Poland	2011/10/25	High-speed Accounting for Virtual Resources. Value Creation, Value Flows and Liability Over Virtualized Resources	Industrial and Academic	Martin Waldburger (UZH), Michael Boniface (ITI)
Poznan FIA, Poznan, Poland	2011/10/27	How Disruptive Technologies Influence the FI Ecosystem	Industrial and Academic	Michael Boniface (ITI)
Poznan FIA, FISE-SESERV Coordination Workshop, Poznan, Poland	2011/10/27	Assessing Economic Outcomes Using Tussle Analysis	Industrial and Academic	Costas Kalogiros (AUEB)

KuVS ELG Meeting, Mannheim, Germany	2011/10/28	SESERV – Socio-economic Analysis of Networks and Services	Industrial and Academic	Burkhard Stiller (UZH)
GENI Engineering Conference GEC12, Kansas City, USA	2011/11/02-04	EU Research Cooperations - Future Networks and Future Internet	GEC community	Didier Bourse (ALBLF)
ITU-T Study Group 3 Meeting, Geneva, Switzerland	2012/01/17	New Work Item to Achieve Socio-economic Design Goals for Future Networks	Industrial and Academic	Martin Waldburger, Patrick Poullie (UZH)
Telecommunication Technology Committee (TTC) Workshop, on-line	2012/01/23	Methods to Achieve Socio-economic Design Goals and Objectives for Future Networks	Industrial and Academic	Martin Waldburger (UZH)
7th GI/ITG KuVS Workshop on Future Internet, Munich, Germany	2012/01/27	A Time-Shifted Video Streaming Approach “LiveShift”	Industrial and Academic	Fabio Hecht (UZH), Thomas Bocek (UZH), Burkhard Stiller (UZH)
SESERV Workshop on the Interplay of Economics and Technology for the Future Internet, Athens, Greece	2012/01/31	Welcome Speech	Industrial and Academic	Costas Courcoubetis (AUEB)
SESERV Workshop on the Interplay of Economics and Technology for the Future Internet, Athens, Greece	2012/01/31	Introduction to Tussle Analysis Methodology	Industrial and Academic	Costas Courcoubetis (AUEB)
SESERV Workshop on the Interplay of Economics and Technology for the Future Internet, Athens, Greece	2012/01/31	Introduction to Tussle Analysis Methodology	Industrial and Academic	Costas Calogiros (AUEB)
SESERV Workshop on the Interplay of Economics and Technology for the Future Internet, Athens, Greece	2012/01/31	Tussle Analysis for FP7 Research Project ETICS Case Studies	Industrial and Academic	Manos Dramitinos (AUEB)
ITU-T Study Group 13 Meeting, Geneva, Switzerland	2012/02/08	Contribution 1339	Industrial and Academic	Martin Waldburger (UZH), Patrick Poullie (UZH)
EC D1 Concertation meeting, Brussels, Belgium	2012/02/14	The Interplay of Economics and Technology for the Future Internet SESERV Workshop - Brief Report and Next Steps	Industrial and Academic	George Stamoulis (AUEB), Costas Kalogiros (AUEB), Didier Bourse (ALBLF)
Digital Social Research, A Forum for Policy and Practice, Oxford, UK	2012/03/13	Infrastructures and the Emergence of Big Data	Industrial and Academic	Eric Meyer (OII)
GENI Engineering Conference GEC13, Los Angeles, USA	2012/03/13-15	EU Research Cooperations - Future Networks and Future Internet – Poster and Flyers	GEC community	Didier Bourse (ALBLF)
ITU Workshop on “Developments regarding telecommunication network architectures and services”, Kampala, Uganda	2012/04/02	Socio-Economic Aware Design of Future Network Technology	Industrial and Academic	Martin Waldburger (UZH)
Conference for eDemocracy and Open Government, Krems, Austria	2012/05/03	The Internet, Science, and Transformations of Knowledge - Keynote speech	Industrial and Academic	Ralph Schroeder (UZH)

LIBER Steering Committee for Heritage Collections and Preservation, Fondazione Rinascimento Digitale, Florence, Italy	2012/05/07-08	Opportunities for Web Archives of the Future Internet. Keynote Speech	Industrial and Academic	Eric Meyer (OII)
Aalborg FIA, Session 1.3, Aalborg, Denmark	2012/05/10	Information Flows in an Economic Aware Context, Session on Novel Networking and Relationship with Applications – The Value of Information Flows between Applications and Networks.	Industrial and Academic	Ioanna Papafili (AUEB)
Autonomous Infrastructure, Management and Security (AIMS 2012), Luxembourg, Luxembourg	2012/06/04-08	Cooperative Database Caching within Cloud Environments	Industrial and Academic	Andrei Vancea (UZH), Burkhard Stiller (UZH), Martin Waldburger (UZH)
ITU-T Study Group 13 Meeting, Geneva, Switzerland	2012/06/04-15	Contribution 1415	Industrial and Academic	Martin Waldburger (UZH), Patrick Poullie (UZH)
Joint ITU-T SG 13 and ISO/JTC1/SC 6 Workshop on "Future Networks Standardization", Geneva, Switzerland	2012/06/11	Socio-Economic Aware Design of Future Network Technology (Y.FNsocioeconomic)	Industrial and Academic	Martin Waldburger (UZH)
SESERV workshop: Socio-economic Certainties and Change for the Future Internet, Brussels, Belgium	2012/06/20	Welcome Speech	Industrial and Academic	Brian Pickering (ITI)
Future Network and Mobile Summit, FuNeMS 2012, Berlin, Germany	2012/07/04-06	Socioeconomic Tussles Analysis of the ETICS Approach for Providing QoS-enabled Inter-domain Services	Industrial and Academic	Costas Kalogiros (AUEB), Manos Dramitinos (AUEB), Costas Courcoubetis (AUEB), George Stamoulis (AUEB), Olivier Dugeon
Future Network & Mobile Summit 2012 (FuNeMS 2012), Workshop on "Cloud Networking – Technical and Business Challenges, Berlin, Germany	2012/07/04-06	Clouds — Challenges and Risks	Industrial and Academic	Burkhard Stiller (UZH)

4.2.2 Organization of Workshops

As detailed in D4.1 [1], SESERV organized its first workshop in Oxford during the first year period. The workshop was entitled "Building the Future Internet: The Social Nature of Technical Choices". The second project year saw the (co-)organization of 2 new SESERV workshops, 1 FISE workshop, and 3 workshops with a strong focus on SE as detailed in the following Table 2 below. SESERV Deliverable D1.4 [6] provides the full details on the SESERV-organized workshops in project year 2.

Table 2: Workshops Organized in Project Year 2

Event	Date	Sessions	Type of Audience	Countries Addressed	Size of Audience
FISE Workshop (in Poznan FI Week) - How Disruptive Technologies Influence the FI Business Ecosystem, Poznan, Poland	2011/10/27	FISE Working Group workshop	Academic & Industrial	Europe	49
Second SESERV Workshop on the Future of Internet-	2012/01/31	SESERV Workshop	Academic & Industrial	Europe	53

Socio-economic Workshop – Athens, Greece					
The 6th IFIP International Conference on Autonomous Infrastructure, Management, and Security (AIMS 2012), Luxembourg, Luxembourg	2012/06/06-08	All Sessions	Academic & Industrial	Europe	45
The 6th IFIP International Conference on Autonomous Infrastructure, Management, and Security (AIMS 2012), Luxembourg, Luxembourg	2012/06/06-08	Ph.D. Workshop Sessions	Academic & Industrial	Europe	45
SESERV Workshop - Socio-Economic Certainties and Change for the Future Internet, Brussels, Belgium	2012/06/20	SESERV Workshop	Academic & Industrial	Europe	49
Future Network and Mobile Summit, FuNeMS 2012, Berlin, Germany	2012/07/07	Workshop on Cloud Networking - technical and business challenges	Academic & Industrial	Europe	50
EINS Summer School 2012, Oxford, UK	2012/08/12-18	All Sessions	Academic	Europe	37

4.2.3 FIA Sessions

As detailed in D4.1 [1], SESERV organized 2 FIA sessions in the first project year, namely the “Information as an Economic Good” session at FIA Ghent (December 2010) and the “Economics of Privacy” session at FIA Budapest (May 2011). Table 3 details the 3 new FIA sessions (co-)organized and contributed in the second year period. SESERV Deliverable D1.3 [5] provides details on the SESERV co-organized FIA sessions in year 2.

Table 3: FIA Sessions Organized in Project Year 2

Event	Date	Sessions	Type of Audience	Countries Addressed	Size of Audience
Poznan FIA, Poznan, Poland	2011/10/27	Value Creation, Value Flows and Liability over Virtual Resources	Academic & Industrial	Europe	50
Aalborg FIA, Aalborg, Denmark	2012/05/10	Session 1.2: Open Platforms for Innovation - EU and US Approaches for Future Internet: FIRE / GENI and FI PPP / IGNITE. Different complementary perspectives, technical challenges and business models (related session)	Academic & Industrial	Europe	60-70
Aalborg FIA, Aalborg, Denmark	2012/05/10	Session 1.3: Novel Networking and Relationship with Applications - – The Value of Information Flows between Applications and Networks	Academic & Industrial	Europe	65

SESERV released 2 FIA session reports during the first year period for the respective SESERV co-organized FIA sessions. The project completed 3 new session reports for the FIA sessions co-organized in the second project year. These session reports form important input to SESERV’s deliverable D1.3, on the one hand, and to the production of on-line articles on the SESERV website on the other hand.

4.2.4 Publications

As detailed in D4.1 [1], SESERV partners developed 11 publications during the first year period. The Table 5 details 13 publications developed during the second year period.

Table 4: Publications

Title	Publication or Link or Reference	Date	Partner/Authors (Organisations)
New Seeds for FI Design Principles: I. Allow the information exchange between layers, II. Sustain the Resources Investment	FIArch Group's White Paper "Future Internet Design Principles" (D. Papadimitriou, T. Zahariadis (Eds.)), 2011	January 2012	Ioanna Papafili (AUEB), Costas Calogiros (AUEB), George D. Stamoulis (AUEB), Burkhard Stiller (UZH)
Focus Group Survey 3Q2011	http://www.scribd.com/doc/79074056/SESERV-Focus-Group-Survey-3Q2011	2012/01/17	Michael Boniface (ITI), Brian Pickering (ITI), Eric Meyer (OII), Cristobal Cobo (OII), Anne-Marie Oostveen (OII)
A Time-Shifted Video Streaming Approach "LiveShift"	7th GI/ITG KuVS Workshop on Future Internet, Munich, Germany	January 2012	Fabio Hecht, Thomas Bocek, Burkhard Stiller (UZH)
Digital Agenda for Europe 2011	http://www.scribd.com/doc/82171993/Digital-Agenda-for-Europe-2011v01	2012/02/20	Michael Boniface (ITI), Brian Pickering (ITI)
The Internet, Science, and Transformations of Knowledge	International Conference for eDemocracy and Open Government, pp 25-33, Krems, Austria	2012/05/03-04	Ralph Schroeder (OII)
Networks for Citizen Consultation and Citizen Sourcing of Expertise	Contemporary Social Science: Journal of the Academy of Social Sciences, pp 1-22	2012/05/18	Cristobal Cobo (OII)
A Tussle Analysis for Information-centric Networking Architectures. The Future Internet	Lecture Notes in Computer Science, ISBN 978-3-642-30240-4, Springer, Berlin Heidelberg, Germany, Vol. 7281	May 2012	Alexandros. Kostopoulos (AUEB), Ioanna Papafili (AUEB), Costas Kalogiros (AUEB), Tapio Leva, Nan Zhang, Dirk Trossen
Cross-Disciplinary Lessons for the Future Internet. The Future Internet	Lecture Notes in Computer Science, pp 42-54, ISBN 978-3-642-30240-4, Springer, Berlin Heidelberg, Germany, Vol. 7281	May 2012	Anne.-Marie. Oostveen (OII), Isis Hjorth (OII), Brian Pickering (ITI), Mike Boniface (ITI), Eric Meyer (ITI), Cristobal Cobo (OII), Ralph Schroeder:
Design Principles for the Future Internet Architecture. The Future Internet	Lecture Notes in Computer Science, pp 55-67, ISBN 978-3-642-30240-4, Springer, Berlin Heidelberg, Germany, Vol. 7281	May 2012	Dimitri Papadimitriou, Theodore. Zahariadis, Pedro Martinez-Julia, Ioanna Papafili (AUEB), Vito Morreale, Francesco Torelli, Bernard Sales, Piet Demeester
The Future Internet - Future Internet Assembly 2012: From Promises to Reality	Lecture Notes in Computer Science / Information Systems and Applications (LNCS), ISBN 978-3-642-30240-4, Springer, Berlin Heidelberg, Germany, Vol. 7281	May 2012	Federico Alvarez, Frances Cleary, Petros Daras, John Domingue, Alex Galis, Ana García, Anastasius Gavras, Stamatis Karnouskos, Srdjan Krco, Man-Sze Li, Volkmar Lotz, Henning Müller, Elio Salvadori, Anne-Marie Sassen, Hans Schaffers, Burkhard Stiller (UZH), Georgios Tselentis, Petra Turkama, Theodore

			Zahariadis (Eds)
Cooperative Database Caching within Cloud Environments	Dependable Networks and Services, 6th International Conference on Autonomous Infrastructure, Management and Security (AIMS 2012), LNCS, Springer, ISBN 978-3-642-30632-7, Vol. 7279	June 2012	Andrei Vancea (UZH), Guilherme Sperb Machado (UZH), Laurent d'Orazio, Burkhard Stiller (UZH)
Catapulting Britain into a Connected Digital Economy: Issues of the Scale and Scope of a New Centre	http://ssrn.com/abstract=2096819	2012/06/30	William H. Dutton (OII), Marc J. Ventresca, Caroline Bucklow, Eddie Townsend, Nick Wainwright
Socioeconomic Tussles Analysis of the ETICS Approach for Providing QoS-enabled Inter-domain Services	Future Network and MobileSummit 2012 Conference Proceedings, Paul Cunningham and Miriam Cunningham (Eds), IIMC International Information Management Corporation, 2012, ISBN: 978-1-905824-29-8	2012/07/4-6	Costas Kalogiros (AUEB), Manos Dramitinos (AUEB), Costas Courcoubetis (AUEB), George Stamoulis (AUEB), Olivier Dugeon
A Novel Game-Theoretic Framework for Modeling Interactions of ISPs Anticipating Users' Reactions	To be published in the Proceedings of the 6th International Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS 2012), October 9-12, 2012, Cargèse, France	2012/10/09-12	Ioanna Papafili (AUEB), Sergios Soursos (AUEB), George D. Stamoulis (AUEB)

SESERV has received two out of three best paper awards for the FIA book contributions at the Aalborg FIA on May 11, 2012, which outlines a major impact and the excellence of work SESERV has pursued.

The first of these papers, entitled "Cross-Disciplinary Lessons for the Future Internet", was presented at the FIA's closing plenary meeting by Anne-Marie Oostveen. The paper addresses societal aspects (WP3) and is also available in an extended version. The second paper awarded addresses economics (WP2) and is entitled "Design Principles for the Future Internet Architecture"; among other design principles for the Future Internet, the paper advocates the inclusion of economic and incentives-based issues, which originated from SESERV members' participation in the FIArch working group since its beginning in June 2011.

4.2.5 On-Line Releases

SESERV partners developed 56 on-line releases during the second year period, as detailed in the following Table.

Table 5: On-Line Releases

Title	Publication or Link or Reference	Date	Partner/Authors (Organisations)
1st SESERV Workshop (Jun-11): Videos, Presentations and Reports	http://www.seserv.org/fise-conversation/workshopmemoriesandmediascapes%E2%80%8E	2011/09/06	Cristobal Cobo (OII)
1st SESERV Workshop - Interview Videos	http://www.seserv.org/panel/videos-interviews	2011/09/11	Cristobal Cobo (OII), Eric Meyer (OII), Anne-Marie Oostveen (OII)
Cross-thematic Trends of Breakout Sessions.	http://goo.gl/Ez2v5	2011/09/11	Isis Hjorth (OII), Bianca Reisdorf (OII),

1st SESERV Workshop - Interview Videos			Chrysanthi Papoutsi (OII), Lucy Power (OII), Nesrine AbdelSattar (OII), Scott Hale (OII)
The Future of Internet and Societies	http://www.seserv.org/fise-conversation/thefutureofinternetandsocieties	2011/09/21	Michael Boniface (ITI)
Annual Report on Studying the Economic Aspects of Future Internet Technologies	http://www.seserv.org/fise-conversation/annualreportonstudyingtheeconomicaspectsoffutureinternettechnologies	2011/09/22	Costas Kalogiros (AUEB)
Future of Fancy?	http://www.seserv.org/Studying-the-Future-Internet/futureorfancy	2011/10/05	Michael Boniface (ITI)
Annual Report on Studying the Societal Aspects of Future Internet Technologies	http://www.seserv.org/fise-conversation/annualreportonstudyingthesocietalaspectsoffutureinternettechnologies	2011/10/12	Michael Boniface (ITI)
IEEE CS TCCC Execom Meeting	http://www.seserv.org/Building-the-Future-Internet/ieeecstcccexecommeeting	2011/10/13	Patrick Poullie (UZH)
Introducing and Applying a SESERV Methodology for Analyzing Socioeconomic Tussles to the ETICS FP7 Project	http://www.seserv.org/Building-the-Future-Internet/introducingandapplyingaseservmethodologyforanalyzingsocioeconomictusslestotheeticsfp7project	2011/10/23	Costas Kalogiros (AUEB)
Participate in FISE 2012 Focus Groups	http://www.seserv.org/fise-conversation/participateinfise2012focusgroups	2011/10/25	Brian Pickering (ITI)
7th International Workshop on Internet Charging and QoS Technologies	http://www.seserv.org/Building-the-Future-Internet/7thinternationalworkshoponinternetchargingandqostechnologies	2011/10/26	Patrick Poullie (UZH)
The Value Creation, Value Flows and Liability Debate	http://www.seserv.org/fise-conversation/thevaluecreationvalueflowsandliabilitydebate	2011/11/14	Michael Boniface (ITI)
ITU-T Study Group 13 Meeting	http://www.seserv.org/Building-the-Future-Internet/itu-tstudygroup13meetingoctober10-212011	2011/11/17	Patrick Poullie (UZH)
CfP: The 6th International Conference on Autonomous Infrastructure, Management and Security (AIMS'2012).	http://www.seserv.org/Building-the-Future-Internet/cfpthe6thinternationalconferenceonautonomousinfrastructuremanagementandsecurityaims2012	2011/12/09	Martin Waldburger (UZH)
Eurostat Report on ICT Usage and Uptake: Progress Towards the Interim Digital Agenda targets	http://www.seserv.org/Studying-the-Future-Internet/eurostatreportonictusageanduptakeprogresstowardstheinterimdigitalagendatarget	2011/12/19	Costas Kalogiros (AUEB)
Networks for Citizen Consultation and Citizen Sourcing of Expertise: Exploring Innovations in the Public Sector	http://www.seserv.org/Studying-the-Future-Internet/networksforcitizenconsultationandcitizensourcingofexpertiseexploringinnovationsinthepublicsector	2012/01/03	Cristobal Cobo (OII)
8th Future Networks Concertation Meeting - Workshop on "Building the Cloud: Management, Performance and Interoperability"	http://www.seserv.org/Building-the-Future-Internet/8thfuturenetworksconcertationmeeting-workshoponbuildingthecloudmanagementperformanceandinteroperability	2012/01/08	Costas Kalogiros (AUEB)
Future Internet Reference Architecture Group: Towards Architectural Design	http://www.seserv.org/Building-the-Future-Internet/futureinternetreferencearchitecturegrouptowardsarchitecturaldesignprinciplesandareferencearchitectureforthefutureinternet	2012/01/16	Ioanna Papafili (AUEB)

Principles and a Reference Architecture for the Future Internet.			
ITU-T Study Group 3 Meeting	http://www.seserv.org/Building-the-Future-Internet/itu-tstudygroup3meeting	2012/01/18	Patrick Poullie (UZH)
FISE 2012 Focus Groups: Survey Results	http://www.seserv.org/fise-conversation/fise2012focusgroupssurveyresults	2012/01/23	Brian Pickering (ITI)
Methods to Achieve Socio-economic Design Goals	http://www.seserv.org/Building-the-Future-Internet/methodstoachievesocio-economicdesigngoals	2012/01/31	Martin Waldburger (UZH)
The Network of Excellence in Internet Science.	http://www.seserv.org/Studying-the-Future-Internet/thenetworkofexcellenceininternetscience	2012/02/02	Michael Boniface (ITI)
Future Internet Enterprise Systems	http://www.seserv.org/fise-conversation/futureinternetenterprisesystems	2012/02/14	Michael Boniface (ITI)
Outcome of the SESERV Workshop on the Interplay of Economics and Technology	http://www.seserv.org/fise-conversation/Outcome-of-the-SESERV-workshop-on-the-interplay-of-economics-and-technology	2012/02/14	Patrick Poullie (UZH)
7th GI/ITG KuVS Workshop on Future Internet	http://www.seserv.org/Building-the-Future-Internet/7thgiitgkuvsworkshoponfutureinternet	2012/02/15	Patrick Poullie (UZH)
2011 Progress Report on the Digital Agenda	http://www.seserv.org/Studying-the-Future-Internet/untitledpost	2012/02/20	Brian Pickering (ITI)
Open Platforms for Innovation @ FIA Aalborg	http://www.seserv.org/fise-conversation/openplatformsforinnovationfiaaalborg	2012/03/08	Martin Waldburger (UZH)
Novel Networking and Relationship with Applications @ FIA Aalborg	http://www.seserv.org/fise-conversation/novelnetworkingandrelationshipwithapplicationsfiaaalborg	2012/03/08	Martin Waldburger (UZH)
Future Internet Reference Architecture Group: Towards Architectural Design Principles and a Reference Architecture for the Future Internet	http://www.seserv.org/Building-the-Future-Internet/futureinternetreferencearchitecturegrouptowardsarchitecturaldesignprinciplesandareferencearchitectureforthefutureinternet-1	2012/03/09	Ioanna Papafili (AUEB)
One Year of Standardization Activities within the ITU-T	http://www.seserv.org/Building-the-Future-Internet/oneyearofstandardizationactivitieswithintheitu-t	2012/03/12	Patrick Poullie (UZH)
User-Centricity Focus Group @ FIA-Aalborg	http://www.seserv.org/fise-conversation/user-centricityfocusgroupfia-aalborg	2012/03/21	Eric Meyer (OII)
Connecting e-Infrastructures to the Digital Agenda	http://www.seserv.org/fise-conversation/connectinge-infrastructurestothedigitalagenda	2012/03/21	Eric Meyer (OII)
13th GENI Engineering Conference	http://www.seserv.org/fise-conversation/13thgeniengineeringconference	2012/03/23	Patrick Poullie (UZH)
Workshop: Socio-economic Certainties and Change for the Future Internet	http://www.seserv.org/fise-conversation/workshopsocio-economiccertaintiesandchangeforthefutureinternet	2012/03/28	Martin Waldburger (UZH)
The Future of Apps and Web	http://www.seserv.org/fise-conversation/thefutureofappsandweb	2012/03/28	Eric Meyer (OII)
Tussle Analysis Goes to East Africa	http://www.seserv.org/Building-the-Future-Internet/tussleanalysisgoestoeastafrica	2012/04/19	Martin Waldburger (UZH)
Workshop "Media - A Driver for Future Internet Usage"	http://www.seserv.org/Building-the-Future-Internet/workshopmedia-adriverforfutureinternetusage	2012/04/21	Michael Boniface (ITI)
QoS-aware Future Internet Focus Group @ FIA Aalborg	http://www.seserv.org/fise-conversation/qos-awarefutureinternetfocusgroupfiaaalborg	2012/05/02	Costas Kalogiros (AUEB)

