



The Socio-economic Dimension of European Research in Networking

While traditional networking research investigated the economic dimension – e.g., addressing charging and pricing of IP services – the coverage of general economics and social facets, e.g., in terms of incentives, high-speed accounting data, risk management, and reliable/trusted Future Internet, is still needed and under way.

At a Glance: SESERV

Socio-Economic Services for European Research Projects



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Duration: September 2009 – August 2011

Funding scheme: CSA

Total Cost: € 1,1 m

EC Contribution: € 0,8 m

Contract Number: INFISO-ICT-258138

Main Objectives

The Internet has evolved from the largely static Information Highway of the 1990's to a critical infrastructure supporting all aspects of life in the 21st Century. The European Commission (EC) is making significant investment in Future Internet research with the aim of ensuring European competitiveness in the face of globalization and emerging societal challenges. It is critical to ensure that the investment in ICT research contributes effectively to European sustainability and welfare.

The SESERV Coordination and Support Action (CSA) provides an approach to coordinating selected areas in socio-economics among FP7 projects to offer access to both socio-economic and technical experts in an integrated manner, while investigating the relationship between Future Internet technology, society, and the economy. It is SESERV's goal to maximize the impact of research by raising the awareness of socio-economic trends, particularly in the areas of incentives, accounting, digital Europe, and risk management, and by addressing possible policy priorities within the re-search community across key dimensions of convergence for information technology, telecommunications, and media.

Critical challenges of sustainability and globalization will increase the dependency on the Internet for economic growth and societal welfare. Thus, a better understanding of socio-economic impacts of Information and Communication Technologies (ICT) research is required to ensure that Research and Technology Development (RTD) aligns and contributes to key policy priorities of Europe. However, selecting and implementing the right research challenges in a complex socio-economic context requires an analysis by multi-disciplinary teams of economists, scientists, and technical visionaries. Current Internet ICT research is only beginning to consider these complexities and the true impact of the Future Internet research is unlikely to be achieved alone.

Controlling and monetizing the evolution of the Internet is seen as a critical goal for most economic regions. The detailed study of integrated economic and societal facets, however, is still necessary and under way.

Thus, there is a clear need to coordinate activities of ICT researchers so that socio-economic priorities are promoted and understood by the Future Internet research community. The SESERV (Socio-Economic Services for European Research Projects) CSA has proposed to fill this gap between socio-economic priorities and the Future Internet research community.

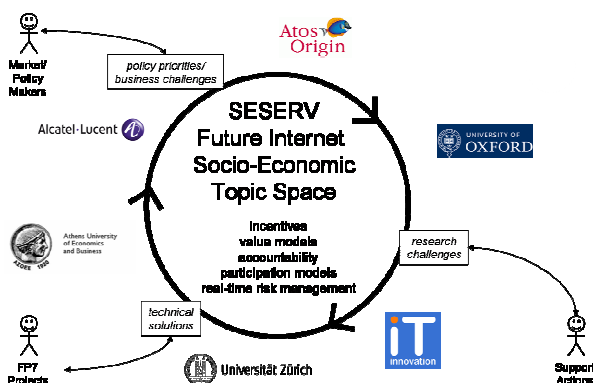
Key Objectives

SESERV has the following major objectives to be pursued in support of the overall aim of advancing technology and socio-economic understanding:

- SESERV will initiate and lead the discussion with the community about socio-economic challenges and perspectives of the Future Internet, facilitating the support and collaboration of Future Internet-related economic facets and social facets
- SESERV will organize Future Internet Assembly (FIA) sessions, scientific workshop organizations, and working groups in support of those socio-economic facets.
- SESERV will disseminate and publish results that address the key interfaces between ICT and socio-economic areas of research.
- SESERV will exploit those results and will show impacts by identifying paths and guiding the respective activities for the integration of socio-economic aspects into the Future Internet.

Methodology and Approach

The overall SESERV methodology is based on a top down approach (pre-determination of economic and social facets in given applications and scenarios), in which the collaboration and orchestration aspects will follow a demand-driven approach. Driven by the well-established methodology of engineering research, requirements and assumptions will be outlined and documented, while a selected number of use cases do form the starting point. A certain danger of such a use-case approach is recognized, but since no overall accepted socio-economic modeling is available today, it defines the only feasible methodology.



Based on those pillars, expected inter-relations between economic and social facets will be investigated and relevant conclusions are drawn with respect to the Future Internet technology and Future Internet services offered.

Thus, SESERV will stimulate structured discussions from different viewpoints (such as technology, operator, economics, and customer) and will help outline these views in jointly edited (by the SESERV consortium) white papers. However, SESERV will not be able to form the basis for unifying results and views, and thus, SESERV cannot integrate existing views into a single, jointly agreed upon state and model.

The approach's primary goal is to achieve a cumulative snowball effect to enhance research by (a) organizing workshops bringing target audiences together, (b) spreading knowledge across disciplinary and organizational boundaries, (c) building liaisons with researchers in related projects, and (d) involving interest groups via a website, events, and publications geared toward multiple audiences.

The core areas of coordinated research include activities on (1) providing incentives to end-users in the Internet, which affect their behavior and congestion/resource utilization, (2) high-speed accounting technology in the Internet and related privacy, retention, and granularity of information effects, (3) digital Europe in terms of a reliable and trusted Internet through social and policies, and (4) methods and frameworks for real-time risk management, associated to information and physical assets of the Internet.

Since socio-economic forces could push the Future Internet toward an arena of competing networks, industrial growth and innovation may be hindered. Therefore, a cooperative strategy for the development of the Future Internet is proposed.

Expected Impacts

The most general impact of the SESERV CSA will be the strategic impact on the Future Internet research agenda. Furthermore, measurable impacts cover:

- SESERV will raise the awareness of the socio-economic challenges in the Future Internet and related technologies.
- SESERV will outline and define the major tussles seen within today's approaches and networking technology and application scenarios.
- SESERV will coordinate selected activities that will lead to an economic, incentive-compatible awareness, and technology-wise capable accounting approach within the Future Internet research community.
- SESERV will coordinate selected activities that address the social challenges of the Future Internet in terms of digital Europe's policies and risk management.