Coordination of the European Future Internet Forum of Member States

D3.2(d) – Report on existing Member State Future Internet activities *(M22)*

K. Sullivan

Document Number	D3.2(d)
Document Title	Report on existing Member State Future Internet activities *(M22)*
Version	1.0
Status	Final
Work Package	WP3
Deliverable Type	Report
Responsible Partner	AMETIC
Dissemination level	PU

Change History

Version	Date	Status	Author (Unit)	Description
0.1	28/May/2012	Working	Kieran Sullivan (WIT)	Update D3.2(c), based on information gathered by ceFIMS as of June 2012 (M22)
1.0	11/June/2012	Final	Kieran Sullivan (WIT)	Finalise document based on new format of database

Table of Contents

1. Introduction

The ceFIMS Coordination Action began its work in September, 2010, and provides functional ongoing support to the European Member State Future Internet Forum (FIF). ceFIMS facilitates FIF activity by providing a Secretariat and support structure, and by maintaining the ceFIMS Future Internet web-portal.

The project has two primary aims:

— To facilitate Future Internet research across Europe by promoting strong Member State engagement and knowledge sharing in the FIF

— To identify synergies and improve FI research effectiveness at Member State level and between Member States and the EC.

The availability of up-to-date information on the widest range of Future Internet Initiatives at Member State and regional levels is vital to achieving these aims: knowledge sharing and exchange of best practice underpins the work of the project. Accordingly, the project is engaged in the process of building a comprehensive picture of Future Internet initiatives at Member State and regional levels across Europe. This information is a valuable resource for Member States, and will also help the project to: analyse the administrative and legal barriers that hinder co-operation: propose practical networking activities; and, support mutual opening mechanisms. A well-managed, accessible body of information will allow the project to document and analyse potential gaps in the European and national Future Internet policies, identify priorities and investment strategies and support the roadmapping activities of the project.

The task of information gathering and analysis (WP3: Stocktaking & Analysis) builds on a Compendium compiled by the European Commission[1]. The project has taken this information and transferred it to a database on the ceFIMS website[2]. With the addition of information gathered from members of the FIF and through the Future Internet Award competition, the database continues to grow into a comprehensive source of information on the wide range of initiatives taking place at Member State and regional level. This repository supports an increased level of awareness of possible collaboration opportunities, as well as helping to exchange information on best practice, test facilities, knowledge and experience. Thus, it works towards avoiding duplication when regions, Member State and EU initiatives seek to address problems arising from interdependencies (both planned and unplanned).

Note that the process of collecting information is ongoing and will continue throughout the lifetime of the project. Thus, this document, D3.2(d), presents the information gathered by ceFIMS as of June 2012 (M22). This latest 'Report on Existing Activities' also incorporates the recommended new format and

---

[1] http://ec.europa.eu/information_society/activities/foi/lead/fif/index_en.htm

[2] www.cefims.eu/database/

layout of the ceFIMS database[3]. The next deliverable will be the final in this series, D3.2(e), and will be produced in December 2012 (M28).

2. Member State Information: Building a Database

The information currently available on the ceFIMS database comes from the Compendium compiled by the European Commission, data gathered through the Future Internet Award competition and data supplied directly to the ceFIMS Secretariat from FIF Members. This information will be expanded through periodic iterations of proactive information collection: (1) Asking FIF Members and Award entrants for updates and information about new initiatives, and (2) Cross checking content against other information sources. Furthermore, as national initiatives are launched at any time, when such information is received, it will be added to the database.

In order to create the basis for improved organisation and categorisation of the information, additional functionality has been added whereby each project/initiative is tagged with keywords (e.g. architecture, security, business, etc.). This allows users to browse the information **by Member State** and **by topic**. A **free-text search** box is also available for the database. As more information is added to the database, this will become an increasingly important tool - a basis for the identification of gaps and analysis of synergies.

Entries received during the Future Internet Award competition are a valuable source of information which is being qualified and if appropriate, added to the database. Entrants are asked to provide information on their initiatives in a structured entry form. This information offers an insight into a large number of national and regional activities. The information in these entries in many cases, is different from (and expands) the current information in the database, as they are typically not national programmes, but rather other types of activities; for example, projects financed from the national programmes, themselves.

For the first Award (December 2010), 31 entries were received from applicants in 12 Member States. The second Award (May 2011) attracted 24 entries from 10 Member States, while 19 entries were received for the third running of the Award (October 2011). A record 36 entries were received for the fourth Award competition (May 2012).

The information that can be gleaned from these entries (which is non-sensitive and is publicly available) provides a valuable body of new information that is being used by the project to supplement and add to the existing available information on Member State initiatives. Section 4 of this report presents this information.