User-centricity - Express Yourself!.	http://www.seserv.org/fise-conversation/user-centricity-expressyourself	2012/05/11	Martin Waldburger (UZH)
Future Internet Assembly 2012: From Promises to Reality - SESERV's successful submissions	http://www.seserv.org/fise-conversation/futureinternetassembly2012frompromisestoreality-seservssuccessfulsubmissions	2012/05/15	Patrick Poullie (UZH)
Internet Science Summer School 2012	http://www.seserv.org/Studying-the-Future-Internet/internetsciencesummerschool2012	2012/05/23	Cristobal Cobo (OII)
Keynote Announcement: Andrea Glorioso (European Commission)	http://www.seserv.org/fise-conversation/keynoteannouncementandreaglorioso	2012/05/31	Martin Waldburger (UZH)
Keynote Announcement: Stephen Minton (IDC)	http://www.seserv.org/Studying-the-Future-Internet/keynoteannouncementstephenmintonidc	2012/06/04	Patrick Poullie (UZH)
Summary of the Future Internet Assembly Aalborg	http://www.seserv.org/fise-conversation/summaryofthefutureinternetassemblyaalborg	2012/06/04	Patrick Poullie (UZH)
Outcome of the Novel Networking Session at the FIA Aalborg	http://www.seserv.org/Building-the-Future-Internet/outcomeofthenovelnetworkingsessionatthefiaaalborg	2012/06/04	Patrick Poullie (UZH)
Keynote Announcement: Alan Hartman (IBM)	http://www.seserv.org/Building-the-Future-Internet/keynoteannouncementalanhartmanibm	2012/06/05	Patrick Poullie (UZH)
Keynote Announcement: Javier Salcedo (Arsys)	http://www.seserv.org/Building-the-Future-Internet/keynoteannouncementjaviersalcedoarsys	2012/06/08	Patrick Poullie (UZH)
SESERV Workshop: Socio-economic Certainties and Change for the Future Internet	http://www.seserv.org/fise-conversation/seservworkshopsocio-economiccertaintiesandchangeforthefutureinternet	2012/06/09	Patrick Poullie (UZH)
Aleksandra Kuczerawy on Data Protection and the Future Internet	http://www.seserv.org/Studying-the-Future-Internet/aleksandrakuczerawyondataprotectionandthefutureinternet	2012/06/12	Martin Waldburger (UZH)
Outcome of the Open Platforms for Innovation Session at FIA Aalborg	http://www.seserv.org/Building-the-Future-Internet/outcomeoftheopenplatformsforinnovationsessionatfiaaalborg	2012/06/15	Martin Waldburger (UZH)
Draft Recommendation Y.FNsocioeconomic is Now Content-complete	http://www.seserv.org/Building-the-Future-Internet/draftrecommendationyfnsocioeconomicisnowcontent-complete	2012/06/18	Martin Waldburger (UZH)
High-speed Accounting and Cooperative Semantic Caching at the AIMS 2012 Conference	http://www.seserv.org/Building-the-Future-Internet/high-speedaccountingandcooperativesemanticcachingatthaims2012conference	2012/06/19	Martin Waldburger (UZH)
Socio-economics at the Joint ITU-T / ISO Workshop on "Future Networks Standardization"	http://www.seserv.org/Building-the-Future-Internet/socio-economicsatthejointitu-tisoworkshoponfuturenetworksstandardization	2012/06/21	Martin Waldburger (UZH)
International Conference for eDemocracy and Open Government	http://www.seserv.org/fise-conversation/International-Conference-for-eDemocracy-and-Open-Government	2012/07/09	Patrick Poullie (UZH)
LIBER Steering Committee for Heritage Collections and Preservation	http://www.seserv.org/Building-the-Future-Internet/libersteeringcommitteeforheritagecollectionsandpreservation	2012/07/10	Patrick Poullie (UZH)
Towards a Competitive European Internet Industry	http://www.seserv.org/Studying-the-Future-Internet/towardsacompetitiveeuropeaninternetindustry	2012/08/09	Michael Boniface (ITI)

4.2.6 Deliverables

As detailed in deliverable D4.1 [1], SESERV partners released 5 deliverables – technical deliverables, not covering reporting-oriented deliverables – during the first year period. Table 7 lists the 6 new deliverables released during the second year period. Note that all deliverables of project year 2 are publicly available ones.

Table 6: Project Deliverables

Number	Title	Lead Partner
D1.3	Second Year Report on Conference Session	UZH
D1.4	Second Year Report on Scientific Workshop	AUEB
D1.5	Focus Group Methodology	IT Innovation
D2.2	Final Report on Economic Future Internet Coordination Activities	AUEB
D3.2	Final Report on Social Future Internet Coordination Activities	UOXF
D4.2	Final Dissemination, External Liaisons, and Exploitation Report	ALBLF

5 External Liaisons

In the preceding sections, the various channels and mechanisms used to engage with the community interested in and motivated by socio-economic topics have been discussed. All of these were made available across interested parties and beyond mainly via the website, including direct postings and reports on events, and at the events themselves. In the next section, we move on to consider specific and quantifiable engagement with the community beginning in Section 5.1 with a consideration of the FI context for SESERV, and then in Section 5.2 moving on to the various specific engagements – with industry, at events, cluster meetings and working groups, and individual socio-economic projects. In addition, a brief glimpse at the intangible effects of dissemination activity is provided in Section 5.3.

5.1 The European Future Internet Landscape

The SESERV project has been running during a period of great change. Significant macro-economic events have been observed, not seen for a generation and certainly not usually witnessed during the lifetime of a two year European project. Against a background of global economic slowdown[6], of power shifting from west to east[7], major uprisings within authoritarian regimes[8] and unprecedented pressures on the environment plotting a strategic plan for technology research that has longevity is difficult. With the foundations of 21st century society being challenged and trust in the institutions used to establish them diminishing, the policy priorities for ICT and Future Internet research must evolve.

In 2008 the European Future Internet community was established through the Bled declaration[9]. Europe began to define the future of the Internet from a European perspective building on a technology convergence vision between networks, services, content, things and security. Each facet of the Future Internet was represented by experts from respective technology communities, each supported by EC Units within DG INFSO.

Research for the Future Internet is defined within the ICT work programme under Challenge 1 with sub-objectives relating to the different technology domains. SESERV, as a project support Future Internet Socioeconomics, needed to establish engagement with the most relevant communities. The overall landscape across Challenge 1 was analysed and is shown in Figure 1. SESERV identified groups in each objective related to:

- Industry: Fora primarily driven and populated by industrial partners.
- Large events: Conferences targeting a specific facet of the Future Internet.
- FIA working groups: Groups associated with the FIA.
- Cluster meetings: Collaboration meetings between projects funded by a specific EC Unit.
- Socio-economic projects: EC funded projects with a socio-economic emphasis.

These groups provided places where socio-economic conversations could occur, in addition to the specific workshops and sessions being organised by the SESERV project. An assessment was made of each group in terms of the groups power/influence, relevance to SESERV objectives and strength of relationship with SESERV partners.

[6] http://www.fi3p.eu/assets/pdf/FI3P%20D2%20-%20EU%20Internet%20Industry%20and%20Market_Final.pdf
[7] https://sites.google.com/site/seservtest1/athens-ws-1
[8] http://www.seserv.org/fise-conversation/seservworkshopsocio-economiccertaintiesandchangeforthefutureinternet
[9] http://www.future-internet.eu/publications/bled-declaration.html

Groups that were judged as important for SESERV were selected and partners assigned to engage the group in the FISE conversation. There was an acknowledgement that SESERV partners could not participate in every group due to the need to prioritise resources and that group activity could increase and decrease over time due to external factors (e.g. funding cycles, project cycles, etc).

Figure 16 shows the Future Internet Community Landscape in relation to SESERV partner engagement in 2012. Each column represents an objective in Challenge 1 and each row represents one of the classes of groups identified above. It can be seen that SESERV has a strong engagement in Strategic Objective SO1.1 Future Networks and some representation in groups across all other objectives of the Future Internet. This distribution acknowledges that SESERV is anchored in Future Networks (SESERV is contracted and funded in the Future Networks Unit) but must consider the facets of the Future Internet which provide much of the socio-economic context and demand drivers for networking innovation.

UZH, AUEB and ALBLF provide engagement with Future Networks whereas IT Innovation and ATOS provide engagement across other aspects of the programme. IT Innovation technical and community leadership role within SESERV has built on their broad role within the Future Internet. In addition to Challenge 1, OII has engaged directly with the Digital Agenda Assembly (DAA) to understand the challenges in building relationships between policy makers and technologists.

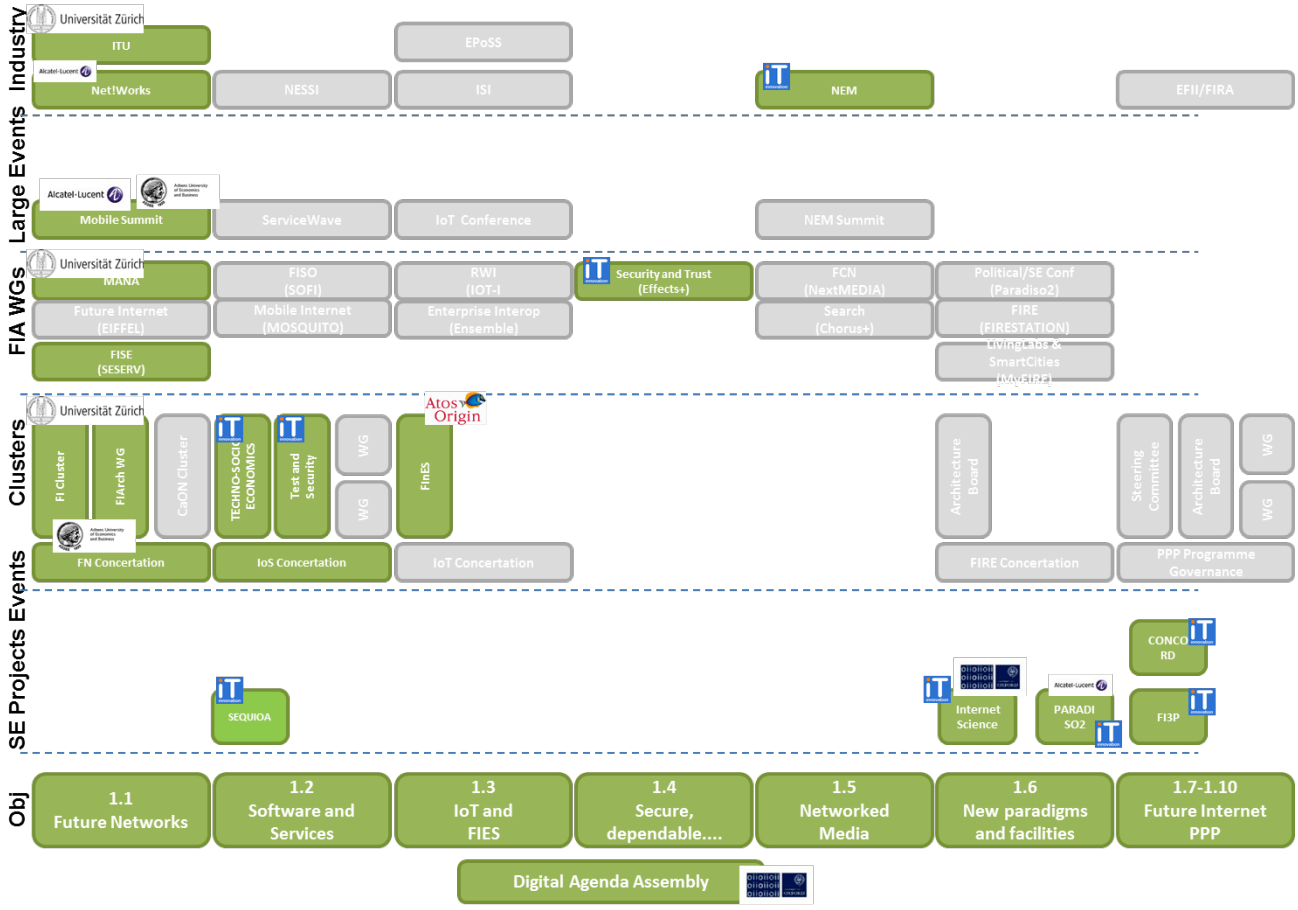

Figure 16: Future Internet Community Landscape

The groups and leading partner from SESERV are listed below with each group discussed in greater detail in Section 5.2:

- Industry
  - ITU (UZH).
  - Net!works (ALBLF).
  - NEM (IT Innovation).
- Large Events: Future Networks and Mobile Summit (FuNeMS) (AUEB).
- FIA Working Groups
  - Management and Service-aware Networking Architectures (MANA) (UZH).
  - FISE (IT Innovation).
- Clusters
  - FI Cluster (UZH).
  - FIArch WG (AUEB).
  - TechnoSocioeconomics WG (IT Innovation).
  - FINES (ATOS).
- Socioeconomic Projects
  - SEQUIOA (IT Innovation).
  - EINS Internet Science (OII).
  - PARADISO 2 (IT Innovation).
  - CONCORD (IT Innovation)
  - FI3P (IT Innovation).
- Digital Agenda Assembly (OII).

At the end of the SESERV project, the European Future Internet landscape is in a period of transition. The Future Internet Public Private Partnership (PPP) was contracted, funded by “recovery” investment in applications of societal importance (utilities, environment, transport, etc). Of course the Future Internet does not equal the PPP and longer term research challenges continued to be addressed by the core of the ICT programme. What is clear is that the EC now has a stronger view of the size and potential value of the European Internet Industry[10] and that the strategic positioning and contribution of the Internet to the European Economy is now significant.

Establishing the importance of the European Internet Industry, its characteristics and contribution, has been key for positioning it within H2020, the new EU Framework Programme for Research and Innovation. H2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. Running from 2014 to 2020 with an €80 billion budget, the EU’s new

[10] http://www.fi3p.eu/assets/pdf/final/FI3P%20Final%20Study%20Report%20v1%200.pdf

programme for research and innovation is part of the drive to create new growth and jobs in Europe[11]. In summary:

"*Horizon 2020 will tackle societal challenges by helping to bridge the gap between research and the market by, for example, helping innovative enterprise to develop their technological breakthroughs into viable products with real commercial potential. This market-driven approach will include creating partnerships with the private sector and Member States to bring together the resources needed*."

H2020 will be complemented by further measures to complete and further develop the European Research Area by 2014. These measures will aim at breaking down barriers to create a genuine single market for knowledge, research and innovation.

The structure of H2020 and how this is implemented within DG CONNECT (formally DG INFSO) is important for how the communities will be structured and the relationship to the FISE Working Group. Figure 17 shows the three pillars of Horizon 2020 (Societal Challenges, Industrial Leadership, and Excellence in Science) and the positioning of ICT. ICT is a significant element of all these areas but the core Future Internet research will be undertaken under the area of "Leadership in enabling and industrial technologies". Future Internet will focus on "networks, software and services, cyber security, privacy and trust, wireless communication and all optical networks, immersive interactive multimedia and connected enterprise".

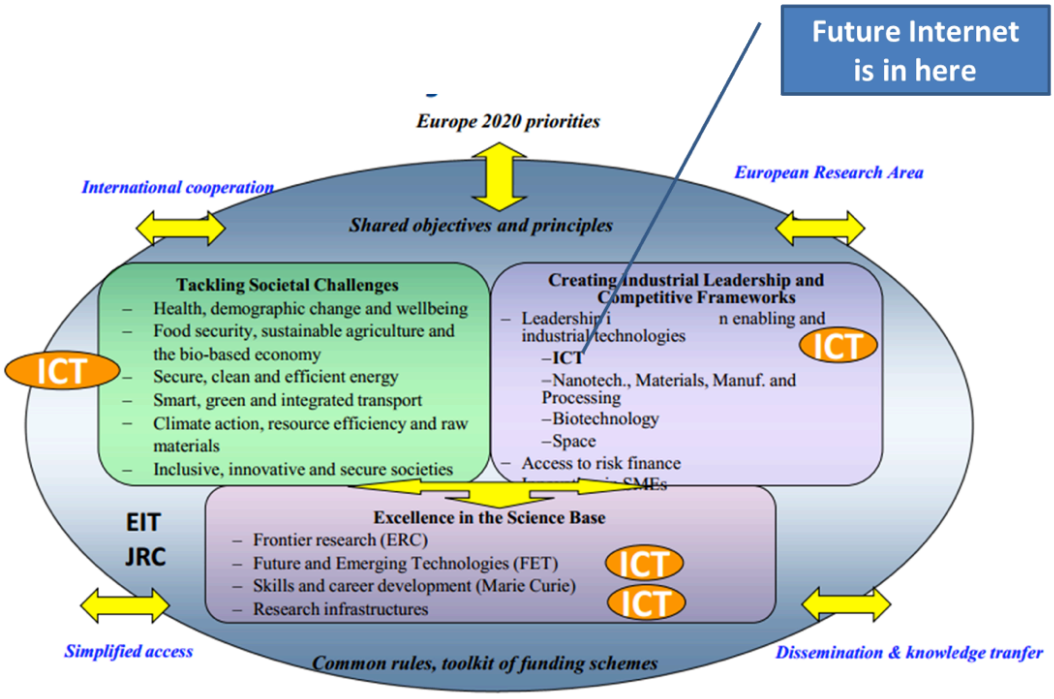

Figure 17: The Three Pillars of Horizon 2020 and Positioning of ICT and the Future Internet

The organisation structure for DG CONNECT which deals with "Communications Networks, Content and Technology" is presented in Figure 18. The Directorate E "Net Futures" is the home of Future Internet research. The transition from the position today into the new structure is listed below:

[11] http://ec.europa.eu/research/horizon2020/index_en.cfm

- The Network of the Future -> Network Technologies.
- Software and service architectures and infrastructures -> Software & Services, Cloud.
- Net Innovation (new).
- New Paradigms and Experimental Facilities -> Experimental Platforms.

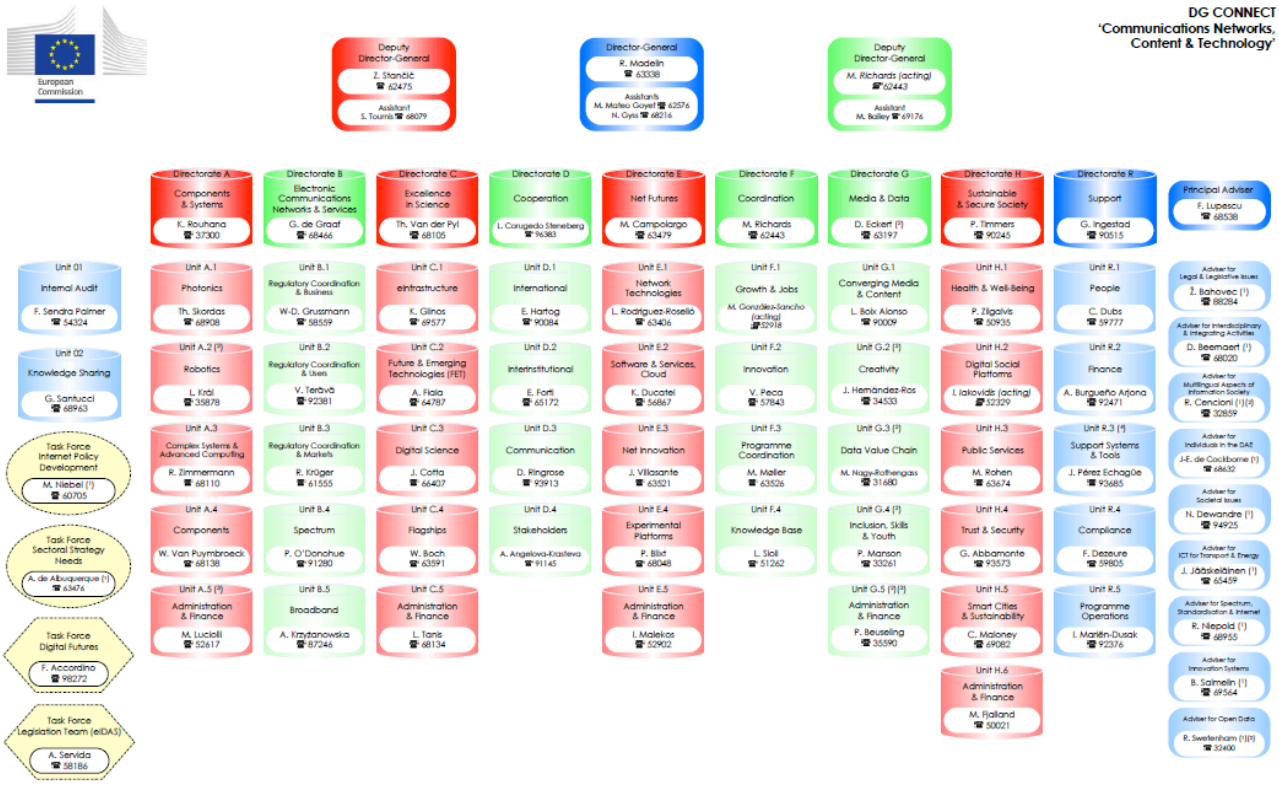

Figure 18: EC DG CONNECT Organisation Structure

In a recent presentation from EC DG CONNECT E1 Unit Head Mr. Luis Rodriguez Rosello, the socio-economic and technology drivers for Future Networks in Horizon 2020 were presented[12] . A slide from this talk is shown in Figure 19. There are many familiar research topics aiming at the Digital Agenda goal of "ubiquitous ultrafast Internet of the future enabling every European to have a broadband connection to the digital society (Digital Agenda). More specifically these include:

- Cutting-edge access, seamless integration of wireless and fixed networks with optimal spectrum and bandwidth use, all optical, lowest radiation, trusted, secure... enabling full connectivity anywhere.
- Novel architectures for easier access to ICT-enabled services (IoT, M2M, Cloud…), Content/Information aware, autonomous, Software Defined Networks.

What is interesting is the position on Industrial Leadership on network technologies. In H2020 Industrial Leadership targets Components and Systems, Next Generation Computing, Future Internet, Content Technologies and Content Management, Advanced

[12] http://www.celtic-initiative.org/Events/Event2012-Stockholm/presentations/07-Luis-Rosello%20LRR%20vPB.pdf

Interfaces and Robotics, and Micro/Nano Photonics/Robotics. According to the FI3P report telecommunications companies are the foundation of the core internet industry and a major strength in Europe[13]. The EC expects that these European strengths will take a leading role in ICT-based smart growth and innovation. Of course this assumption is not without risk considering the disruptive innovations seen within the Internet over recent years. Lessons from the FISE Workshop in Poznan highlight the challenges for incumbent operators in a rapidly changing Internet market.

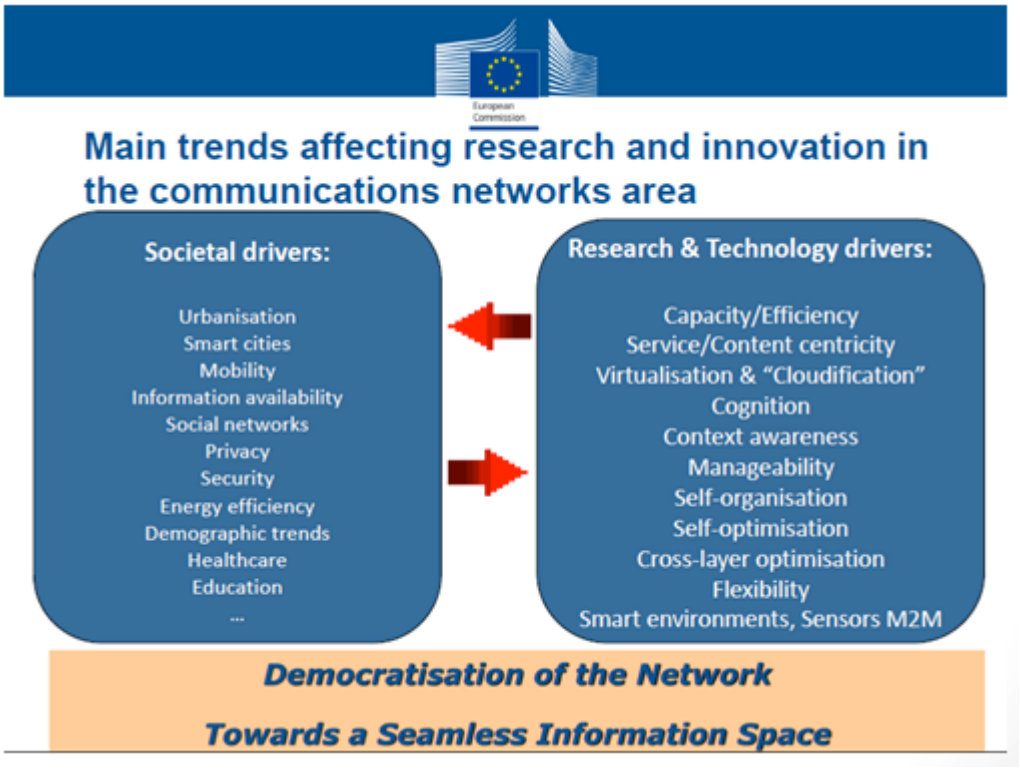

Figure 19: Societal and Technology Drivers for Future Networks in H2020

For the FISE working group the conversation will continue and is highly relevant as Europe contends with the grand challenge of sustainable societies and competitiveness in a globalised marketplace. These are issues that have become increasing acute throughout the lifetime of FP7. The economic sustainability, environment sustainability and competitiveness are at greater risk today than in 2008[14].

The following section details the SESERV engagements with the EC Challenge 1 community.

5.2 Challenge 1 Community Engagement

This section details the SESERV engagement identified in the Section 5.1: Industry (ITU, Net!works and NEM), Large events (Future Networks and Mobile Summit (FuNeMS)), FIA Working Groups (MANA and FISE), Clusters (FI, FIArch WG, TechnoSocioeconomics WG

[13] http://www.fi3p.eu/assets/pdf/final/FI3P%20Final%20Study%20Report%20v1%200.pdf
[14] http://ec.europa.eu/research/bioeconomy/pdf/201202_innovating_sustainable_growth.pdf

and FINES), Socioeconomic Projects (SEQUIOA, EINS Internet Science, PARADISO 2 CONCORD and FI3P) and Digital Agenda Assembly (DAA). This section addresses the objectives of the Communities / Groups and their importance for FISE, the status of the Communities / Groups in relation to the current FI Structure, the summary of SESERV contributions and finally the conclusions and recommendations for FISE WG for engagement towards 2013.

5.2.1 Industry

5.2.1.1 ITU Study Group 13

From the beginning of 2011 onwards, members of SESERV have been deeply engaged with the ITU-T, namely with Study Group 13 (SG13), Working Party 5 (WP5/13), Question 21 (Q21/13). SG13[15] and Q21/13[16] are concerned with standardization activities regarding Future Networks (FN). SG13 is, in addition, one of the Study Groups that is involved in the Next Generation Networks Global Standards Initiative (NGN-GSI)[17].

5.2.1.1.1 Objectives of the Community/Group and Importance for FISE

SG13 focuses on "Future networks including mobile and NGN". FN and NGN standardization determines the ITU-T's counterpart activity of the FN initiative in the European research landscape. Whatever FN, NGN, or Future Internet (FI) technology a research project designs, implements, or studies, hence, may be of potential (standardization-oriented) interest of SG13 – and vice-versa.

When narrowing the scope to socio-economic aspects of FNs, NGNs, and the FI, Q21/13 is of central importance to the FISE community. Q21/13 has developed and finalized ITU-T Recommendation Y.3001. Y.3001 reflects one of the primary documents out of Q21/13 in the ongoing Study Period. It determines 4 objectives and 12 design goals for FNs. The objective of "Social and economic awareness" and the design goal of "Economic incentives" drew the particular interest of the SESERV representatives – this common interest started off a close interaction at various ends between Q21/13 and members of the FISE community.

5.2.1.1.2 Status of the Community/Group in Relation to the Current FI Structure

SG13 and Q21/13 have been, currently are, and are very likely going to be worked on after 2012. The ongoing Study Period for Q21/13 will be completed by the end of 2012. Out of a single Question, Q21/13 has proposed three Questions for the next Study Period (2013-2016). What a Question embraces in terms of scope and objectives is described in a so-called Question Description. SESERV members have been involved on multiple occasions since being engaged in Q21/13 in drafting one of the three Question Description out of Q21/13.

5.2.1.1.3 Summary of SESERV Contributions

Since the coordination activities and the respective standardization activities are primarily concerned with SESERV WP2 results (e.g., tussle analysis), the in-depth analysis of contributions made (and outcome achieved) is documented in Deliverable D2.2 (Section 6) [3]. The following represents a highly condensed summary:

[15] http://www.itu.int/ITU-T/studygroups/com13/index.asp
[16] http://www.itu.int/ITU-T/studygroups/com13/sg13-q21.html
[17] http://www.itu.int/en/ITU-T/gsi/ngn/Pages/default.aspx

- ITU-T Recommendation Y.3001: SESERV's interest in the design for tussle principle and the tussle analysis method resulted in the fostered representation of the tussle concept in Y.3001.
- ITU-T Draft Recommendation Y.FNsocioeconomic: UZH was nominated editor of a new document developed in Q21/13, draft Recommendation Y.FNsocioeconomic. The main approach of Y.FNsocioeconomic consists of tussle analysis being the meta-method to anticipate a FN technology's potential for adoption during the technology design and standardization phase. By the contributions made, Y.FNsocioeconomic is now (at the end of the current Study Period) content-complete.
- Question Description for Next Study Period: SESERV members have been involved in drafting the Question Description for the next Study Period that will focus on environmental and socio-economic awareness of FNs. This will, thus, be the Question into which Y.FNsocioeconomic will be further developed and finalized in 2013.
- Liaison Statements from SG13 to SG3: SG13 (by way of Q21/13) has issued multiple liaison statements towards SG3 in order to inform the economics-driven SG3 about the progress in Y.FNsocioeconomic and to give SG3 the opportunity to comment. Y.FNsocioeconomic has been noticed and acknowledged by SG3.
- Outreach Activities: UZH has presented Y.FNsocioeconomic and tussle analysis on three different occasions. It was presented to the TTC, a Japanese regional standardization body, in January 2012. In April 2012, Y.FNsocioeconomic and the tussle analysis method were presented and discussed in an ITU-T workshop organized by Q15/13 (applying IMS and IMT in developing country mobile telecom networks) in Kampala, Uganda. In June 2012, the outreach was made to the ISO which sees a working party on FNs as well. Y.FNsocioeconomic was presented in the joint ITU-T / ISO workshop on "Future Networks Standardization".

5.2.1.1.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

The coordination activities with ITU-T SG13, Q21/13 have been intense and diverse since they began in January 2011. The outcome as portrayed is very positive. In particular, the work on Y.FNsocioeconomic is of key interest to the FISE community as this Recommendation embraces tussle analysis as the main approach to assess a FN technology's adoption potential during design and standardization phase. The primary focus, hence, towards 2013 will be on the further development and finalization of Y.FNsocioeconomic (which is at this point content-complete, but not final as yet). The involvement in drafting a Question Description dealing with environmental and SE driven aspects of FNs shows that it is of strategic interest to the FISE community as SG13 and Q21/13 move from the current Study Period into the one starting in 2013. This new Question with its dedicated scope in SE will determine the environment suited for the successful finalization of Y.FNsocioeconomic in 2013.

5.2.1.2 Net!works

Net!Works is the FP7 European Technology Platform (ETP) for communications networks and services (formerly eMobility ETP). It represents over 800 member organizations. All member organizations have the possibility to influence where the research related to future communication systems in the area of mobile and wireless is going within EC FP7 and

H2020. Net!Works focus is directly connected to the one of EC DG CONNECT E1 Network Technologies Unit. Several of the active Net!Works participants are also directly engaged in the actions of the EC E1 Concertation and Clusters meetings, FIA MANA WG discussions and Future Network and Mobile Summits (see corresponding sub-sections below).

5.2.1.2.1 Objectives of the Community/Group and Importance for FISE

As detailed on the Net!Works website [18] ICT is one of the industrial sectors set to grow in the coming decade generating lots of exciting new jobs and economic activity. EU is very well positioned to lead this growth, based on its established leadership of EU Industry in communications technologies addressing societal challenges, e.g. transport, energy, environmental and health applications. The new applications involve integrating the latest mobile and fixed communications networks and services directly into the application. This gives users the instant information and control they need to optimize their services to the specific needs of the individual as well as to the needs of society as a whole. Net!Works is continuously working on the development of its Strategic and Applications Research Agenda (SARA), specific White Papers (e.g. Broadband Mobile Systems, Optical Fibre Technologies and Radio over Fibre Strategic Research for Future Networks, Smart Cities Applications and Requirements, Broadband Wireless Beyond 2020…) and more recently success stories (e.g. Mobile Communications, Optical Communications and Broadband Internet Access). Socio-economic issues are highly relevant to Net!Works to maximize the expected impact and exploitation of networking technologies.

5.2.1.2.2 Status of the Community/Group in Relation to the Current FI Structure

Net!Works is very active on all its on-going actions previously listed. It is also actively engaged in the preparation of Horizon 2020. Net!Works was highly visible in the latest Future Networks and Mobile Summit organized in July 2012 in Berlin. Its General Assembly will be organized in November 12 in Brussels.

5.2.1.2.3 Summary of SESERV Contributions

SESERV partners (e.g. ALBLF, AUEB, UZH) interacted with Net!Works participants through different actions at EC DG INFSO D1 / CONNECT E1 Unit level, e.g. in connection to the EC D1 Concertation and Clusters meetings, Future Networks and Mobile Summits…

5.2.1.2.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

The role of Net!Works will still be very important in the coming period. ALBLF, AUEB and UZH will further interact with Net!Works community on the different network technologies discussions and actions.

5.2.1.3 NEM

NEM, the Networked and Electronic Media Initiative, is a European Technology Platform under the Seventh Framework Programme. As an industry-led initiative, NEM aims at fostering the convergence between consumer electronics, broadcasting and telecoms in order to develop the emerging business sector of networked and electronic media.

[18] http://www.networks-etp.eu/home.html

5.2.1.3.1 Objectives of the Community/Group and Importance for FISE

The NEM Initiative aims at building sustainable European leadership in content production and networking technologies. Its objective is to promote an innovative European approach to the convergence of media and telecommunications towards a Future Media Internet that will enhance the lives of European citizens through a richer media experience. The NEM Initiative is supporting Europe's activities on the Future Internet and is actively contributing to the definition of the related research and innovation areas. In particular, the Future Media Internet has been identified by the NEM community as its major innovation area.

Media is a key driver for Future Internet usage. The way in which content is created, delivered and consumed by different types of users significantly influences the characteristics and features required by the Internet. Examples, such as iPlayer and NetFlix demonstrate how the right service and business model can create massive demand for network operators. SESERV started to engage with NEM in year 2 of the project as a consequence of the call for more user centricity and control (See D3.1[19]). Users and content are intrinsically linked and much of the debate is about how to not just connect people to content but connect people through content using new real-time interaction models that take advantage of rich media such as augmented reality and 3D Internet. Content economics and regulation especially for cross-border interaction and the single European market are important topics relevant to FISE objectives. FISE has held FIA sessions on the Economics of Information and Information as an Economic good, and related sessions on the Economics of Privacy (personal content).

5.2.1.3.2 Status of the Community/Group in Relation to the Current FI Structure

The NEM initiative is currently in a state of transition and the positioning in relation to Horizon 2020, like many other initiatives, remains in a state of flux. With the move of Media from Directorate D to Directorate G, NEM future is uncertain.

5.2.1.3.3 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

The role of media in driving Internet usage will not disappear just because of the restructuring of the EC. What will be interesting is how the content communities organise themselves within Directorate D and their relationship with Directorate G. FISE should continue to watch the outputs of NEM (e.g. Position Papers and Newsletters). IT Innovation will continue to participate in the NEM Steering Committee and NEM Summits later this year. Through this engagement IT Innovation will bring FISE WG related issues to the forum.

5.2.2 Large Events

5.2.2.1 Future Networks & Mobile Summit

Future Network & Mobile Summit (FuNeMS) is a well-established annual conference were researchers from all over the world meet to present their results and get feedback from the audience, both during focused scientific sessions, as well as, informal meetings. Each conference is organized in close collaboration with EC and together with FIA and Cluster meetings can be considered the primary events for guaranteeing coherence in European research results and promising higher impact in the Future Internet.

[19] http://www.scribd.com/doc/68338983/D3-1-v1-5

5.2.2.1.1 Objectives of the Community/Group and Importance for FISE

The main objective of each FuNeMS conference is to support industry, policy and research stakeholders in:

- Sharing experiences and research results.
- Identifying future trends and opportunities for international research collaboration under the ICT Theme of FP7.
- Discussing business opportunities.

The focus is aligned with the Future Networks (FN) objective of FP7 and particularly the three clusters: a) Future Internet Technologies, b) Radio Access and Spectrum, and c) Converged and Optical Networks. Furthermore, a fourth theme related to satellite communications has been added in the 2012 program, highlighting the community's expectations on the increasing role of satellites in the Future Internet.

These objectives are directly related to the socio-economic aspects of Future Internet and participating in such events can greatly increase the awareness of technologists on the interests and priorities of all stakeholders. For example, social challenges that were considered of high priority were "Security, Trust and Privacy in the Future Internet", while "Network Overlay, Virtualisation and Federation" are directions to address economic concerns.

5.2.2.1.2 Status of the Community/Group in Relation to the Current FI Structure

The next FuNeMS will take place in Lisbon from 03 - 05 July 2013. Even though the detailed Call for Papers should be announced in mid October 2012, that is after the time of writing this deliverable, is can be expected that the focus of the conference will be along the lines of the Future Networks (FN) objectives under FP7. This will allow SESERV members (and those of the wider FISE community) to participate in new FP7 research projects and to contribute further to the discussions regarding the interplay of socioeconomics and technologies for the Future Internet.

5.2.2.1.3 Summary of SESERV Contributions

Various SESERV members have been actively participants at previous FuNeMS events, namely the one in Budapest (June 2011 in Warsaw, Poland) and the last one in Berlin (July 2012 in Berlin, Germany). Contributions ranged from informal discussions with projects (e.g., regarding socio-economic tussles) to chairing sessions (e.g., Session 4c: Future Internet - Management in FuNeMS 2011), giving presentations (e.g., on the outcomes of tussle analysis) and participating in round-table discussions (such as the technical and business challenges of "Cloud Networking").

5.2.2.1.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

It is important that the FISE WG continues interacting with researchers on the technical aspects of the Future Internet and policy experts in order to bring more coherence and potential to European research efforts. The impact will be maximized if the interests of all major stakeholders are expressed and taken into consideration. The organization of workshops that bring together projects of complementary and alternative technologies is recognized as a significant step in this direction and suggest what should happen in the future as well. For example, the recent workshop entitled "Cloud Networking – Technical and Business Challenges" provided the opportunity for the participants to debate

candidate technologies from competing projects and discuss the major obstacles for adoption.

5.2.3 FIA Working Groups

5.2.3.1 MANA

The Management and Service-aware Networking Architectures (MANA) working group covers management, service-aware networking, and service platform technologies and systems, which form the critical infrastructure part of the Future Internet. This envisages also capabilities spanning a range of technologies, including: (1) Scalable and robust service-aware networking architectures and (2) Mobile, wireless and high function network core, edges and service nodes.

5.2.3.1.1 Objectives of the Community/Group and Importance for FISE

The main goal of the group is to summarize the important research challenges, requirements, and opportunities for the definition and design of the management and service-aware networking architectures applicable to the FI. Furthermore, the goal to reach a "FI Reference Architecture" was proposed at the FIA Valencia, 2010.

5.2.3.1.2 Status of the Community/Group in Relation to the Current FI Structure

As of the time of finalizing this deliverable, the status of this working group seems to be dormant, although a number of interactions between group members did happen upto early/mid 2011. It has been noted that management-related tasks in an architectural consideration do require a very clear relation to the Future Internet architecture as whole. Thus, the FIArch group has considered the basic requirements of network and service management aspects in its design principle discussion (see below).

5.2.3.1.3 Summary of SESERV Contributions

The position paper of MANA entitled "Management and Service-aware Networking Architectures (MANA) for Future Internet – System Functions, Capabilities and Requirements" was supported (among others) by ALBLF (K. Sabnani) back in 2009 and is available for download[20]. Furthermore, as basic assumptions of this paper originate from the two Dagstuhl seminars and perspectives workshop on "Management of the Future Internet" and "Perspectives Workshop: Architecture and Design of the Future Internet" in 2009, UZH (B. Stiller) was involved in the definition of those foundations.

5.2.3.1.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

Depending on the activity of MANA in the near future, a consideration of network and service management-related functionality will be kept alive. As such the "Economic Traffic Management" work, which originates from the EU FP7 SmoothIT STREP and which initially lead to the partial definition of SESERV WP2, may be continued under social applications and traffic situations, in which economic incentives will play a crucial role. Furthermore, the Future Internet-related management tasks will affect social areas, impacting society by regulation and legislation, such that a combination of economic and societal aspects (as inherently defined for any Future Internet Socio-economics – FISE) will determine an important pillar of the future of the Internet.

[20] http://www.future-internet.eu/fileadmin/documents/prague_documents/MANA_PositionPa-per-Final.pdf

5.2.3.2 FISE

5.2.3.2.1 Objectives of the Community/Group and Importance for FISE

The FISE group brings together experts (e.g. economics, social scientists, etc) who study and experts (e.g. engineers, computer scientists) who build the Future Internet. The group aims to look for new perspectives on Future Internet research through conversation and debate within a multidisciplinary community of researchers and professionals. The idea is to learn from others in different, related fields and bridge the gap between technical innovation and socio-economic outcomes. SESERV provides the driving force behind the FISE WG and is the main connection between FISE and the Future Internet community.

5.2.3.2.2 Status of the Community/Group in Relation to the Current FI Structure

The group is a regular contributor to the FIA having organised sessions at every FIA since 2008. With over 200 people in the LinkedIn group there is an active community who contribute to specific topics and their development around each of the FIA events.

5.2.3.2.3 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

The FISE WG must continue after the end of the SESERV project. Through SESERV the FISE WG has established a team of enthusiastic individuals who want to continue the work (see Appendix A). The topics and actions discussed by the FISE WG in 2013 must consider the outputs of the SESERV project as detailed in deliverables D2.2 [3] and D3.2 [4]. These deliverables provide a snapshot of socio-economic priorities mid-2012 based on FI community contributions and the dynamic macro socio-economic context.

5.2.4 Clusters

Future Network Concertation meetings gather ongoing research projects out of FP7, funded in the Future Networks (FN) objective. Concertation meetings serve the purpose of information and results exchange and they aim to foster debate among related projects. FN Concertation meetings bring together projects from three clusters, the FI (Future Internet Technologies) Cluster, the RAS (Radio Access and Spectrum) Cluster, and the CaON (Converged and Optical Networks) Cluster.

5.2.4.1 FI Cluster

5.2.4.1.1 Objectives of the Community/Group and Importance for FISE

The FN Concertation website[21] states the following objectives:

- To support the ongoing FP7 projects in sharing their latest research achievements.
- To enhance the project cooperation activities, share best practices and opportunities for (pre-)standardization.
- To set future activities and topics of common interest for each cluster.
- To facilitate networking and discussion among the participants.

These objectives are in-line along many dimensions with the objectives of the FISE community. The FN Concertation meetings provide for a key venue to present the SESERV achievements – and by that reach out to projects whose technology exposes a high level of socio-economic aspects to be looked at. The example of the coordination

[21] http://ec.europa.eu/information_society/events/future_networks/concertation/index_en.htm

activity of SESERV members with the ITU-T proves that this works the other way round as well: The initial contact between SESERV and the ITU-T was established in February 2011 during the 7th Future Networks FP7 Concertation[22] meeting in Brussels, Belgium. Alojz Hudobivnik (Assistant Rapporteur in Q21/13) gave a presentation on the ITU-T (at the time draft, now final) Recommendation Y.3001.

5.2.4.1.2 Status of the Community/Group in Relation to the Current FI Structure

Out of the three clusters being involved in FN Concertation meetings, the FI Cluster clearly has seen the closest relation to SESERV and the FISE community. The FI Cluster has seen contributions from SESERV members at several of its meetings. While the FN Concertation website announces at the time of writing the present deliverable a new meeting planned for October 2012, it is as yet unclear if and when the next FI Cluster meeting is planned.

5.2.4.1.3 Summary of SESERV Contributions

Various SESERV members have been actively participating in the FN Concertation and FI Cluster meetings throughout the past two years, starting with the 6th Concertation in October 2010. Contributions made include presentations at different meetings – ranging from SESERV-general in the initial phase up to highly specific ones such as “Supermarket Style Energy Saving ’Buy One Get One 50% Off’” or “Future Smart Connectivity: Considering Stakeholder Interests and Conflicts in the Design of Federated Network Architectures”. Other contributions cover the organization and moderation of a panel session on “Economic and user perspective of Inter-ISP traffic optimization”.

5.2.4.1.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

SESERV members are going to attend and contribute to upcoming FN Concertation meetings (as well as FI Cluster meetings, should those continue to be organized). As new research projects funded from the respective objective are being initiated by autumn 2013 with involvement from SESERV partners, this activity can be supported not only content- but also resource-wise.

5.2.4.2 FIArch WG

The FIArch group has conducted in the past a systematic analysis of the design principles of the Internet in order to identify and to characterize the design principles that are expected to drive the architecture of the Future Internet, to which SESERV has contributed.

5.2.4.2.1 Objectives of the Community/Group and Importance for FISE

The goal of this FIArch group is to determine the set of major and basic design principles, which a Future Internet needs to follow to ensure that emerging requirements are met as well as being brought to the attention of protocol and systems designers. The potential and/or possible evolution of those principles against a broader panel of experts active in architecture research was the key to enable the broad and coherent view point described. Moreover, experts from different domains had been invited to a number of workshops and meetings as well as telephone conferences to add their point of view/opinion to the discussion. The importance for FISE-related aspects is driven by the fact that the “Locality Principle” is based on major incentives, which participating stakeholders need to follow to

[22] http://ec.europa.eu/information_society/events/future_networks/concertation/programme/7th/index_en.htm

become or remain part of the interaction, service, or offering. Thus, the economic facet of a design principle of the Future Internet serves as the major interconnection point.

5.2.4.2.2 Status of the Community/Group in Relation to the Current FI Structure

The Future Internet Architecture (FIArch) experts reference group is composed of representatives of the most relevant FP7 research projects in relation to FI architectures and renowned experts from industry and academy covering in a complementarily way all areas related to the Future Internet Architecture. The work of the group is coordinated by the FP7 CSA projects in the area of Future Internet: NextMedia, IOT-I, SOFI, EFFECTS+, EIFFEL, SESERV, Chorus+, and Paradiso 2, and supported by the EC Units D1 (Future Networks), D2 (Networked Media Systems), D3 (Software & Service Architectures & Infrastructures), D4 (Networked Enterprise & Radio Frequency Identification (RFID)), and F5 (Trust and Security).

5.2.4.2.3 Summary of SESERV Contributions

The key contributions from SESERV perspective have been driven by AUEB (G. Stamoulis, I. Papafili, C. Kalogiros) and UZH (B. Stiller) in terms of the "Locality Principle" and the "Allow the exchange of information between end‐points of different type" seed for new design principle. The full White Paper is accessible for download[23]. Furthermore, a shorter version of this work appeared in the FIA Open Access Book "The Future Internet – Future Internet Assembly 2012: From Promises to Reality" under the title of "Design Principles for the Future Internet Architecture", which won one of the three awarded Best Paper Awards at the FIA Aalborg, Denmark, May 2012. The Open Access paper is available online[24]. Note that the paper "A Tussle Analysis for Information-centric Networking Architectures", amongst others co-authored by AUEB (I. Papafili) determines the close relation between architecture work and the SESERV-propagated tussle analysis approach for future networks.

5.2.4.2.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

The future activity of the FIArch Group includes the preparation and publication of two new documents:

- Systematic analysis, evaluation and comparison of technologies and architectures studied by research projects that support the identified Design Principles.
- Evaluation, measurements (criteria/metrics) and analysis grid/methodology itself.

To begin with gathering input from various research projects a workshop is planned to be held at EU INFSO premises at the end of September of 2012. Then, drafts of the planned documents are expected to be released within Q4 of 2012, while the finalization and publication of the two documents is expected in 2013. SESERV will not continue into 2013; as such SESERV cannot guarantee follow on steps in the coming years. However, there are partners of SESERV, who contributed so far to FIArch and who will most likely see new EU-funded projects starting towards the end of 2012, which will enable them to continue the collaboration with FIArch. While details depend on the future of FIArch, a further push of the locality principle in practice and use for new technologies can be foreseen as well as the support of information exchange protocols for inter-stakeholder general signalling purposes. As such FISE will see some economic input from such locality-driven approaches.

[23] http://ec.europa.eu/information_society/activities/foi/docs/fiarchdesignprinciples-v1.pdf
[24] http://www.springer.com/computer/communication+networks/book/978-3-642-30240-4

5.2.4.3 TechnoSocioeconomics WG

5.2.4.3.1 Objectives of the Community/Group and Importance for FISE

The purpose of the Techno-Socioeconomics working group is to discuss cross-project collaboration on related issues within the Internet of Services projects (Objective 1.2). The group provides a forum for current software and services projects to share ideas on aspects such as business models and socio-economic methodology.

5.2.4.3.2 Status of the Community/Group in Relation to the Current FI Structure

The Techno-Socioeconomics WG is part of the Internet of Services unit and convenes during bi-annual collaboration meetings. The group has its origins in the business modelling and SLA group that was part of the former Grid unit in FP6. During the lifetime of SESERV the group has been chaired by members of the SEQUOIA project

5.2.4.3.3 Summary of SESERV Contributions

SESERV was invited to present during the Internet of Services collaboration meeting on Wednesday, 28 September 2011. IT Innovation presented on “Collective and Participative experiences in real-world and Online Communities” which built on the results of SESERV year 1 as described in D3.2. This led to SEQUOIA presenting participating in the FISE-WG workshop in Poznan through a presentation of the socio-economic impact assessment methodology for Internet of Services projects.

5.2.4.3.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

SESERV has contacted the working group to explore the possibility of a presentation of SESERV results during the collaboration meeting in October 2012. Upon this contact, IT Innovation was invited to present SESERV results at the Internet of Services collaboration meeting – thus to a key community for SESERV dissemination – on 16 October 2012. IT Innovation accepted the invitation and will continue to seek for engagement within the Internet of Services community through the most relevant forum.

5.2.4.4 FINES

5.2.4.4.1 Objectives of the Community/Group and Importance for FISE

The FInES cluster is a long running collaboration (since 2004) for EC projects focused on the FI and the Enterprise. Today, the cluster has a portfolio of 18 ongoing projects and involves a large community of interested stakeholders (more than 1,000). It also manages 14 Task Forces, maintains an evolving Research Roadmap, is engaged in many events each year, and has high visibility on the web and through socialnetworks.

5.2.4.4.2 Status of the Community/Group in Relation to the Current FI Structure

The future of FInES is uncertain with the reorganisation of the EC (moved to Net Innovation) and the departure of key EC players such as Gérald Santucci and Cristina Martinez. The allocation of the domain to a unit responsible for "Net Innovation" is a good fit for FinES with the aim at becoming a centre of excellence promoting user driven-innovation, new business models, digital entrepreneurship, behavioural and societal changes as well as doing the promotion of ethical and societal acceptance of ICT in a complex environment. This offers significant challenges and prosperous research path for the FInES domain

5.2.4.4.3 Summary of SESERV Contributions

SESERV has forged strong links with FInES by facilitating joint actions with the FISE-WG. Specifically, the co-chair of FInES Man-Sze Li has been an active member of FISE-WG sessions over the years at the FIA including Information as an Economic Good and Economics of Information sessions. In Poznan, FISE and FInES organised a joint session called “Value Creation, Value Flows in Virtualised Resources” which focused on the issues related to both working groups once focused on the Internet and the other the Enterprise. IT Innovation also presented SESERV at the FInES cluster meeting on 19 December 2011.

5.2.4.4.4 Conclusions/Recommendations for FISE WG for Engagement Towards 2013

FInES remains an interesting area for FISE, especially in relation to B2B interactions. This contrasts the major focus of FISE which as largely focused on broader C2C and B2C issues. The move to Net Innovation moves FInES into an area very closely coupled to FISE issues and there’s likely to be a need to continue to work closely with the community at the level of the FIA.

5.2.5 Socioeconomic Projects

5.2.5.1 SEQUOIA

SEQUOIA [25] was an EC Strategic Objective SO1.2 Internet of Services support action focused on developing a self-assessment socio-economic impact assessment methodology for IoS projects. SEQUOIA finished with a conference in March 2012 when the final methodology and results of the impact assessment where presented. The collaboration between SESERV and SEQUOIA focused on joint awareness raising of respective methodologies. SEQUOIA participated in the FISE Poznan workshop providing an overview of their approach and SESERV presented at the SEQUOIA chaired SE working group in the IoS community.

5.2.5.2 EINS Internet Science

The Network of Excellence in Internet Science [26] is an EU-funded project bringing together over thirty research institutions from across Europe “focusing on network engineering, computation, complexity, networking, security, mathematics, physics, sociology, game theory, economics, political sciences, humanities, and law, as well as other relevant social and life sciences. The network's main deliverable will be a durable shaping and structuring of the way that this research is carried out, by gathering together a critical mass of resources, gathering the expertise needed to provide European leadership in this area, and by spreading excellence beyond the partnership. EINS is the major multidisplinary European action studying the FI. In many ways it is SESERV at scale and has the potential to strike significant and meaningful conversations about the future directions of the Internet. Both OII and IT Innovation are partners within the EINS consortium and will continue to seek opportunities to recruit expert knowledge from non-technical domains to add strength to FISE related events. The Oxford Internet Institute hosted the EINS 2012 Summer School [27], which was lead by SESERV member Cristobal Cobo, and saw participation of additional SESERV participants Eric Meyer and Ralph Schroder.

[25] http://www.sequoiaproject.eu/
[26] http://www.internet-science.eu/
[27] http://www.internet-science.eu/summer-school-2012

5.2.5.3 PARADISO2

PARADISO 2 [28] was a coordination action aimed at facilitating high level socio-economic conferences and providing research strategy for the European Commission. The final conference "Internet and Societies new Innovation Paths including the 1st Dialogue on Platforms for Collective Awareness" was organised 7-9 Sept 2011. The collaboration between PARADISO and SESERV focused on joint awareness raising of results are related events. PARADISO partners participated and presented at FISE WG sessions including the Economics of Privacy and Information as an Economic Good. SESERV partners attended PARADISO conferences which influenced the socio-economic priorities highlighted in social coordination activities described in D3.1.

5.2.5.4 CONCORD

CONCORD [29] is a coordination action aiming to provide programme management for the FI Public Private Partnership. CONCORD has a significant socio-economic activities to help programme partners understand business models and business model disruption resulting from FI-PPP innovations. CONCORD participated in the FISE WG workshop in Poznan and contributing thoughts on disruptive innovation and open innovation platforms. The outcome was an agreement to co-develop ideas on open innovation platforms building on the knowledge from FInES and FISE. This work is expected to start late 2013 after the FI-PPP Phase 2 deadline

5.2.5.5 FI3P

FI3P [30] was a study funded by the European Commission, DG Information Society and Media. The objective of the study was to identify the potential economic and societal longer-term impacts of the FI public-private partnership proposed. The study aims to analyse the current contribution of the Internet industry to the European economy and society; analyse its likely future contribution (2015-2020) with a fully deployed public-private partnership (PPP) and in its absence; identify any economic, legal and societal barriers to the competitiveness of European Internet industry, and assesses ways to mitigate them; and provide policy recommendations grounded in analysis. FI3P has collaborated with SESERV through participation on FISE WG workshops and FIA sessions. The insights gained by FI3P about the European Internet market, the contribution of the FI-PPP and the methodology used to conduct the study have been of significant interest to members of the FISE community. The consequence of this engagement resulted in IT Innovation providing critical review of the final FI3P report prior to its publication through an expert invitation to an FI3P workshop.

5.2.6 Digital Agenda Assembly

The Digital Agenda Assembly, and related reports, have influenced the content of D3.2 [4]. OII project partners have attended the first two Digital Agenda Assemblies (2011, 2012), and discussed the issues tying the FI to the DAA with a wide variety of people. Unfortunately, the SESERV proposal for a workshop at the 2012 DAA was not accepted, which reduced the possibility of high visibility. Nevertheless, the Digital Agenda Assembly addresses many of the issues central to SESERV, including questions of how people

[28] http://paradiso-fp7.eu/
[29] http://www.fi-ppp.eu/concord/
[30] http://www.fi3p.eu/

generate data that underlies much of the technical and business activity of the Internet, and how people can continue to be empowered using online tools and forums to be active citizens. The technical issues addressed by the DAA are similar to those at the FIA, but are discussed at a different level of abstraction, focusing on society and its citizens. This engagement has informed the content of SESERV reports.

5.3 The Extent of Other SESERV Contacts

Finally in this section on External Liaisons, it is relevant to consider some of the less formal contacts, what the FI-PPP refer to as “communication channels”, to “support the collection and exchange of information with all external stakeholders”[31]. Other FP projects, academic institutions and finally industrials are considered. It is these communication channels which have taken SESERV from the early FISE view on socio-economic challenges for the FI[32] and the observations of PARADISO2[33], to the eight cross-sectorial themes, the seven tussle types, and the numerous recommendations to policy makers, technologists and other stakeholders summarized and described in the WP2 and WP3 Deliverables.

5.3.1 Projects

The following Table lists the SESERV project contacts and related interactions.

Table 7: Projects Contacts

Projects	Interactions
• LAWA • SENSEI • SmartSantander • SOCIALNETS • SocIoS • TA2 • WeGov	Reviewed stakeholders to establish typical relationships and the overall value chain. This contributed to the definition and validation of the FI ecosystem stakeholders.
• WeGov	Used as the basis for the discussion of analytical tools; as well as an initial exploration of socio-economic themes such as trust and privacy.
• ULoop • SAIL • N4C • PERSIST • SOCIETIES • FAME	Direct contribution to the SESERV Oxford Workshop, along with participation in the breakout sessions. This led directly to the definition of the initial eight cross-sectorial themes.
• Experimedia	Presentation at the SESERV Brussels Workshop.

These projects have all contributed to the definition and validation of the cross-sectorial themes, tussle analyses, and the stakeholders relevant for the FI ecosystem. Participation was initially during communication in respect of the stakeholder analysis, but then

[31] http://www.fi-infinity.eu
[32] http://dx.doi.org/10.3233/978-1-60750-007-0-1
[33] http://paradiso-fp7.eu/files/2012/02/PARADISO_refdoc_final.pdf

increased to direct engagement at workshop(s) including presentations and discussion at breakout sessions or focus groups.

5.3.2 Academic Institutions

The following Table lists the SESERV Academic institutions contacts and related interactions.

Table 8: Academic Institutions Contacts

Academic Institutions	Interactions
• University of York, UK • University of Edinburgh, UK • Serious Games Institute, University of Coventry, UK • KU Leuven, Belgium	Presentation at the SESERV workshops; presentation during the SESERV Oxford debate.
• University of Technology , Sydney, Australia • Bar-Ilan University, Israel • Ryerson University, Canada • University of California, USA • University of Düsseldorf, Germany • University College Dublin, Ireland • VU-University, Amsterdam, The Netherlands • TNO Delft, The Netherlands • IT University, Göteborg, Sweden • Waterford Institute of Technology, Ireland	Participation in the focus groups leading to the set of recommendations to policy makers, regulators, technologists, user groups and operators.
• University of Maastricht, Germany • KNAW, Netherlands • University of Warwick, UK	Participation at the SESERV workshops.

In this category, direct participation via presentations, debate and discussion during focus groups and breakout sessions helped in the definition of recommendations as well as the cross-sectorial themes and tussles.

5.3.3 Industrials

The following Table lists the Industrial contacts and related interactions. The industrials came to the SESERV workshops both to provide direct input in terms of presentations at the workshops on matters such as the economics of network QoS, trust and security to cloud computing and the current status of the Internet and connectivity.

Notwithstanding the individual letters of support in the Appendix A, in the above sections, the lists of projects, academic institutions and industrials summarize the reach of the SESERV project in inviting input as well as stimulating discussion. Input was in the form of

presentations, whereas discussion involves debate as well as participation in breakout sessions and focus groups.

Table 9: Industrial Contacts

Industrials	Interactions
• BT • IBM • HP • Deutsche Telekom • IDC • Arsys • TID	Presentation at the SESERV workshops; participation in focus groups and breakout sessions.

6 Evaluation Criteria and Measuring of Impact

As detailed in SESERV deliverable D4.1 [1], the set of 14 specific Key Performance Indicators (KPIs) was defined by the SESERV partners to assess project impact and to take appropriate measures during the project lifetime, in order to maximize the Coordination Action outcomes. The set of KPIs determined is structured into two groups, (1) SESERV coordination KPIs for the FISE community and (2) SESERV research support priority KPIs.

The two groups each follow dedicated objectives:

- SESERV coordination KPIs for the FISE community (Section 6.1): These eight indicators measure quality and quantity of the FISE community, public interest in the SESERV project and produced outputs. They include
  - (K1) Size of FISE community on FISE LinkedIn group,
  - (K2) Size of FISE community on FISE mailing list,
  - (K3) Distribution of expertise or community profile,
  - (K4) Projects engaged,
  - (K5) Participants at specific/all SESERV events,
  - (K6) Website access,
  - (K7) SESERV contributions to the wider community and
  - (K8) Event reports produced.
- SESERV research support priority KPIs (Section 6.2): These six indicators determine focal points of SESERV coordination activities resulting in research support. These include
  - (K9) Number of publications,
  - (K10) SESERV deliverables,
  - (K11) Research priorities identified,
  - (K12) Socio-economic priorities assessed,
  - (K13) Number of tussle analyses and
  - (K14) Projects profiled.

As SESERV is approaching its formal close at the end of August 2012, the final evaluation on impact achieved with respect to all of these KPIs is becoming available. Detailed documentation follows below on a per-KPI basis. All data collected reflects the situation as of July 13, 2012.

Before providing detailed data, each KPI is briefly characterized by four dimensions [1]: (1) The way the KPI is measured, (2) a short description of its purpose, (3) a minimum threshold to consider the dissemination action a success, and (4) a contingency plan for the case where the respective KPI measurements during the duration of the project indicated a significant risk that the foreseen threshold would not be reached.

6.1 SESERV Coordination KPIs for the FISE Community

Two indicators engage with digital subscription to SESERV-driven on-line channels targeting the community (Section 6.1.1). Multiple indicators measure and report on the

distribution of expertise in the SESERV-coordinated FISE community as well as on engaged projects providing a contribution (Section 6.1.2). Two indicators determine the public interest in SESERV (Section 6.1.3). And finally, the output of SESERV is measured by contributions to related groups and event reports produced (Section 6.1.4).

6.1.1 Size of FISE Community

The size of the FISE community is measured by two indicators. Both indicators follow the same purpose, namely to estimate the size of the FISE community in order to measure trends in interest in SESERV:

- K1: Size of FISE community on FISE LinkedIn group.
- K2: Size of FISE community on FISE mailing list.

The size of the FISE community on the FISE LinkedIn group is measured by the total number of people registered with the FISE LinkedIn group. The minimum threshold to reach has been defined as 100 registered group members. The contingency plan for any potential deviation from the threshold was to request partners to send invitations to join to their professional contacts in social networks to join.

The size of the FISE community on the FISE mailing list is measured by the total number of people registered with the FISE mailing list fise@future-internet.eu[34] hosted by Eurescom. The minimum threshold to reach was defined in the range from 100 to 150 registered mailing list subscribers. The contingency plan for any potential deviation from the threshold was to invite people attending to events – SESERV-organized ones or with SESERV participation – to subscribe to the mailing list.

Table 10: Size of FISE Community KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K1: Size of FISE community on FISE LinkedIn group	**216 group members**	Yes Yes	No
K2: Size of FISE community on FISE mailing list	**101 subscribers**	Yes No	Yes

Table 10 shows with 216 members of the FISE LinkedIn group that the threshold (100 group members) was not only reached but significantly surpassed. Accordingly, the contingency plan was not needed to be activated. The LinkedIn group has proven to be a very active, constructive, and thus meaningful instrument to lead and coordinate a lively community.

The attractiveness of the LinkedIn group is reflected by a constant growth rate attracting new members every months (and existing members staying active in the group), resulting in a steady growth of total member numbers. Figure 20 presents these two positive trends. It covers the time frame from April 2011 up to mid July 2012. April 2011 was when the new SESERV website as well as its updated on-line dissemination strategy were implemented – including the then newly created FISE LinkedIn group.

[34] http://lists.eurescom.eu/exilist.cgi.pl?filter=fise

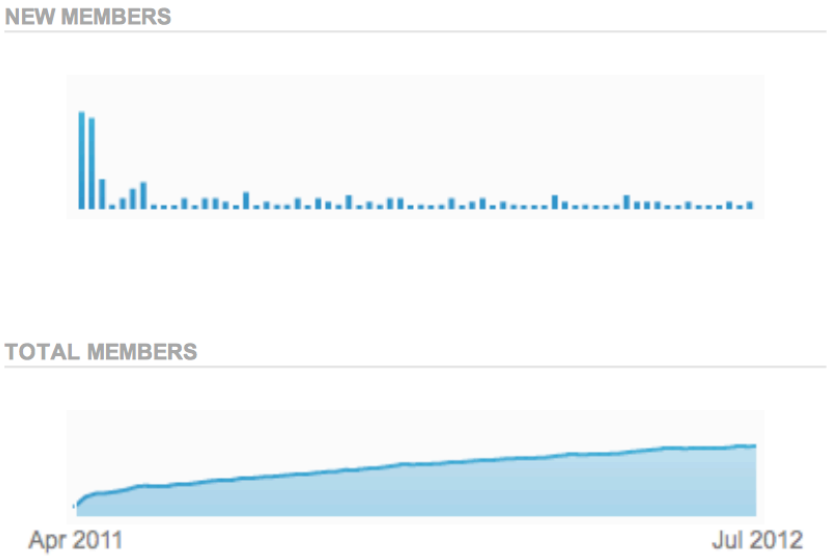

Figure 20: Growth of the FISE LinkedIn Group (April 2011 – July 2012)

From a qualitative point of view, the LinkedIn group is actively used by both SESERV members and community members not directly affiliated with SESERV. This is very positive, especially since SESERV initiated the group and configured the new website for automated posts to the LinkedIn group whenever a new article is posted on the SESERV website. The fact that members from the whole community, not only SESERV members, use the group actively, shows success in attracting wider engagement in the community beyond project boundaries.

When looking at how – for what purpose or use – group members become active, three typical use cases emerge: The most frequent[35] case is when group members post about events or new content items become available. In other words, they use the group as an on-line dissemination channel. Figure 21 shows a typical example for the case of a post out of the FInES Cluster looking for contributions from members of the FISE community (note that the personal details are blacked out).

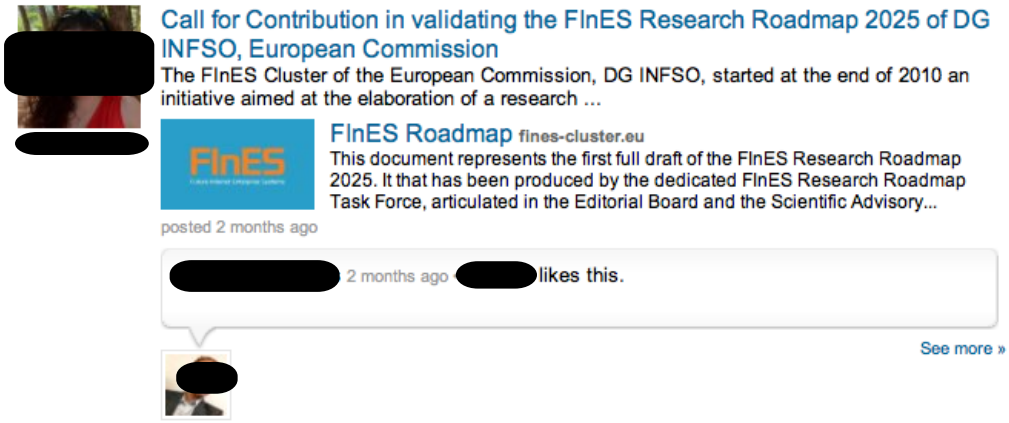

Figure 21: Dissemination-oriented Sample Post from the FInES Cluster

[35] LinkedIn does not provide detailed statistics here. In particular, the analysis of older posts is complex. Hence, any quantitative statement regarding qualitative use cases reflects an estimate based on coarse-grained data.

Roughly every other post in the group has provoked a higher level of engagement, meaning another group member either expressed a personal evaluation of the post by "liking" it or commented on the post – by that rendering the original post into a discussion. Discussions constitute the second most frequent use case, comments the third one. From April 2011 to July 2012, the estimated total number of discussions is of the order of 50 and the number of posts (including those that turned into a discussion by group member interaction) is estimated to be of the order of 100. Figure 22 depicts the level of comments and discussions observed in the FISE LinkedIn group from April 2011 onwards.

For the question of who is a member of the group and who is active in it, an outline of member profiles with regard to their expertise and background is provided in Section 6.1.2, while the most active users are either from within SESERV or the core network of contacts as described in more detail throughout this deliverable, e.g., in Section 2.5.

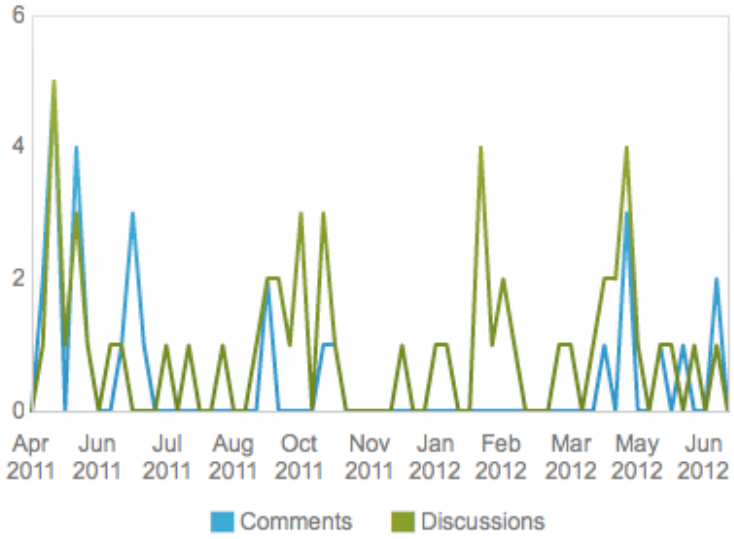

Figure 22: Number of Discussions and Comments in FISE LinkedIn Group

Turning the focus now from the highly active FISE LinkedIn group to the FISE mailing list, then the number of subscribers (101) has clearly reached the threshold, but does not exceed it. Accordingly, the contingency plan was activated in 2012 after realizing that the mailing list was less often used both by SESERV members and the wider community than the LinkedIn group and that subscriber numbers leveled below the threshold.

The increased attention created among community members, including members of SESERV, towards the mailing list showed an effect, albeit not a very strong one. Subscriber numbers slowly increased and reached the threshold in the course of 2012. And there were more posts on the list than before. For instance, the mailing list was more actively used as a dissemination channel, e.g., for announcing calls for participation. However, it has to be noted that the mailing list remains considerably less active than the FISE LinkedIn group. It appears that the engaged community members crowd in primarily in a single location rather than several parallel ones – and that location appears to be a social media targeting professionals. This is not uncommon across current online communities[36].

[36] http://www.bbc.co.uk/news/business-15856116

This is not to say that the mailing list should be given up. A smaller part of the community is present on the mailing list, and seeing there rather selective posts once in a while than a constant flow of messages is possibly the reason why the list has seen a stable number of subscribers. The key conclusion though is that it brings most success to focus primarily on the one location where members of the community are and where they feel more comfortable. This focus has proven to lead to a significantly higher level of engagement. In that light, the downsizing of efforts in SESERV presence on Twitter – as decided in the re-launch of the SESERV on-line activities in April 2011 – appears to have been a wise move. Even though it might be somewhat unfair to compare a well curated channel (LinkedIn) with a much less attended one (Twitter), the fact that the LinkedIn group shows 216 members while the SESERV Twitter account has only 34 followers undeniably indicates that the choice for LinkedIn was the right one.

With an engaged community in this well-established channel, the LinkedIn FISE group will constitute a key element in ongoing community support after SESERV's formal end.

6.1.2 Distribution of Expertise and Engaged Projects

The distribution of expertise and projects engaged are measured by three KPIs:

- K3: Distribution of expertise or community profile.
- K4: Projects engaged.
- K5: Participants at specific/all SESERV events (workshops).

Distribution of expertise or community profile is documented by the percentage of expertise between the different disciplines measured by a poll of current users. Its purpose is to ensure a reasonable distribution of expertise in the SESERV community, in order to ensure multidisciplinary engagement with problems. The threshold to reach has been defined at participants with a technical profile at a maximum of 75% of cases and with a profile from other domains at a minimum of 25% of cases. The contingency plan for any potential deviation from the threshold was to intensify efforts in ensuring that SESERV gathers a multidisciplinary variety of people.

Engaged projects are measured by the total number of projects that have provided a contribution in such forms as on-line surveys, questionnaires, etc. A project is counted if at least one project representative has contributed (several representatives from the same project providing a contribution results in a single project being counted). The purpose of this indicator is to assure that the scope of problems considered by SESERV is as wide as possible. The minimum threshold to reach was set at 50 projects providing a contribution. The contingency plan for any potential deviation from the threshold was to increase the network of contacts through partners.

Participants at SESERV events are measured by the total number of people attending either a single ("specific") or all SESERV workshops. Its purpose is to determine a success metric for official SESERV events, i.e., workshops as it provides valuable information on community interest in specific problems encountered by SESERV. The minimum threshold to reach was defined for the Oxford workshop at 40 participants, for the Athens workshop at 25 participants, and for the Brussels workshop at 50 participants. The contingency plan for any potential deviation from the threshold was to intensify dissemination efforts and to give more publicity to the SESERV workshops.

Table 11: Distribution of Expertise and Engaged Projects KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K3: Participants at specific/all SESERV events (workshops)	**Oxford workshop: 69 participants** **Athens workshop: 53 participants** **Brussels workshop: 49 participants**	Oxford workshop: Yes Yes Athens workshop: Yes Yes Brussels workshop: No No	Oxford workshop: No Athens workshop: No Brussels workshop: Yes
K4: Distribution of expertise or community profile	**Oxford workshop: 30% with technical profile, other profiles 70%** **Athens workshop: 55% with technical profile, other profiles 45%** **Brussels workshop: 47% with technical profile, other profiles 53%**	Oxford workshop: Yes Yes Athens workshop: Yes Yes Brussels workshop: Yes Yes	Oxford workshop: No Athens workshop: No Brussels workshop: No
K5: Projects engaged	**93 projects**	Yes Yes	No

Table 11 shows that two out of three workshops (Oxford, Athens) have reached the threshold of participants. With 69 and 53 participants at the Oxford and Athens workshop, the threshold was significantly exceeded. The Brussels workshop missed the threshold by one participant. As a consequence of fewer registrations ahead of the Brussels workshop, the contingency plan was activated. This included a wide variety of activities performed and content items created to attract registrations and participants at the event.

Specific steps in the contingency plan for the Brussels workshop involved the production of a professional quality flyer put on-line on the SESERV website and advertised through the FISE community channels (LinkedIn group, mailing list), SESERV partner contacts, and several mailing lists (e.g., all@future-internet.eu, the FI Cluster mailing list). The flyer was not only used as a tool to promote the event in on-line channels as described, it was also printed and distributed at events SESERV members attended.

The front page of the flyer advertising the SESERV Brussels workshop is captured in Figure 9. The flyer was three pages in total. The second and third pages provided the detailed agenda filled with interesting content – embedding each talk into a theme and emphasizing the involvement of key speakers. In order to further announce and promote the high-level speakers that SESERV had been able to involve in the event, separate keynote announcements were placed on-line and fed into the LinkedIn FISE group. Figure 23 shows an example of such an on-line post announcing a keynote at the Brussels workshop.

Regarding distribution of expertise or community profile, Table 11 shows that the targeted threshold was not only reached, but also significantly surpassed – surpassing referring in this context to less than 75% participants with a technical profile. These numbers were obtained from the registration forms for the respective SESERV workshop. Two main profiles were stated, technical and other. The technical profile was structured into sub-categories of research and industry (Figure 24). The other profile was equally structured into two sub-categories, namely policy and socio-economic. Participants from either social

sciences or economics were assigned to the latter sub-category. In accordance with these profile categories and sub-categories, the following assignments emerge.

SESERV Socio-Economics Service for European Research Projects

Search this site

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Studying the Future Internet >

Keynote Announcement: Stephen Minton (IDC)

posted 4 Jun 2012 02:42 by Patrick Poullie [updated 9 Jul 2012 04:54 by Martin Waldburger]

Stephen Minton, Vice President for the IDC Worldwide IT Markets, will give a keynote speech at the SESERV-organized workshop **Socio-economic Certainties and Change for the Future Internet**:

IDC looks at the growing market segments of the Future Internet, and how the social and economic context of its "Information Society Index" applies to its industry stakeholders. The analysis and forecast will set a context for much of the discussion throughout the day.

The workshop will take place in Brussels on **June 20**, 2012, right before the Digital Agenda Assembly. Participation is open and free-of-charge. Take the opportunity and **register on-line**.

On the Speaker

Stephen Minton is a Vice President and analyst at IDC covering global ICT markets. He manages IDC's industry-standard Worldwide Black Book research, which tracks ICT spending in 54 countries. In this role, he co-ordinates IDC's global IT spending research and analysis, helping IT organisations around the world with their planning, resource allocation and competitive analysis initiatives. Additionally, he is responsible for the IDC Information Society Index, which benchmarks countries according to IT and Internet socio-economic impact and penetration.

Stephen is the author of papers which focus on globalisation and the spread of technology into emerging markets, and is a regular speaker at major international events and conferences on the subject of macro-level ICT trends. In 2002, he addressed the United Nations in New York, speaking to UN ambassadors on the subject of the Information Society. He is regularly quoted for his views on ICT market trends by major media publications, and has featured on CNBC and Bloomberg television.

Stephen previously worked with Digital Equipment Corporation (DEC) in a marketing role. Originally from Hartlepool in the North of England, he graduated from the University of Salford in 1995. He has also worked in the field of consumer market research with Millward Brown International. He moved from IDC's UK office to the United States in 2001, where he spent ten years in Massachusetts before returning to the UK in 2011. He currently lives with his wife and two daughters in Hartlepool, England.

Figure 23: Keynote Announcement Example for Promotion of High-level Speakers

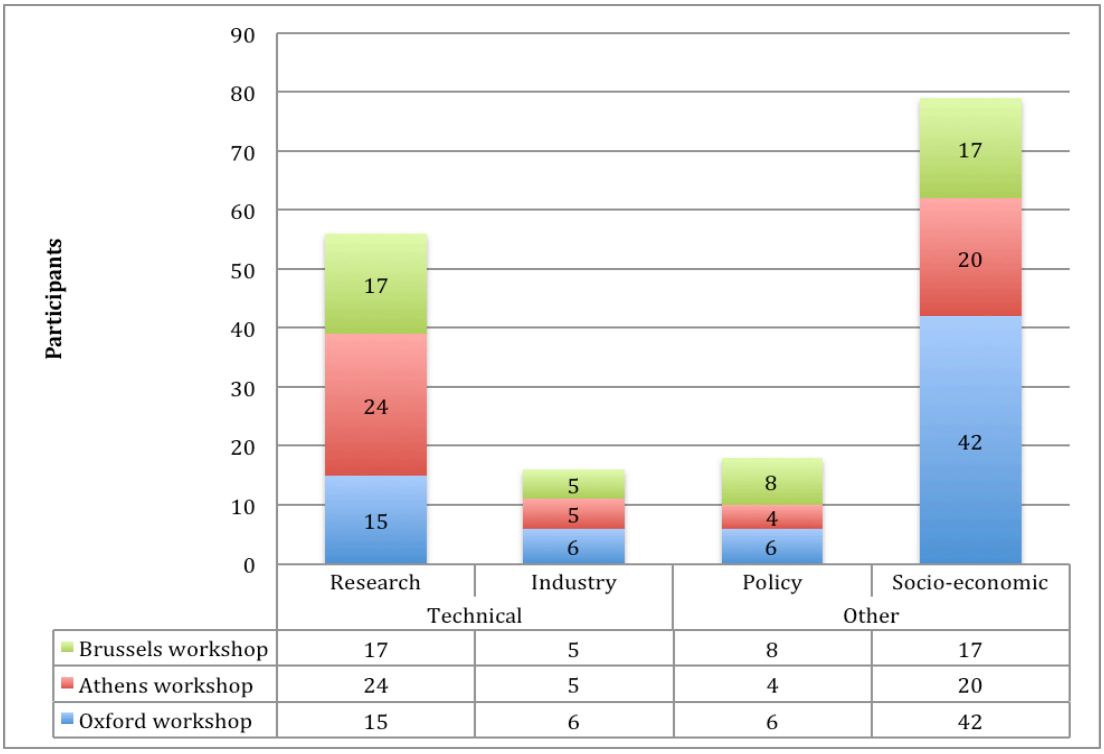

Figure 24: Profile of Workshop Participants[37]

[37] Not counting 2 participants in the Brussels workshop for which the profile was unknown.

These numbers originate from the analysis of SESERV workshop attendance. The statistics provided by LinkedIn regarding (self-declared) industry sector, function, and seniority may provide an additional source to characterize the profiles of FISE community members.

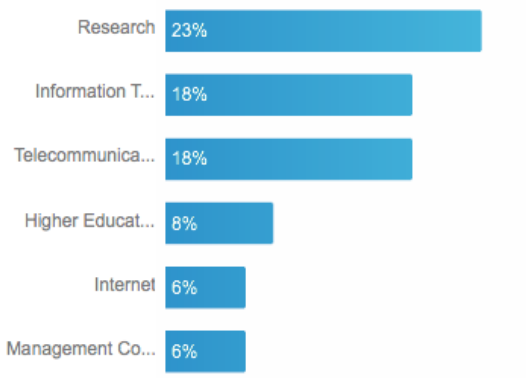

Figure 25: Self-declared Industry Affiliation for LinkedIn FISE Group Members

The top-3 industries the 216 community members declare their background in are research (50), information technology and services (39), and telecommunications (38). The two most often declared functions are research (51) and education (42). Other functions are significantly less frequent. A clear majority states itself to be of senior level (69), while manager (33) is less than half as often declared. Figure 25, Figure 26, and Figure 27 visually represent the FISE LinkedIn group community profile for the dimensions of industry, position, and seniority, respectively.

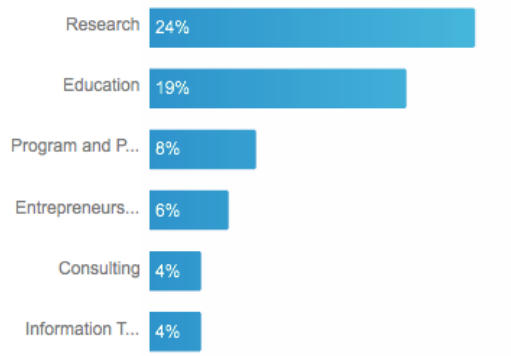

Figure 26: Self-declared Position for LinkedIn FISE Group Members

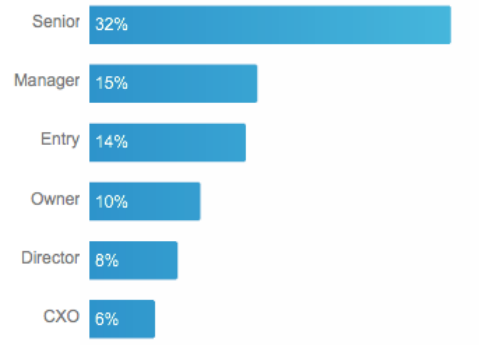

Figure 27: Self-declared Seniority for LinkedIn FISE Group Members

The third indicator in this KPI group – projects engaged – complements the community-oriented analyses conducted for the two indicators of participants in SESERV workshops and community profile. Table 11 shows a total of 93 projects engaged via providing a contribution to a SESERV on-line survey or questionnaire. This high number of engaged projects not only reaches the threshold (50), it surpasses it as the value is close to double.

Contributions to three SESERV on-line surveys and one questionnaire were considered in this KPI. Representatives from 45 distinct projects contributed to the SE priority survey[38] initiated in mid April 2011. The tussle analysis questionnaire which formed the basis for a SE driven project profiling as detailed in deliverable D2.1 was sent to and answered by 16 distinct research projects. The focus group survey[39] (initiated in October 2011) and the user-centricity survey[40] (initiated in May 2012), have seen contributions from representatives out of 22 and 35 individual projects, respectively. As these numbers per survey/questionnaire indicate, the four surveys/questionnaires attracted representatives from a wide variety of projects. Only a small number of projects is listed as engaged project for more than one survey/questionnaire – in other words, there are not many overlaps so that the total number of 93 distinct projects engaged reflects SESERV's wide reach into the European project and research landscape.

6.1.3 Public Interest in SESERV

The public interest in SESERV is measured by a single indicator – one though that acts as an umbrella indicator relating to multiple included metrics to be reported:

- K6: Website access.

The primary object to report on with respect to public interest in SESERV is the project website. The website serves as the main on-line presence for the project. Website access is measured by various metrics of website activity within the period from mid April 2011 (SESERV website re-launch) and mid July 2012. Its purpose is to provide valuable information on public interest in the SESERV project with a high temporal resolution. The minimum threshold to reach has been set at 300 visits per month. The contingency plan for any potential deviation from the threshold was to promote the web site in the FISE group on LinkedIn and to promote it at events.

Table 12: Public Interest in SESERV KPI

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K6: Website access	**715 visits per month**	Yes Yes	No

The primary metric to look at for documenting website access is the number of visits registered. Figure 28 shows visits in the period from April 13, 2011 to July 13, 2012 (15 months) on a weekly basis. The small markings at the timeline denote events of special importance to SESERV. From left to right, these markings refer to:

- FIA Budapest on May 18-19, 2011.

[38] http://www.seserv.org/fise-conversation/seservsocio-economicssurvey
[39] http://www.seserv.org/fise-conversation/participateinfise2012focusgroups
[40] http://www.seserv.org/fise-conversation/user-centricity-expressyourself

- SESERV Oxford workshop on June 28, 2011.
- FIA Poznan and FISE Working Group workshop on October 25-27, 2011.
- SESERV Athens workshop on January 31, 2012.
- FIA Aalborg on May 10-11, 2012.
- SESERV Brussels WS on June 20, 2012.

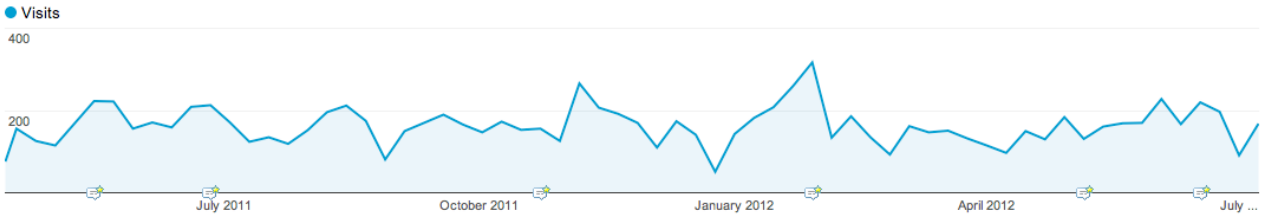

Figure 28: Visits on SESERV Website (Weekly Basis)

In total, 10729 visits were accounted in the period mentioned of 15 months. This translates into 715 visits per month (rounded), which is more than double the threshold (300 visits per month) defined. Table 12 summarizes these achievements. The high number of visits reached is remarkable for a website like SESERV's. It indicates that the website attracts considerable public interest and that it reaches out to the wider community.

The highest peak in terms of visits was created by the SESERV Athens workshop (see the respective marking in Figure 28) with 317 visits in a single week. The second highest peak in visits is noted subsequent to the FIA Poznan and the collocated FISE Working Group workshop when the SESERV co-organized FIA session material as well as the analysis of the workshop came on-line. Other peaks with more than 200 visits per week registered were created at the FIA Budapest, the SESERV Oxford workshop, and the SESERV Brussels workshop. The peak in early September 2011 emerged at the time when the deliverables D2.1 and D3.1 were published.

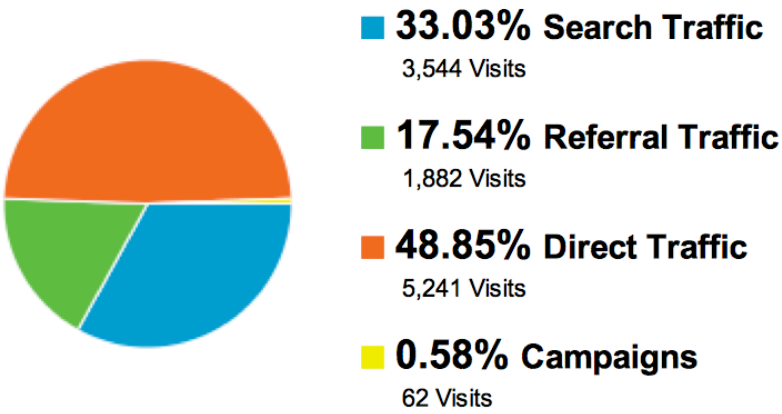

Figure 29: Traffic Sources of SESERV Website

It is interesting to see where visits and, in more general terms, website traffic come from. Figure 29 outlines various traffic sources. Nearly half of all visits reflect direct traffic. This means that website users access the SESERV website (or any of its sub-pages) by entering the respective URL directly in their web browsers. Alternatively, users may make use of a bookmark they added some time earlier. A number this high for direct traffic indicates that SESERV, its website, and the respective URL is very well known in its user

base. The promotional activities of SESERV in advertising its web presence have therefore been successful.

The second largest portion of visits (roughly a third of all traffic) originates from people using a search engine and accessing the SESERV website by means of a search result. The analysis of keywords[41] used when searching is shown in Figure 30. The most often used keyword is the project acronym. Beyond this project name-oriented search case, there are a number of search cases that are much less frequent, since they are highly specific. These cases reflect users that express focused information needs. For instance, regarding the social impact of ICT, disruptions in the FI, or the Internet ecosystem. Other users are looking for direct access to a SESERV workshop website section or to videos from SESERV.

	Keyword	Visits	Visits
1.	seserv	458	12.92%
2.	(not provided)	381	10.75%
3.	social impact of ict	56	1.58%
4.	network science: from the internet to human communications	55	1.55%
5.	how disruptive technology influences fi	52	1.47%
6.	seserv videos	49	1.38%
7.	fundamental limitations of current internet and the path to future internet	42	1.19%
8.	internet+ecosystem+value+chain	34	0.96%
9.	seserv project	31	0.87%
10.	seserv workshop athens	25	0.71%

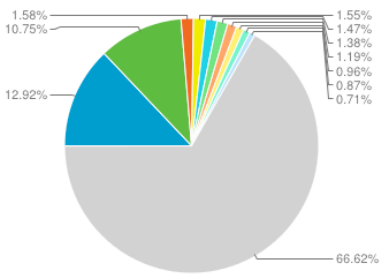

Figure 30: Keywords Used for Search Traffic

Referral traffic amounts for the third largest number of visits generated. Figure 31 depicts the top-10 sources for referral traffic on the SESERV website. While a good part of traffic is caused by referrals happening from alternatives to the primary SESERV domain seserv.org (seserv.eu and sites.google.com), it is highly positive to see a notable amount of visits from other sources. On the one hand, the large share of referrals from LinkedIn is important. These visits relate to members of the LinkedIn FISE group clicking (from within LinkedIn) on a post with a link to a SESERV web page. Other referring sites include the FISE Working Group wiki, IT-Tude, and the FI-PPP.

	Source	Visits	Visits
1.	sites.google.com	275	14.61%
2.	linkedin.com	259	13.76%
3.	oii.ox.ac.uk	117	6.22%
4.	seserv.eu	101	5.37%
5.	fisa.future-internet.eu	99	5.26%
6.	reviewer.seserv.org	80	4.25%
7.	it-tude.com	60	3.19%
8.	cordis.europa.eu	59	3.13%
9.	fi3p.eu	55	2.92%
10.	google.com	46	2.44%

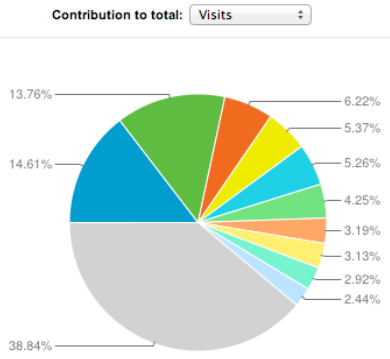

Figure 31: Distribution of Sources for Referral Traffic

[41] The second most frequent keyword category listed as „not provided“ refers to encrypted search traffic (using HTTPS) for which no detailed keyword analysis is made available by Google.

The audience on the SESERV website consists of slightly more new visitors (51.43%) than returning visitors (48.57%). In the accounting period from mid April 2011 to mid July 2012, a total of 5 492 unique visitors have accessed the website. On average, 2 pages per visit are accessed, totaling up to 21 851 page views overall. 2 pages per visit might sound modest, but when combined with the average duration users stay on the website this metric is put into the right perspective: The average visit duration is high with 6 minutes and 24 seconds – this means that even though users do not access a large number of different pages per visit, those pages they do visit they actually spend time on (more than 3 minutes per page).

When looking at public interest and website access from a more qualitative point of view, the focus moves towards content items that were most often accessed or downloaded. Detailed insight into download statistics per content item published by SESERV is provided in the analysis of research support priority KPIs (cf. Section 6.2).

6.1.4 SESERV Contributions and Meetings Attended

This KPI group is measured by two indicators:

- K7: SESERV contributions to the wider community.
- K8: Event reports produced.

SESERV contributions to the wider community are measured by the active contributions made to related groups such as standards, cluster presentations, workshops etc. The primary metric in use to document these (diverse) contributions is the number of meeting attendance reports produced by SESERV members. This metric is relevant as meeting attendance reports, on the one hand, support project-internal reporting regarding contributions made and insight gained. On the other hand, meeting attendance reports include a publishable digest section which serves as the basis for publishing on-line articles on the meeting attended and the contribution made in either of the three columns on SESERV's front page (Studying the FI, FISE Conversation, Building the FI). Both the project-internal and project-external uses as described determine the purposes of this KPI. The minimum threshold to reach was set at 24 meeting attendance reports produced. The contingency plan for any potential deviation from the threshold was to contact more stakeholders and initiatives, groups, etc. in order to increase SESERV participation in community events – and by that to produce more meeting attendance reports.

Event reports produced are measured by the number of FIA sessions and workshops that SESERV (co-)organizes and for which an event report is written (document output produced by SESERV in the form of official events organized or co-organized by SESERV). The threshold to reach has been set at 7 event reports to be produced. The contingency plan for any potential deviation from the threshold was to provide more relevant topics for the FIA sessions and to intensify efforts to disseminate the events.

Table 13: SESERV Contributions and Attended Meetings KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K7: SESERV contributions to the wider community	**57 meeting attendance reports**	Yes Yes	No
K8: Event reports produced	**5 FIA session reports,** **4 Workshop reports**	Yes Yes	No

Table 13 shows a high number of 57 meeting attendance reports being produced up to mid July 2012. The threshold has not only been reached, it has been more than doubled. This documents SESERV's impressive active involvement in many events. For a Coordination Action clearly the presence and participation in community events is a key factor for success. Accordingly, this achievement is critical to the success of SESERV. Even more so, the list of meeting attendance reports shows SESERV contributions at a wide variety of meetings – being involved in various events of different initiatives and at different levels is as important as being involved in many events. Figure 15 gave an impression (for the year 2012) of both the high number of events with SESERV contribution as well as the variety of those events in terms of nature, contribution, audience, and content-wise focus.

Figure 32 shows an example for how meeting attendance reports create an impact – in this example in terms of publicly available content on the SESERV website. The example shows a screenshot of an on-line article posted in the "building the Future Internet" column. The article explains the role of SE at the joint ITU-T/ISO workshop on Future Networks standardization (June 2012, Geneva, Switzerland).

The article begins with a short recapitulation on the event's purpose and objectives telling the reader what this event was about and the context within which it was run. The article then goes on to put an emphasis on the relation of SE with Future Networks. It does so by citing a key quotation – such a way as to stand out – from an event participant. The remainder of the article links to this quotation by relating it to the SESERV-driven contribution to this event.

In this example, SESERV's contribution consisted of a talk given on tussle analysis as a means to anticipate the socio-economic impact of technology at design time and on the respective standardization activities in the ITU-T emerging in the draft recommendation Y.FNsocioeconomic. The article shown in Figure 32 exemplifies the way in which valuable content is created from a meeting attendance report: The embedded slides had already been viewed 45 times in only 3 weeks at the time of writing this deliverable.

Turning the focus from meeting attendance reports to event reports produced for SESERV (co-)organized FIA sessions and workshops relates to the evaluation of the respective deliverables. Deliverables D1.1 (First Year Report on Conference Session) and D1.3 (Second Year Report on Conference Session) document FIA sessions that have been co-organized by SESERV. Deliverables D1.2 (First Year Report on Scientific Workshops) and D1.4 (Second Year Report on Scientific Workshops) document SESERV-organized workshops.

Table 13 shows with 5 FIA session reports and 4 SESERV workshop reports that the threshold has not only been reached, it has been surpassed. This higher number achieved is due to SESERV's commitment in co-organizing two (instead of one) sessions at FIA Aalborg as well as the FISE Working Group workshop collocated with FIA Poznan. Event reports for the following FIA sessions and SESERV workshops have been produced:

- FIA Ghent: "Information as an Economic Good" session
- FIA Budapest: "The Economics of Privacy" session
- FIA Poznan: "Value creation, Value Flows, and Liability over Virtual Resources" session
- FIA Aalborg: "Novel Networking and Relationship with Applications" session

- FIA Aalborg: “Open Platforms for Innovation” session
- SESERV Oxford workshop: “The Future Internet: The Social Nature of Technical Choices”
- FISE Working Group workshop: “How Disruptive Technologies Influence the FI Business Ecosystem”
- SESERV Athens workshop: “The Interplay of Economics and Technology for the Future Internet”
- SESERV Brussels workshop: “Socio-economic Certainties and Change for the Future Internet”

In a similar way as meeting attendance reports are acknowledged as a key driver for SESERV’s success as a Coordination Action, FIA session and SESERV workshop reports play an important role in seeding project-internal developments as well as in facilitating the production of valuable content for publication and for discussion with the community. Figure 5 presented an example – here for the Brussels workshop – of how the analysis of workshop key take-away messages has driven their use in a format targeting the web. This shows the entry point to the respective prezi produced – this prezi constitutes highly popular content on the SESERV website.

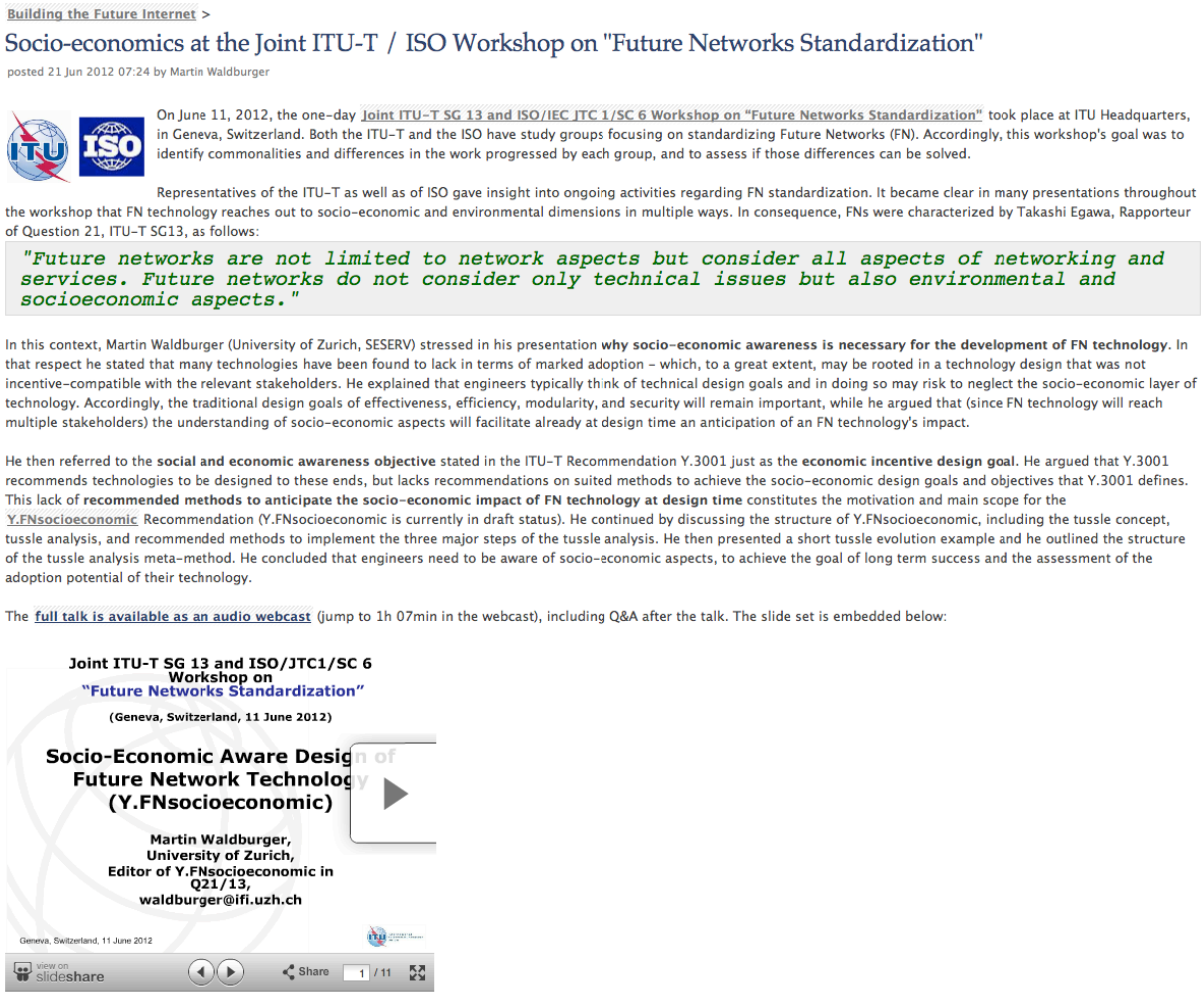

Figure 32: Sample Article Produced from the Digest of a Meeting Attendance Report

6.2 SESERV Research Support Priority KPIs

The category of research support priority KPIs includes 6 indicators. Two indicators document the number of papers and deliverables, respectively, produced in SESERV (Section 6.2.1). Two indicators report on the number of technology-driven and socio-economic priorities identified (Section 6.2.2). Finally, two indicators shed light on concrete applications of methodologies proposed by SESERV (Section 6.2.3) – covering research project profiles and detailed tussle analyses for a research project's FI technology.

6.2.1 SESERV Publications

SESERV publications are documented by two KPIs:

- K9: SESERV deliverables.
- K10: Number of publications.

SESERV deliverables are measured by the number of formal deliverables produced (and accepted). Its purpose is to quantify the compliance of SESERV with engagements stipulated by contract. The threshold to reach was set at 20 deliverables (including management reports). Since deliverables were published only after meeting a high quality standard, the contingency plan for any potential deviation from the threshold was to reinforce the peer review process internally to ensure the quality of deliverables.

Number of publications is measured by the number of papers published on the SESERV website. Its purpose is to document results produced by SESERV in the form of publications. The threshold to reach was set at 2 papers. The contingency plan for any potential deviation from the threshold was to encourage and help partners to publish papers in conferences and to find the most appropriated events for submitting papers.

Table 14: SESERV Publications KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K9: SESERV deliverables	**21 deliverables**	Yes Yes	No
K10: Number of publications	**19 papers (white papers, conference papers, book chapters, and books)**	Yes Yes	No

As Table 14 summarizes, SESERV has produced a total of 21 deliverables in the two years of project duration. This number includes technical and management deliverables, both public and restricted ones. 10 deliverables have been produced in the first project year, 11 in the second year. The deliverable D1.5 "Methodology for SESERV Year 2 Coordination Activities" was recently added by the project in order to document good practice for and lessons learned from conducting focus groups (a key instrument of use in the second project year). With 21 deliverables available, the threshold is not only reached, but surpassed.

Public deliverables are made available for reading and download on the SESERV website[42]. Deliverables constitute highly popular content among the website visitors and the FISE community – this is especially true for the deliverables from SESERV Work

[42] http://www.seserv.org/publications

Packages 2 (Economic Future Internet Coordination Activities) and 3 (Social Future Internet Coordination Activities). As a matter of fact, deliverable D2.1 turned out to be the most popular on-line content item overall with 2127 reads since its publication in mid September 2011[43]:

- D2.1 First Report on Economic Future Internet Coordination Activities: 2127 reads
- D3.1 First Report on Social Future Internet Coordination Activities: 525 reads
- D1.1 First Year Report on Conference Session: 195 reads
- D1.2 First Year Report on Scientific Workshop: 94 reads

In addition to deliverables, the project has been very active in publishing white papers, conference papers, book chapters, and books. Table 14 reports a total number of 19 publications which is far beyond the threshold. All publications are made available for reading and download on the website.

Two publications out of project year 2 are especially note-worthy as they each received a best paper award given away by the FIA Book 2012 organizers. In fact, these papers with significant SESERV-contribution received two out of the three best paper awards for the FIA Book 2012. These papers are:

- "Cross-Disciplinary Lessons for the Future Internet"[44] by Anne-Marie Oostveen, Isis Hjorth, Brian Pickering, Michael Boniface, Eric T. Meyer, Cristobal Cobo, and Ralph Schroeder
- "Design Principles for the Future Internet Architecture"[45] by Dimitri Papadimitriou, Theodore Zahariadis, Pedro Martinez-Julia, Ioanna Papafili, Vito Morreale, Francesco Torelli, Bernard Sales, and Piet Demeester

Papers are among the most popular content items on the SESERV website. Table 15 lists the six most often viewed papers and indicates for each paper when it was published, how many times it was read, and which rank in the overall reading statistics for published documents (not including presentations) it holds.

Table 15: Top-6 SESERV Papers Published

Title	Date of Publication	Reads	Rank[46]
Legislative Tensions In Participation And Privacy	May 12, 2011	**329**	3
A Tussle Analysis for Information-Centric Networking Architectures	May 15, 2012	**300**	4
Initial SESERV Survey Results (May-11)	May 13, 2011	**291**	5
Design Principles for the Future Internet Architecture	May 15, 2012	**290**	6
Cross-Disciplinary Lessons for the Future Internet	May 15, 2012	**263**	7
SESERV Focus Group Selection Survey Oct-Dec 2011	January 23, 2012	**211**	8

Papers and deliverables have been found to be key elements when it comes to SESERV's publication activities. The publication of on-line articles, presentation slides, and videos

[43] The list covers public deliverables with their respective reading statistics published in September or November 2011. A series of public deliverables (D1.3, D1.4, D1.5, D2.2, D3.2, D4.2) has become available at the end of project year 2 – for these deliverables, no statistical data is available as yet due to their recent publication.
[44] http://www.springerlink.com/content/55723166807n1643/fulltext.pdf?MUD=MP
[45] http://www.scribd.com/doc/93639703/fiabook2012-dp
[46] Regarding documents (including deliverables and papers, excluding presentations)

determines equally important publication activities. Videos are made use of during SESERV workshops. Individual talks have been recorded and published (with the consent of the respective speaker) over SESERV's YouTube channel. Videos were embedded in on-line articles presenting workshop results and analysis. Figure 33 shows monthly viewing statistics for SESERV's videos on YouTube for the past year (mid July 2011 to mid July 2012, Monthly Basis). The two peaks – one in March 2012 with 60 views and one in August 2011 with 117 views – are outstanding. These two peaks emerge as the direct consequence of interest in the Oxford and Athens workshops continuing thanks to the video material produced.

Figure 33: Viewing Statistics for SESERV Videos on YouTube

Regarding on-line articles published on the SESERV website, the project has shown to be very active. As of July 13, 2012, a total number of 95 articles had been published in either of the three main columns on the website. The middle column (FISE Conversation) was the most contributed to with 47 articles posted, followed by the column Building the Future Internet with 31 articles, and the column Studying the Future Internet with 17 articles. A total of 95 articles were published in the time period from website re-launch (mid April 2011) to mid July 2012 - over a period of 65 weeks. In other words, (roughly) one new on-line article was published every second week.

Many on-line articles embed presentation slides – both for presentations given by a member of SESERV and by speakers from initiatives engaged with SESERV. As of July 13, 2012, an impressive number of 39 presentations given by SESERV members in the FISE community had been made available[47] for on-line reading and for download.

Embedded presentation slides are a driver for increased visit numbers and for longer visits. Table 16 lists those 54 published presentations that have been viewed at least 100 times. The top-3 presentations (by popularity) with up to 544 views for the first-ranked one are all presentations from SESERV members. Many presentations given by members of the community have attracted a high number of viewers. It may be of special interest here to note that multiple presentations given at the SESERV Brussels workshop have already gained a high ranking – despite being published for 3 weeks only. For instance, Andrea Glorioso's talk on the "No Disconnect Strategy" at the Brussels workshop has attracted a lot of interest with 243 views so far.

Table 16: Presentations Published on SESERV's Website with at least 100 Views

Title	Date of Publication	Views
Costas Kalogiros: Illustrative Tussle Analysis for DNS, TCP	March 11, 2012	**544**
Martin Waldburger: Methods to Achieve Socio-economic Design Goals and	January 31, 2012	**532**

[47] http://www.seserv.org/publications/presentations

Objectives for Future Networks (Y.FNsocioeconomic)		
Michael Boniface: How Disruptive Technologies Influence the FI Ecosystem	November 1, 2011	**421**
SESERV: Socio-Economic Services for European Research Projects	April 16, 2011	**376**
David Hausheer: Value of Virtualized Programmable Network Infrastructures	November 12, 2011	**370**
Jasper Lentjes: Internet as Universal Business System in SME	November 12, 2011	**352**
Sergio Gusmeroli: The Internet as Universal Business System	November 12, 2011	**336**
Mick Haynes: Hitrail: The Hermes VPN Network for Railway Services	November 12, 2011	**321**
Robin Mason: Two-sided Perspectives on Net Neutrality	February 17, 2012	**311**
Guilherme Sperb Machado: SLACC - SLA Support System for Cloud Computing	June 21, 2011	**303**
Kevin Doolin: Integration of Pervasive and Social Computing	August 15, 2011	**295**
Man-Sze Li: The Societal and Business Applications Perspective	November 12, 2011	**286**
Martin Waldburger: High-speed Accounting for Virtual Resources	November 12, 2011	**271**
Sergi Figuerola: Value Creation, Value Flows and Liability over Virtual Resources	November 12, 2011	**268**
Vânia Gonçalves: Management Aspects of Virtualization Business Scenarios	November 12, 2011	**267**
Makis Stamatelatos: Value Creation, Value Flows and Liability over Virtual Resources: Infrastructure Perspective	November 12, 2011	**267**
William H. Dutton: Freedom of Connection - Freedom of Expression	August 15, 2011	**265**
Michael Boniface: Future Internet Support Actions	May 19, 2011	**264**
Michael Boniface: Adaptability for Personalized and Collective Media Experiences	May 17, 2011	**264**
Bob Briscoe: Internet Marke Failures: Technological Causes and Solutions	February 17, 2012	**259**
Luis M. Correia: SAIL - An Overview	August 15, 2011	**259**
Nicole Dewandre: Societal Interface of the Digital Agenda for Europe	August 15, 2011	**258**
Manos Dramitinos: Tussle Analysis for FP7 Project ETICS Case Studies	March 11, 2012	**253**
Costas Kalogiros: Update on Recent SESERV Results and Upcoming Events	October 7, 2011	**253**
Michael Boniface: Value Creation, Value Flows and Liability over Virtualized Resources	November 1, 2011	**248**
Costas Courcoubetis: Introduction to Tussle Analysis Methodology	March 11, 2012	**245**
Mike Surridge: Resilient Communities and Digital Jails	April 26, 2011	**244**
Andrea Glorioso: No Disconnect Strategy	June 26, 2012	**243**
Costas Kalogiros: A SESERV Methodology for Tussle Analysis in Future Internet Technologies	September 28, 2011	**237**
Alissa Cooper: Internet Traffic Management in the UK	March 9, 2012	**227**
Burkhard Stiller: Economic and User Perspective of Inter-ISP Traffic Optimization	May 26, 2011	**226**
Michael Boniface: Collective and Participative Experiences in Real-world and Online Communities	September 27, 2011	**221**
Burkhard Stiller: SESERV - Socio-economic CSA Interactions with EC D1 Projects	May 26, 2011	**220**
Elwyn Davies: The Social Nature of Technical Choices	August 15, 2011	**218**
Michael Boniface: Socio-Economics Service for European Research Projects	April 29, 2011	**203**
Fabio Hecht: Economic Traffic Management (ETM) Mechanisms	May 24, 2011	**200**
Alessandro Bogliolo: Socio-Economic Certainties and Change for the Future Internet	June 26, 2012	**194**
George D. Stamoulis: Internet Tussles Involving Information	April 14, 2011	**191**
Falk von Bornstaedt: The Evolution of Business Models in the Internet: Sending Party Network Pays as the Basis for Quality of Service (QoS) Support in the Internet	March 9, 2012	**190**
Martin Waldburger: High-speed Accounting for Virtual Resources	December 20, 2011	**183**
Martin Waldburger: Economic and User Perspective of Inter-ISP Traffic Optimization	June 8, 2011	**176**
Vesa Terävä: Net Neutrality in Europe	June 26, 2012	**168**
Falk von Bornstaedt: Networks: Perspectives and Analysis in the Future Internet	June 26, 2012	**162**

Stephen Minton: Tech Transformation in the Age of Uncertainty	June 26, 2012	**147**
Sara de Freitas: The Gamification of Everyday Life	June 26, 2012	**138**
Michael Boniface: Future Internet Socio-Economics	February 11, 2012	**131**
George D. Stamoulis: 3rd Workshop on Economic Traffic Management	June 6, 2011	**124**
Burkhard Stiller: SESERV - Socio-economic CSA Interactions with EC D1 Projects	May 26, 2011	**119**
Eric Meyer: SESERV and Privacy	May 13, 2011	**113**
Eric Meyer: Knetworks - Ongoing Activities	July 6, 2011	**109**
Javier Salcedo: Cloud Computing	June 26, 2012	**104**
Aleksandra Kuczerawy: Privacy Issues in Future Internet	June 26, 2012	**104**
Alan Hartman: Trust Measurement and Management	June 26, 2012	**103**

6.2.2 Technology-driven and Socio-economic Priorities

This KPI group is documented by two indicators:

- K11: Research priorities identified.
- K12: Socio-economic priorities assessed.

Research priorities are measured by the number of technology-driven research priorities identified by SESERV. This indicator's purpose is to measure technology-driven research priorities identified by SESERV. As such, it may be seen in contrast to the second indicator in this KPI group. No threshold was set for this indicator. Consequently, no contingency plan was defined.

Socio-economic priorities are measured by the number of socio-economic research priorities listed in the Digital Agenda addressed by SESERV. This indicator's purpose is to quantify the socio-economic driven research priorities identified by SESERV. No threshold was set for this indicator. Consequently, no contingency plan was defined.

Table 17: Technology-driven and Socio-economic Priorities KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K11: Research priorities identified	**7 tussle groups (consolidated tussles around Internet and cloud functionality and tussle cartography) 11 technology-driven recommendations in year 2**	n/a n/a	n/a
K12: Socio-economic priorities assessed	**8 cross-cutting societal themes 5 focus groups in year 2 22 socio-economic recommendations in year 2**	n/a n/a	n/a

Table 17 reveals that 7 tussle categories have been identified. The tussle groups are documented in deliverable D2.1 (First Report on Economic Future Internet Coordination Activities). The identified tussle groups are the following:

- Network Security.
- Interconnection Agreements.
- Allocation of scarce resources.
- Responsibility for agreement violation.

- Routing / provisioning Service Requests (selecting a provider to fulfill a customer request).
- Controlling content/service delivery (referring to possible anti-competitive tactics).
- Controlling access to sensitive data.

These tussle groups determined throughout project year 1 have been consolidated in project year 2 and related to Internet and cloud functionalities. The in-depth analysis of those consolidated tussles along determined functionalities allowed a tussle cartography to be drawn – linking tussles to functionalities and mapping them visually. Deliverable D2.2 (Final Report on Economic Future Internet Coordination Activities) documents these findings in detail. In terms of overall conclusions the set of 11 recommendations with respect to technology-driven research priorities have been determined as presented in D2.2. A set of 7 recommendations result from bilateral discussions, focus groups, and meetings as they address research projects, providers, and policy makers for successfully redesigning and configuring FI technologies. A set of 4 recommendations result from joint work with a team of European experts in high-speed accounting.

Just as SESERV Work Package 2 focused on technology-driven priorities, so SESERV Work Package 3 focused on the identification and assessment of socio-economic priorities. This effort resulted at the end of project year 1 in 8 cross-cutting societal themes being determined. Deliverable D3.1 (First Report on Social Future Internet Coordination Activities) presents the cross-cutting themes in detail while they are summarized below:

- Call for increased transparency (data use and systems).
- Call for more user-centricity and control.
- Continuing need for further multi-disciplinary and cross-sectorial bridging.
- Striking balances between outer-poles in debates and design.
- Facilitating further digital literacy development.
- Addressing lack of common vocabularies and definitions.
- Need for clarifying digital rights (including digital choice).
- Inviting global regulatory frameworks.

These cross-cutting societal themes drove the preparation, selection, design, and conduct of a central instrument in use throughout project year 2, that of focus groups. Six focus groups have been initiated, held, and evaluated in total – 4 in Work Package 2 and 2 in Work Package 3. Deliverables D2.2 (Final Report on Economic Future Internet Coordination Activities) and D3.2 (Final Report on Social Future Internet Coordination Activities) present the focus groups in detail and outline insight obtained from the focus groups. D3.2 explains the procedure by which the focus groups were selected. Deliverable D1.5 (Methodology for SESERV Year 2 Coordination Activities), in addition, provides in-depth analysis of the focus group methodology applied. In terms of overall conclusions the set of 22 recommendations with respect to socio-economically driven priorities have been determined as presented in D3.2. These recommendations are grouped into six major themes that have emerged from the project:

- Project Design and Development.
- Participant/User Experience.

- Internet Data.
- Regulation and Public Policy.
- Transparency and Trust.
- Citizenship, Awareness, and Education.

6.2.3 Application of SESERV Methodologies

The application of SESERV methodologies KPI group is evaluated against two indicators:

- K13: Number of tussle analyses.
- K14: Projects profiled.

The projects profiled are measured by the total number of projects that a socio-economic profile was compiled for. This indicator's purpose is to measure the number of projects for which key input parameters to a tussle analysis were determined. The threshold to reach was set at 10 profiled projects. The contingency plan for any potential deviation from the threshold was to request partners to intensify efforts in order to reach more projects through their network.

Table 18: SESERV Methodology Application KPIs

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K13: Projects profiled	**16 projects**	Yes Yes	No
K14: Number of tussle analyses	**8 detailed tussle analyses**	Yes No	No

The number of tussle analyses refers to how many detailed tussle analyses designed and conducted for a selection of previously profiled projects and their technology. The purpose of this indicator is to document the number of projects for whose developed technology/protocol adoption chances were assessed by application of a detailed tussle analysis. The threshold to reach was set at 8 detailed tussle analyses. The contingency plan for any potential deviation from the threshold foresaw to provide clear information about the tussle analysis in order to increase number of projects interested in performing such analysis.

A total of 16 research projects were profiled (cf. Table 18) – meaning a socio-economic project profile has been compiled for each project and its technology. Deliverable D2.1 (First Report on Economic Future Internet Coordination Activities) includes all project profiles, and explains the procedure by which a profile was obtained. The analysis of preliminary tussles identified for the 16 profiled projects drove the selection of those 8 projects for which a detailed tussle analysis was conducted in project year 2. Deliverable D2.2 (Final Report on Economic Future Internet Coordination Activities) provides full details for all tussle analyses. D3.2 also covers consolidated tussle groups determined along Internet and cloud functionalities as well as a tussle cartography. Detailed tussle analyses have been performed for and in cooperation with the following 8 projects: BONFIRE, C2POWER, ETICS, OPTIMIS, PURSUIT, SAIL, ULOOP and UNIVERSELF.

6.3 KPI Summary

Based on the detailed analysis conducted regarding progress made along the measurement dimensions of the KPIs K1 to K14, Table 19 summarizes achieved values for each KPI. The table indicates whether the KPI-specific threshold was reached and/or exceeded (where applicable). Moreover, it states if the respective contingency plan (if applicable) was activated.

In summary, all KPIs with a threshold defined achieved this threshold value – with only one exception. The Brussels workshop missed the targeted number of attendees by 1 (49 participants, 50 participants targeted). All KPIs – except for three – not only reached their threshold, but they exceeded it. The two KPIs (beyond the already mentioned KPI relating to the number of participants at the Brussels workshop) that did not exceed the threshold are the size of the FISE mailing list and the number of detailed tussle analysis conducted. Detailed assessments of those achievements are available in the KPI-specific sub-sections above.

It has to be noted that not exceeding a threshold does not automatically imply the invocation of a contingency plan. For instance, the number of detailed tussle analyses to be conducted in SESERV's project year 2 was set at 8. Considering the effort put into these tussle analyses as well the highly valuable results obtained from these analyses, any higher number of tussle analyses would not be reasonable. Accordingly, the contingency plan needed to be activated for one KPI only, namely the size of the FISE mailing list. The contingency plan ensured for this KPI that the mailing list size reached the target threshold.

Table 19: Summary of KPI Achievements

KPI	Achieved Value (as of July 13, 2012)	Threshold Reached (Yes/No) Threshold Surpassed (Yes/No)	Contingency Plan Activated (Yes/No)
K1: Size of FISE community on FISE LinkedIn group	**216 group members**	Yes Yes	No
K2: Size of FISE community on FISE mailing list	**101 subscribers**	Yes No	Yes
K3: Participants at specific/all SESERV events (workshops)	**Oxford workshop: 69 participants** **Athens workshop: 53 participants** **Brussels workshop: 49 participants**	Oxford workshop: Yes Yes Athens workshop: Yes Yes Brussels workshop: No No	Oxford workshop: No Athens workshop: No Brussels workshop: Yes
K4: Distribution of expertise or community profile	**Oxford workshop: 30% with technical profile, other profiles 70%** **Athens workshop: 55% with technical profile, other profiles 45%** **Brussels workshop: 47% with technical profile, other profiles 53%**	Oxford workshop: Yes Yes Athens workshop: Yes Yes Brussels workshop: Yes Yes	Oxford workshop: No Athens workshop: No Brussels workshop: No
K5: Projects engaged	**93 projects**	Yes Yes	No
K6: Website access	**715 visits per month**	Yes Yes	No

K7: SESERV contributions to the wider community	**57 meeting attendance reports**	Yes Yes	No
K8: Event reports produced	**5 FIA session reports,** **4 Workshop reports**	Yes Yes	No
K9: SESERV deliverables	**21 deliverables**	Yes Yes	No
K10: Number of publications	**19 papers (white papers, conference papers, book chapters, and books)**	Yes Yes	No
K11: Research priorities identified	**7 tussle groups (consolidated tussles around Internet and cloud functionality and tussle cartography)** **11 technology-driven recommendations in year 2**	n/a n/a	n/a
K12: Socio-economic priorities assessed	**8 cross-cutting societal themes** **5 focus groups in year 2** **22 socio-economic recommendations in year 2**	n/a n/a	n/a
K13: Projects profiled	**16 projects**	Yes Yes	No
K14: Number of tussle analyses	**8 detailed tussle analyses**	Yes No	No

7 Partners Exploitation Statements and SESERV Sustainability

The project role and original exploitation plans of each of the SESERV partners were presented in D4.1 [1]. In this section, updated exploitation plans are presented for each partner, along with specific joint initiatives for individual members of the consortium.

7.1 Partners Exploitation Statements

7.1.1 University of Zurich

The Communication Systems Group (CSG) at the Department of Informatics (IFI) of the University of Zurich represents an academic partner profile in SESERV. The CSG is a leading research group internationally in communication systems research, focusing on accounting, Internet economics, and network and service management, which attracts Ph.D. students and researchers from a European and international background. The CSG runs a full Bachelor and Masters teaching curriculum in computer networks and communication systems with a primarily national and European focus.

UZH is equally interested in the social and economic sides of the SESERV coordination action, although according to its research focus is more inclined towards a deeper background in the economic side. UZH sees great potential for exploitation of high-speed accounting, incentives, and risk management work, for instance, within the context of scientific publications, future research projects, PhD theses, and its integration into the teaching curriculum. In terms of a longer-term perspective, the tussle analysis method developed by SESERV is perceived as a highly beneficial instrument for the strengthened coordination and further design and architecture of the FI from a technical, socio-economic, and legal point of view. Accordingly, the following specific items have been identified by UZH to be exploited out of SESERV's achievements:

- The socio-economic awareness design and standardization of FI technology: UZH is in the editor's role of the Y.FNsocioeconomic draft Recommendation worked upon in the ITU-T's Study Group 13, in particular Question 21/13. Y.FNsocioeconomic centres around the tussle analysis method as a structured procedure to anticipate a technology's adoption potential at technology design and standardization time. UZH perceives the continued support and development of Y.FNsocioeconomic towards its finalization in 2013 as a key mid-term exploitation activity – with the potential for longer-term strategic endorsement in the upcoming Study Period (2014-2017) embedded into the follow-on Question of Question 21/13, showing a dedicated focus on environmental and socio-economic aspects of Future Networks.
- The SE of network and service management: The high-speed accounting paper co-authored by UZH and a European team of experts in the field has shown how diverse, controversial, and to a great extent fundamentally challenging the accounting of resource and service usage data on high-speed links has become. Accounting constitutes a central, but by far not the only management task in communication systems. UZH will pursue and extend the SE driven research in high-speed accounting as well as the wider range of network and service management. This relates, for instance, to traffic analysis and to the underlying

research question to be addressed in how far and under which generalizable conditions traffic analysis is worth-wile.

- The relation between technology and regulations: One very fundamental question coming visible and being discussed on several occasions throughout SESERV's various coordination activities – e.g., the economics of privacy FIA Budapest session, to name just one example – is related to a beneficial and efficient relationship between technological characteristics and functionalities as well as any related regulation. In particular, the questions of the right abstraction level, incentive compatibility, and technology (in-)dependence determine pressing issues that UZH plans to study in greater detail.

These three specific exploitation items reflect the primary directions that UZH will pursue driven by SESERV's impact. The instruments UZH will be bringing these items into are embedded both in its teaching curriculum and European research projects. A prominent example of influenced teaching activities is the Internet Economics seminar[48] organized and held by UZH once a year where several topics will show a deep socio-economic orientation as outlined. In terms of European research projects to profit from SESERV results, especially SmartenIT (STREP), where UZH will be the coordinator, and Flamingo (NoE) should be mentioned – both starting on November 1, 2012 (plan).

7.1.2 IT-Innovation

The University of Southampton IT Innovation Centre (IT Innovation) is an applied research centre of the University of Southampton's School of Electronics and Computer Science. Its mission is to help industry, commerce and the public sector gain maximum benefit from advances in digital technology. The mission is achieved by adopting research methodologies that engage industrial partners in ways that maximise the chance of exploitation. The delivery, deployment and use of technology in real environments by IT Innovation's partners are an essential element of its research and innovation partnerships. Through this process a deep understanding has been developed of delivering complex and disruptive software systems where requirements ambiguity exists and conflicting technical and commercial goals need to be resolved. IT Innovation now has over 10 years of experience in cross-domain management of aggregated and federated infrastructures deployed as enablers in applications requiring system-to-system interworking using service-based interfaces. It successfully managed an open source programme of research (contributions from 15 collaborative projects) in trusted services from 2001 – 2009 that demonstrates our philosophy and the impact achieved. From 2008, the focus has been on a programme of FI research that addresses the challenges in federated and aggregated systems (services, networks, content, real-world things and security) bringing together research programmes in trusted systems, content-centric infrastructures and sensor networks. IT Innovation is represented on the NESSI steering committee, the UK FI Strategy Group, a steering committee member of the NEM ETP and caretaker for SE in the FIA.

IT Innovation will exploit the results of SESERV in ongoing applied research, and in its consultancy and support services. The results from SESERV will be disseminated through conferences and journal publication to peers in computer science disciplines, presentation

[48] The next iteration of the Internet Economics seminar will take place in the fall semester 2012. Detailed information, including topic descriptions, is available at http://www.csg.uzh.ch/teaching/hs12/inteco.html.

and demonstrations at user-oriented conferences, press releases, and dissemination via the Web. SESERV will add to IT Innovation's innovation service portfolio, particularly in the socio-economic impact of FI technologies, tools and processes, including business models and best-practice in technology utilization. Exploitation will include the incorporation of SESERV methodologies and insights into the IT Innovation research portfolio and through collaboration with its partners.

IT Innovation has gained significant knowledge about socio-economic priorities for the FI through participation in SESERV. This has led to significant research projects aiming to address these priorities. Of significance includes participation in the EINS Network of Excellence on Internet Science[49] where IT Innovation leads a task in the JRA Emergence Theorise and Design Methodologies applying methods (e.g. SESERV's Tussle Analysis) to specific domain specific use cases, and the EC OPTET project where IT Innovation leads the work package researching the SE of trust models in federated and aggregated systems. IT Innovation will continue to maintain a position on the FIA Steering Committee and is committed to chairing the FISE WG in 2013.

7.1.3 Athens University of Economics and Business

AUEB-RC, by means of the Network Economics and Services laboratory, is a non-profit institution of higher education that specializes in promoting the understanding of interplay between technology and economics for the FI and the IT sector. More specifically, members of AUEB-RC have played a pioneering role in economic and business modelling for the FI, the Grid and its transformation into Cloud Computing and recently in the area of Internet of Things, proposing and evaluating economic mechanisms where necessary for aligning the incentives of different stakeholders.

Its participation in the SESERV project has been a catalyst for discussing with industrial, policy, academic and the broader communities about the still to be addressed economic challenges, those currently emerging and their interrelations with social issues. These interactions have strengthened the competitiveness of AUEB-RC in all research areas mentioned above and may lead to innovative research results that will be widely disseminated via conference and journal articles.

Furthermore, organizing workshops, sessions, focus groups and disseminating SESERV results in major European events, such as FIA weeks, cluster meetings and FuNeMS, have increased the visibility of AUEB-RC members and already led to invitations for engagement with the identified tussles. Applying the tussle analysis methodology in new settings will further demonstrate its usefulness and help in designing new technologies that will harmoniously fit into the FI ecosystem.

The key economic priorities of the FI that have been identified will find their way into the undergraduate and postgraduate curricula of the University courses. Furthermore, students at the postgraduate level will be involved in carrying out research as part of their M.Sc. and Ph.D. thesis dissertations on selected topics. Finally, AUEB-RC will continue disseminating the technical outcomes of SESERV in other technical campus-internal research laboratories and initiatives in order to be considered for further exploitation.

[49] http://www.internet-science.eu/

7.1.4 University of Oxford

The Oxford Internet Institute (OII) at the University of Oxford is a world-leading centre for the study of the social aspects of the Internet. Founded in 2001, the OII has 20 faculty, 20 doctoral students, and 30 master's students, all researching various aspects of the Internet. The expertise at the OII includes legal and policy perspectives, and experts in social network analysis, eLearning, eGovernment, daily life, and eResearch. OII is a truly multidisciplinary institute, with disciplines represented including sociology, anthropology, political science, economics, education, information science, physics, history, law, public policy, computer science, and geography.

The participation of the OII in the SESERV project will be exploited in a number of ways.

- OII is a partner in the *Network of Excellence in Internet Science*, which "aims to strengthen scientific and technological excellence by developing an integrated and interdisciplinary scientific understanding of Internet networks and their co-evolution with society, and also by addressing the fragmentation of European research in this area. Its main objective is to enable an open and productive dialogue between all disciplines which study Internet systems from any technological or humanistic perspective and which in turn are being transformed by continuous advances in Internet functionality."[50]. SESERV participants Cristobal Cobo and Anne-Marie Oostveen are both strongly involved in this project, as is Ian Brown, who spoke at SESERV events.
- The OII is leading proposals for a Connected Digital Economy Catapult (CDEC) under the UK Technology Strategy Board. SESERV participant William Dutton is leading on this work [51]. In short, the proposed catapult will "depend in part on business, industry, and university centers of excellence defining a clear conception of the converged world of the Internet, and related media, information and communication technologies, particularly with how it connects with the creative sectors of the digital economy. A key impetus…[is] the need to join thinking across different sectors of business, industry and academia."
- Sections of D3.2 [4] will be re-written for submission as a chapter in the next FIA book on the topic of users in the FI ecosystem. Additional material may also be re-written to form the basis for an additional journal publication. Anne-Marie Oostveen, Ralph Schroeder, and Eric Meyer will lead on this.

7.1.5 Alcatel-Lucent

Alcatel-Lucent Bell Labs France (ALBLF) was and is targeting the development of the overall economic dimension at EC D1 project level, and more widely at Challenge 1 level (e.g. through FIA). The initial foreseen exploitation with respect to SESERV was therefore envisaged through three components:

- Development of the economic discussions, analysis, cross-fertilization and understanding between projects and creation of added value on top of the different projects.
- Development of an economic cartography for the projects tackling economic issues. Identification of the most promising investigations, support to their wide

[50] http://www.internet-science.eu/network-excellence-internet-science
[51] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2096819

dissemination and fertilization, e.g. through the organization of specific events and workshops. Identification of prioritized issues to be addressed in the forthcoming research projects and initiatives.

- Development of connecting points between projects and initiatives in order to maximize the efficiency of the engaged research actions (avoiding the “not invented here” and “do it again” syndromes).

The three components were tackled by SESERV with different extents. The most promising developments to be leveraged for ALBLF are the ones connected to the consolidation of the FISE community and the experience and achievements obtained through the (co-)organization of, and participation in the different workshops.

The economic issues are tackled in several projects contributed to by ALBLF (e.g. ETICS, UniverSelf, ULOOP, OneFIT, SAIL…). One of the challenges identified is to ensure that the economic and technical issues can be jointly considered within each project project (different partners in the project, different terminologies, and so forth). Going beyond each individual project (inter-projects) can only be beneficial at both community (e.g. Challenge 1) and also at individual project level (added value back to the project). ALBLF will ensure that the economic issues can be further addressed and progressed in the forthcoming EC projects and events, e.g. through the further inclusion of economic (and business impact / sustainability) issues in the research proposals and the consideration of economic perspectives in the forthcoming FIA and FuNeMS events (ALBLF being member of both Steering Committees). ALBLF also plans to further progress the analysis and interactions initiated in the context of the FIRE - GENI and FI PPP – IGNITE discussions (different complementary perspectives, technical challenges and business models in EU and US approaches for FI).

7.1.6 Atos

Atos has benefited from the SESERV project through an increased awareness and involvement with socio-economic aspects related to the FI. Atos is, above all, a technical company, and so naturally has a significantly higher number of technical employees than socio-economists. Its research activities have also reflected this and to date there has been a higher emphasis on technical work in the projects.
Part of the awareness which has been created is the importance of factoring socio-economic issues into technical design, particularly as exemplified by the tussle analyses of WP2. However the awareness goes further, different ways of considering trust, the different viewpoints on net neutrality, the value of privacy and so on, are all themes which will directly contribute to an understanding within Atos of how technology is used by different stakeholders.
In terms of contact, Atos has extended its network. Working closely with a broader (in scope) set of partners than before has provided specialists in the sociological and economic fields with whom Atos can potentially work together in the future. Wider than this, it now has personal contacts at organisations who are researching a number of facets of SE-related FI issues. Atos has also increased its understanding of the Future Network domain and on the back of this are due to initiate a new research project tying Atos’ existing research assets into the innovation created in this domain.

A greater appreciation of the SE topics which most interest and affect the community has also helped Atos orient itselves and to ensure that these aspects have high attention paid to them. Hence Atos sees topics such as increased transparency of data use and systems (taken up in the Optimis project), more user-centricity and control (taken up in the

Cloud4SOA project) and clarifying digital rights (taken up in the SMART-FP7 project) joining the hitherto identified priorities of cloud computing, privacy and data protection. Furthermore, the stakeholder analysis has clarified Atos' view of the FI and enhances its existing approach to state of the art surveys and requirements solicitation, an activity rolled out in most research and commercial projects. The core functionalities defined for the network domain complement the functionalities of the cloud and services domain.

Perhaps the most tangible benefit for Atos comes from the tussle analysis methodology. This has been deployed in two projects in which Atos participates: BonFIRE and Optimis. Initially the result appeared to be that the tussle methodology helped clarify and describe a known problem but did not necessarily improve the participants' understanding of it (this was described in the M12 deliverable D2.1). However in the second year, a more detailed look at the tussle analysis, and developments in the methodology, have allowed both these research initiatives to project future behaviour and consequently deficiencies in the system. For example, in Optimis, the initial tussle analysis in M12 led to a formal description of the issue the project set out to resolve technically. Through the formal description it was possible to discuss further with economists, and during the second iteration it was clear that the project's proposed solution was not stable, and indeed the tussle would spill-over and lead to a situation unfavourable to one of the actors. The project counter-proposed with a pricing mechanism to resolve this and tussle analysis was instrumental in the evaluation procedure. At the time of writing, tussle methodology continues to be deployed to predict the outcome of the proposed pricing model, although the definitive outcome is still uncertain.

Atos intends to continue applying tussle analysis to research projects. The methodology is still going through enhancement, both internally, and collaboratively (led by AUEB). Atos intends to work informally with AUEB on enhancements to the methodology and to apply it to more projects, and from the start of the projects (as opposed to mid-term as was the case in SESERV). This process is one of learning, development and validation, and Atos anticipates that following the next cycle of projects this analysis can become a stable tool of the research department and will be sufficiently stable to be exported to the commercial arms of the organisation, for work in new system development.

In conclusion, Atos' individual exploitation is focussed on inclusion of socio-economic themes and experts within its research initiatives, expanding its perspective and leading to improved research results and new areas of investigation, and on the development and validation of tussle analysis as an important tool for use in commercial and research projects.

7.2 SESERV Sustainability

Beyond the SESERV partners' individual and joint exploitation plans, detailed in the previous sub-section, the socio-economic work initiated by SESERV will be leveraged and furthered after the contractual end of the project. Among others (not exhaustive list), the following actions are highlighted in the continuity of SESERV:

- Further development of the FISE WG activities. As previously mentioned, the WG has established a team of enthusiastic individuals who want to continue the work (see Appendix A). The topics and actions will consider the outputs of the SESERV project as detailed in deliverables D2.2 [3] and D3.2 [4].

- Push of the SESERV recommendations from WP2 (eleven recommendations – see [3]) to research projects, providers and policy makers for successfully redesigning and configuring FI technologies.
- Push of the SESERV recommendations from WP3 (twenty two recommendations – see [4]) aimed primarily at a mix of technology developers, funding bodies, project managers, and communities of technology users/participants.
- Further socio-economic interactions through the EC Concertation and Clusters meetings, new research projects funded by EC entering the technical and socio-economic discussions during Fall 2013. SESERV partners will interact on socio-economic issues through the new funded projects. It is also expected that the EC projects having interacted with SESERV will further consider and elaborate on the SESERV work, e.g. on Tussles methodology (ETICS, UniverSelf, ULOOP…). The socio-economic discussions are also expected to be part of the further FIArch developments.
- Development of the focus and the related discussions on socio-economic issues in the forthcoming FIA and FuNeMS, thanks to the SESERV partners contributions to Steering Committees, submission of technical papers and (co-)organization of workshops and sessions.
- Furthering of the ITU Y.FNsocioeconomic work, with the potential for longer-term strategic endorsement in the upcoming Study Period (2014-2017) embedded into the follow-on Question of Question 21/13.
- Further usage and development of the LinkedIn FISE group, that will constitute a key element in the ongoing socio-economic community support.
- Maintenance of the SESERV website, allowing the community to further access the information available during the project lifetime.

As stressed in D2.2 [3] and D3.2 [4], SESERV members showed that there is need to continue to have opportunities to bring socio-economic concerns to the forefront of the FI community, and equally the need to share the FI story with a broader range of audiences outside the FIA. All SESERV recommendations and dissemination are open platforms for further conversations to taken up by the FISE community and beyond.

8 Summary and Conclusions

This Deliverable D4.2 summarizes the key SESERV achievements in the areas of dissemination, external liaisons and exploitation. D4.2 builds on D4.1 [1] in terms of structure and scope, while D4.2 emphasizes on the key global achievements for the complete SESERV project duration and provides details on second year period outcomes.

SESERV interacted very actively with several communities in EC DG INFSO (and CONNECT) Challenge 1 to analyze the socio-economic facets of their technology and to provide expert feedback on socio-economic questions. SESERV members attended diverse events organized or co-organized several workshops, to establish contact and stimulate discussions between different experts on FI issues. Through these processes, a network of experts was built around SESERV, benefiting from SESERV expertise and providing information that allowed SESERV to draw a clear picture of SE in the FI. The knowledge gathered was conveyed to the community in highly interactive SESERV-organized workshops that allowed SESERV to arrange expert debate on socio-economic topics that had been identified to be of interest to the community.

SESERV has evolved its dissemination strategy throughout the lifetime of the project to ensure the FISE community could be supported most effectively. Key steps include the continuous development of the project website, various dissemination tools (prezi presentations, banner and posters, flyers), and a deepened engagement in social networking-oriented dissemination channels like LinkedIn, Slide Share, and Scribd.

SESERV generated significant volume and variety of dissemination material, equally matched by the respective variety of dissemination activities performed – enabling the dissemination strategy's implementation to benefit from a very efficient approach. During the lifetime of the project, SESERV members actively engaged with the socio-economic community, including Industry (ITU and ETPs), large events (Future Networks and Mobile Summit (FuNeMS)), FIA Working Groups (MANA and FISE), Clusters (FI Cluster, FIArch WG, TechnoSocioeconomics WG, and FINES Cluster), SE-oriented Projects (SEQUOIA, EINS Internet Science, PARADISO 2 and FI3P), and the Digital Agenda Assembly (DAA).

D4.2 details the final evaluation on impact achieved with respect to all KPIs determined. The KPI-based analysis of SESERV's performance in dissemination and external liaisons shows that the Coordination Action has contributed significantly to its overall objective: to bridge the gap between those who study and those who build the FI by supporting discussion and debate within the multidisciplinary community of researchers and professionals working on FISE.

In assessment of the detailed achievements made throughout SESERV's project duration and as substantiated by the impact measured by its KPIs, the Coordination Action's goals with respect to dissemination, external liaisons, and exploitation have been successfully met. This led to a highly positive impact for the FISE community within the European research landscape: At the time SESERV faces its end as a project, it realizes that socio-economic dimensions have become well recognized in European FI research. It also realizes that the network of contacts formed and strengthened throughout numerous joint activities has emerged as a vital and well established community. SESERV's dissemination and external liaisons activities contributed considerably to creating awareness about SE. Finally, SESERV's exploitation plans show that the project partners will now strive to fully establish SE in European FI research – embedded in the FISE community that SESERV helped build and foster throughout the past two years.

References

[1] The SESERV Coordination Action: First Dissemination, External Liaisons and Exploitation Plans. SESERV Deliverable D4.1, September 2011.

[2] The SESERV Coordination Action: Annual Project Progress Report (PPR1) - September 2010 – August 2011. SESERV Deliverable D5.2.1, October 2011.

[3] The SESERV Coordination Action: Final Report on Economic Future Internet Coordination Activities. SESERV Deliverable D2.2, August 2012.

[4] The SESERV Coordination Action: Final Report on Social Future Internet Coordination Activities. SESERV Deliverable D3.2, August 2012.

[5] The SESERV Coordination Action: Second Year Report on Conference Session. SESERV Deliverable D1.3, August 2012

[6] The SESERV Coordination Action: Second Year Report on Scientific Workshop. SESERV Deliverable D1.4, August 2012.

Abbreviations

AAA	Authentication, Authorisation, Accounting
CaON	Converged and Optical Networks (EC D1 Cluster)
CSA	Coordination and Support Action
D1	EC DG INFSO Future Networks Unit (now EC DG CONNECT E1 Unit)
DAA	Digital Agenda Assembly
DG	Directorate General
EC	European Commission
ETP	European Technology Platform
ETSI	European Telecommunications Standards Institute
FI	Future Internet
FI3P	FI-PPP - Study in support of a Future Internet Public-Private Partnership
FIA	Future Internet Assembly
FInES	Future Internet Enterprise Systems
FI-PPP	Future Internet Public Private Partnership
FISE	Future Internet Socio-economics
FN	Future Networks
FP	Framework Programme
FuNeMS	Future Network & Mobile Summit
H2020	Horizon 2020
ICT	Information and Communication Technology
IMS	IP Multimedia Subsystem
IMT	IMS Multimedia Telephony
INFSO	Information Society
IoS	Internet of Services
IoT	Internet of Things
IP	Internet Protocol
ISO	International Standards Organisation
ISP	Internet Service Provider
ITU	International Telecommunication Union
ITU-T	ITU Telecommunication Standardisation Sector
KPI	Key Performance Indicator
M2M	Machine to Machine
MANA	Management and Service-aware Networking Architectures (FIA WG)
NEM	Networked and Electronic Media

NGN-GSI	Next Generation Networks - Global Standards Initiative
Q&A	Question and Answer
QoS	Quality of Service
RAS	Radio Access and Spectrum (EC D1 Cluster)
RSS	Rich Site Summary
S&T	Science and Technology
SE	Socio-economics
SG	Study Group
SO	Strategic Objective
STREP	Specific Targeted Research Project
TSB	Technology Strategy Board
TTC	Telecommunication Technology Committee
WG	Working Group
WP	Work Package

Acknowledgements

This deliverable was made possible with the generous and open help of the entire SESERV team, which may include advice and counsel from individuals employed by the respective project participants, but not acknowledged specifically in the list of authors. The authors of D4.2 offer many thanks to them all.

Appendix A Letters of Support

This section provides the 18 letters of support/appreciation received from persons having interacted with SESERV in the context of the socio-economic developments (EC FISE community, EC D1 projects partners).

Letter Authors	Organizations
Mr. Alojz Hudobivnik	ISKRATEL
Prof. Dr. David Hausheer	Technische Universität Darmstadt
Mr. Juan Gimenez	Telefonica I+D
Mr. Pedro Aranda	Telefonica I+D
Dr. Sergios Soursos	Intracom S.A. Telecom Solutions
Dr. Tuan Anh Trinh	Budapest University of Technology and Economics (BUTE)
Mr. Aiko Pras	University of Twente
Mr. Frank Lehrieder Mr. Tobias Hossfeld	Universität Würzburg
Dr. Georgios Gardikis	National Center for Scientific Research, Demokritos
Ass. Prof. Karoly Farkas	Budapest University of Technology and Economics (BUTE)
Mr. Luca Deri	University of Pisa
Prof. Dr-Ing. Markus Fiedler	Blekinge Institute of Technology
Mrs. Man-Sze Li	IC Focus
Mr. Nick Wainwright	HP Labs
Mr. Nicolas Le Sauze	Alcatel Lucent Bell Labs France
Professor Sally Wyatt	eHumanities Group
Mr. Pavel Celeda	Masaryk University
Dr. Estelle De Marco	InthemiS

ISKRATEL

ISKRATEL, D.O.O., KRANJ
LJUBLJANSKA C. 24A
4000 KRANJ
SLOVENIJA

Kranj, July 12, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV co-organized FIA session at the FIA Ghent which I attended.
- The standardization activities in the ITU-T Q21/13"Future Networks".
- Answering a SESERV on-line survey/questionnaire.

SESERV researchers were engaged by drafting the ITU-T standardization document Y.FNsocioeconomic about socio-economic awareness of Future Networks. I would like to thank you for the support and contribution to the ITU-T SG13 work in the past and I would like your support to be continued into 2013 to finalize the standardization work item. Expertise of FISE community members is excellent.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,
Mr. Alojz HUDOBIVNIK, M.Sc.
CTO Adviser
+ ITU-T Q21/13 Ass. Rapporteur

ITU International Telecommunication Union

Alojz Hud

Socio-Economic Services for European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

TECHNISCHE UNIVERSITÄT DARMSTADT

TUD | FB18 | PS | Rundeturmstr. 10 | 64283 Darmstadt | Germany

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV co-organized FIA session at the FIA Budapest and Poznan in which I participated and/or gave a talk.
- Answering a SESERV on-line survey/questionnaire.
- The setup of the SESERV coordination action before leaving UZH
- The administration of the FISE mailing list at EURESCOM
- The co-moderation of the FISE group on LinkedIn

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

D. Hausheer

Prof. Dr. David Hausheer
Head of Peer-to-Peer Systems Engineering

Prof. Dr. David Hausheer

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Datum
12. Juli 2012

Unser Zeichen

Ihre Nachricht
SESERV Letter of support

Dokument
SESERV_Letter_of_support.doc

Telefónica

Telefónica Investigación y Desarrollo
Telefonica I+D
Don Ramon de la Cruz, Nº 82
28006
Madrid, Spain

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Signature

Juan Pedro Fernandez-Palacios Giménez
Head of Unit
Core Network Evolution
Telefonica I+D-GCTO Unit

Madrid, July 15, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- **The standardization activities in the ITU-T.**
- **The pre-standardization activities in the FIArch working group.**
- **Answering a SESERV on-line survey/questionnaire.**

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Pedro A. Aranda
Technology Specialist

Intracom S.A. Telecom Solutions

Athens, July 13, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV workshop in Athens in which I joined the parallel session entitled "Content and service delivery architectures for the Future Internet" and contributed in the discussion related with the tussle between the ICNs and existing stakeholders such as CDN providers and the Search Engine providers.
- The SESERV co-organized FIA session at the FIA Ghent and FIA Aalborg, in which I contributed in the discussions about tussles between various stakeholders in the Future Internet chain value and the emerging business models.
- Answering a SESERV on-line survey/questionnaire.
- Serving as a caretaker of the FISE WG for more than 2 years (2009-2011), helping to organize and coordinate SE-related sessions in FIA plenaries.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Sergios Soursos, Ph.D.
Senior R&D Engineer

Socio-Economic Service European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

Budapest University of Technology and Economics (BME)

Budapest, July 12, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV co-organized FIA session at the FIA Budapest in which I co-organized the Session on Economics of privacy in the Future Internet.

The session was a success and I really appreciate SESERV's support and participation, in particular in creating awareness to socio-economic impacts of technological issues of the Future Internet.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Dr. Tuan Anh Trinh, Head of group
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Fax: +36 1 46 33 107

Socio-Economic Services for European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

UNIVERSITY OF TWENTE.
50 YEARS OF HIGH TECH, HUMAN TOUCH

Enschede, July 30, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

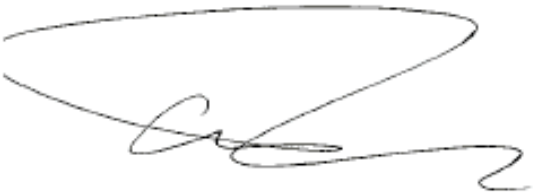
Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have contributed in writing the paper "Socio-economics of High-speed Internet Accounting" specifically in the high-speed traffic accounting section that described the basic technologies currently available.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Aiko Pras
Head of the Design and Analysis of Communications Group
University of Twente
The Netherlands



Socio-Economic Services for European Research Projects (SESERV)
European Seventh Framework Project FP7-2010-ICT-258138-CSA

Julius-Maximilians-
UNIVERSITÄT
WÜRZBURG

UNIVERSITY OF WÜRZBURG, GERMANY
CHAIR OF DISTRIBUTED SYSTEMS
PROF. DR.-ING. P. TRAN-GIA

Würzburg, Germany, July 26th, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

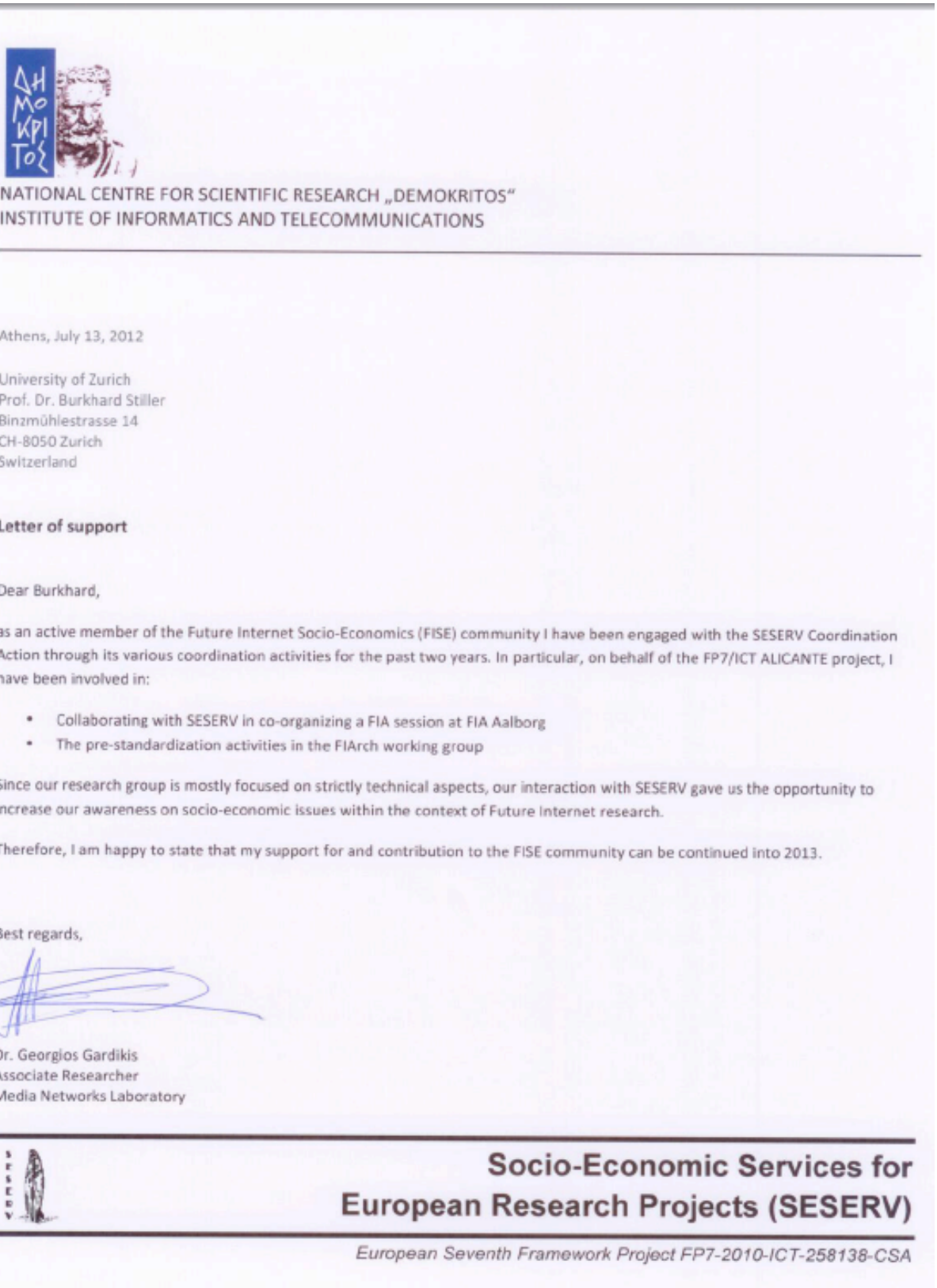
as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in the SESERV workshop in Athens. I really enjoyed the keynote talks and the fruitful discussions. Thanks to the workshop, I have now a better understanding of the economic dimensions in the design of technical solutions for the future Internet and their evaluations, what will for sure have an impact on my future work.

As a concrete example, we are planning to write a magazine-style article about content distribution architectures in the Future Internet Applications research group at the chair of communication networks, in particular comparing the P2P paradigm with Content Centric Networking. The workshop made it clear to us that economic issues, such as the identification of the involved stakeholders and their interests, have to be an important part of this work. Therefore, the discussion within the focus group about content and service delivery architectures during the afternoon session will serve as a very good starting point for that purpose.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Frank Lehrieder, Tobias Hoßfeld



NATIONAL CENTRE FOR SCIENTIFIC RESEARCH „DEMOKRITOS"
INSTITUTE OF INFORMATICS AND TELECOMMUNICATIONS

Athens, July 13, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, on behalf of the FP7/ICT ALICANTE project, I have been involved in:

- Collaborating with SESERV in co-organizing a FIA session at FIA Aalborg
- The pre-standardization activities in the FIArch working group

Since our research group is mostly focused on strictly technical aspects, our interaction with SESERV gave us the opportunity to increase our awareness on socio-economic issues within the context of Future Internet research.

Therefore, I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Dr. Georgios Gardikis
Associate Researcher
Media Networks Laboratory

Socio-Economic Services for European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

Budapest University of Technology and Economics
Faculty of Electrical Engineering and Informatics
Department of Telecommunications

Budapest, July 18, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV co-organized FIA session at the FIA Conference in Aalborg, in which I was part of the organizing team.
- Answering a SESERV on-line survey/questionnaire.

It was a pleasure to be involved into the work of the SESERV team which helped extend the awareness about socio-economics even in my local environment.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Károly Farkas
Associate Professor

Pisa, July 18th, 2012

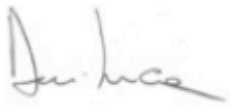
University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have contributed in writing the paper "Socio-economics of High-speed Internet Accounting" specifically in the high-speed traffic accounting section that described the basic technologies currently available.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.



Best regards,

Luca Deri <deri@di.unipi.it>
Computer Science Department
University of Pisa

School of Computing

Prof. Dr.-Ing. Markus Fiedler
Head of the Communication and
Computer Research Laboratory
Tel. +46 455 385653
markus.fiedler@bth.se

University of Zürich
Prof.Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zürich
Switzerland

Letter of Support

Karlskrona, 2012-07-24

Dear Burkhard

As an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. Within the Networks of Excellence Euro-NGI and Euro-FGI, I have been in charge of the socio-economic research activities, and recently within Euro-NF of the corresponding workshop.

Particular items of collaboration with SESERV were as follows:

- In May 2012, the projects Euro-NF and ALICANTE coordinated the Future Internet Assembly (FIA) Session 1.3 "Novel Networking and Relationship with Applications – The Value of Information Flows between Applications and Networks" together with SESERV.
- In July 2012, the projects SAIL, GEYSERS, Euro-NF and SESERV coordinated the Future Networks and Mobile Summit (FuNeMS) sessions on "Cloud Networking", consisting of talks and panel discussion.

I really enjoyed the collaboration and the commitment of the SESERV partners, being of great help in the preparation, realization and documentation of the events.

I am happy to state my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Prof. Dr.-Ing. Markus Fiedler

Blekinge Institute of Technology
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London, 18th August, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

As an active member of the Future Internet Socio-Economics (FISE) community, I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- SESERV workshops as a contributor
- Various SESERV co-organized FIA sessions at the FIA as a contributor / co-organiser on behalf of the FInES Cluster
- Answering SESERV on-line survey/questionnaire on more than one occasion.

I am committed to supporting the FISE community through coordination of the FISE community into 2013.

I am committing such efforts as a Volunteer and as Co-Chair of the FInES Cluster, which is also a voluntary activity.

Best regards,

Man-Sze Li
Director

HP Labs
Long Down Avenue
Stoke Gifford
Bristol BS34 8QZ
United Kingdom
www.hpl.hp.com

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

23 July 2012

Nick Wainwright
European Projects Director

HP Labs

+44 (0) 117 312 8139 (w)
+44 (0) 7770 645884 (m)

nick.wainwright@hp.com

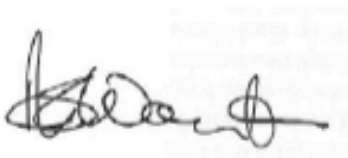
Dear Burkhard,

As an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years.

In particular, I have been involved in the SESERV workshop in Oxford in which I participated in sessions addressing issues arising from the cloud. As a member of the FIA Steering Committee I would like to recognize the contributions made by SESERV to FIA. I have attended SESERV sessions at several FIA events and these stimulate much interaction across the different domains and raise awareness and understanding about socio-economics issues in the Future Internet.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Yours sincerely



Nick Wainwright
European Projects Director,
HP Labs

Alcatel·Lucent
Bell Labs

ETICS

Nozay, France, August 27th 2012

From:
Nicolas Le Sauze
Alcatel-Lucent Bell Labs France
Route de Villejust
91620 Nozay, France

To: University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV workshop in Athens in which I gave a presentation in the session on Interconnection and monitoring providing concrete examples of Network operator interconnection issues for QoS-enabled use cases. As coordinator of the FP7 ETICS project, I also arranged an additional ETICS talk during the SESERV workshop in Brussels on June 2012, as I was not available myself.
- Direct coordination between ETICS and SESERV regarding the tussle analysis applicability to Network Operator Interconnection rules. The analysis have led to a joint paper at the Future Network and Mobile Summit Conference 2012, "Socioeconomic Tussles Analysis of the ETICS Approach for Providing QoS-enabled Inter-domain Services ", presented by Costas Kalogiros (AUEB-RC) from SESERV.
- Answering a SESERV on-line survey/questionnaire.

During the two years of the project, SESERV had allowed to increase the awareness on socio-economic issues related to on-going and future technical developments, with the innovative methodology of the Tussle modeling. I support the continuation of such actions in the future, in order to motivate and ease future technical choices, in particular in complex situations such as the one studied in ETICS with QoS-enabled IP interconnection.

Best regards,

Nicolas Le Sauze
Alcatel-Lucent Bell Labs France, Research Manager
FP7 ETICS Project Coordinator

SESERV

Socio-Economic Services for European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

eHumanities
Royal Netherlands Academy of Arts and Sciences

28 August, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Professor Stiller,

as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in:

- The SESERV workshop in Oxford in which I contributed to a panel discussion about the future of the Internet.

I found it a very stimulating event, and the level of discussion was very high. I have found points raised during the discussion returning in my later work, especially questions about net neutrality.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Sally Wyatt

Professor Sally Wyatt
Programme Leader, eHumanities Group

Visiting address:
Joan Muyskenweg 25
1096 CJ Amsterdam

The eHumanities Group
Royal Netherlands Academy of Arts and Sciences
P.O. Box: 94264, 1090 GG Amsterdam, The Netherlands
Phone: +31 (0)20 462 85 92 - http://ehumanities.nl

Brno, July 20th, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

as an active member of the Future Internet Socio-Economics (FISE) community we have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, we have been involved in contribution to the paper "Socio-economics of High-speed Internet Accounting".

We are involved for many years in high-speed networking, especially in network security monitoring and anomaly detection. The socio-economic dimensions of accounting in high-speed networks is a topic of utmost importance for us nowadays.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Pavel Čeleda <celeda@ics.muni.cz>
System analyst at Institute of Computer Science
Masaryk University, Brno, Czech Republic

Socio-Economic Services for
European Research Projects (SESERV)

European Seventh Framework Project FP7-2010-ICT-258138-CSA

InthemiS

Montpellier, August 27, 2012

University of Zurich
Prof. Dr. Burkhard Stiller
Binzmühlestrasse 14
CH-8050 Zurich
Switzerland

Letter of support

Dear Burkhard,

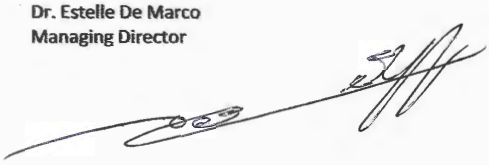
as an active member of the Future Internet Socio-Economics (FISE) community I have been engaged with the SESERV Coordination Action through its various coordination activities for the past two years. In particular, I have been involved in the SESERV co-organized FIA session at the FIA Budapest which I also co-organized and in which I have presented an overview of the legal context and social perception of privacy and personal data protection.

This session on Economics of privacy has been very successful, and I have appreciated the interaction with SESERV representatives, especially for their support and their input, which has contributed to increasing awareness and to fostering reflection on Future Internet issues and especially on the impact of the socio-economic context on the issue of privacy and personal data protection.

I am happy to state that my support for and contribution to the FISE community can be continued into 2013.

Best regards,

Dr. Estelle De Marco
Managing Director



SESERV

Socio-Economic Services for European Research Projects (SESERV)

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