---

[3] Recommendation from ceFIMS M12 Review

3. Capturing Information: Ongoing Activities

A series of measures are being actively undertaken in order to gather information and expand the information available to the project:

1. List of European research councils and funding agencies

The project is compiling a list of research councils and funding agencies across Europe. This list includes website links and contact points. This task is being undertaken by project partner NWO, leader of WP4 (Strategic Actions) in the project. The list will be valuable for future contacts when gathering data and will be useful for identifying the type and range of initiatives being funded by Member States.

Appendix A contains the latest list of research councils and funding agencies (as of June 2012).

2. Open Dialogue with Future Internet Forum Member State Representatives

Contact has been made with all Member States represented in the Future Internet Forum, to open a dialogue with them on this issue. FIF members are asked to review the information on the database from their Member States and to inform the ceFIMS Secretariat if the information should be updated or changed in any way. Member States who have not already provided information are asked to provide information by completing the provided template (template in Appendix B).

The project is creating a dialogue with individual Member States based on this information in order to get more detailed information. The approach is to follow up with individual Member States through interviews and focused discussions at future workshops, to collect the type of information that cannot be easily gathered via structured forms. Such interactions will facilitate the exchange of best practices, the analysis of legal and operational barriers, and the identification of modalities for enhanced future cooperation. Furthermore, these activities offer an informal feedback mechanism for the identification of gaps, and the analysis of synergies and future cooperation opportunities. These methods will complement the factual, structured information collected via the forms for the database.

In order to enrich the information available on Member State initiatives, ceFIMS will investigate whether the initiatives—or their management organisations—maintain publicly accessible databases of projects (or other information sources, such as reports, compendiums, programme portfolio analyses, etc.) implemented within the scope of Future Internet. This is essential for the analysis of synergies; in particular, in the case of bottom-up programmes that do not describe in detail the topics that can be financed. The information uncovered through this process will also help pin-point research groups, capabilities, and test infrastructures.

3. Advisory Committee *(formerly entitled 'Steering Committee')*

An Advisory Committee for the project is in place. The composition rotates each semester in line with the Presidency of the EU. The composition of the Advisory Committee for the second semester of 2012 (June – December) is envisaged as follows:

— Cyprus (Chair)

— Lithuania

— France

— Czech Republic

— Sweden

— Spain

— Belgium

— Hungary

— *Portugal (ex-officio)*

— *Ireland (ex-officio)*

The Advisory Committee plays an important role in gathering data during the project and acts as a bridge between the project and the FIF; in particular, when developing a dialogue with Member States on their Future Internet activities.

4. EU Future Internet Activities

The following information represents the data gathered by ceFIMS, as of June, 2012, and supersedes the information contained in D3.2(c). The 'Projects & Initiatives' sections that follow contain the 10-line summary for each entry in the database. The key outputs/results and the link for further information are available on the database itself: http://www.cefims.eu/database/

4.1. Austria

4.1.1. RESEARCH AGENCIES

1. Der Wissenschaftsfund FWF: http://www.fwf.ac.at

2. Die Österreichische Forschungsförderungsgesellschaft FFG: www.ffg.at

4.1.2. ORGANISATIONS

— Austrian Research Promotion Agency

— Austrian Federal Ministry of Transport Innovation, and Technology

4.1.3. PROJECTS & INITIATIVES

FIT-IT

Various initiatives, including:

FIT-IT – Programme Embedded Systems (estim. share of FI-relevance: 20-30%)

FIT-IT – Systems on Chip (estim. share of FI-relevance: 5-10%)

FIT-IT – Semantic Systems (estim. share of FI-relevance: 30-35%)

FIT-IT – Trust in IT Systems (estim. share of FI-relevance: 25-35%)

ARTEMIS-AUSTRIA (national Co-Programme of ARTEMIS-JTI-Initiative, estim. share of FI-relevance: unknown)

Austrian electronic network – AT:net (estim. share of FI-relevance: unknown)

General funding (Basis-Programme/FFG; estim. share of FI-relevance: unknown)

Broadband initiative (estim. share of FI-relevance: unknown)

4.1.4. MISCELLANEOUS

Future Internet Austria: http://www.fi-austria.at/

4.2. Belgium

4.2.1. RESEARCH AGENCIES

1. Fonds de la Recherche Scientifique (FNRS): http://www2.frs-fnrs.be/

2. Fonds Wetenschappelijk Onderzoek (FWO): www.fwo.be

3. Het federaal wetenschapsbeleid: www.belspo.be

4. Het agentschap voor Innovatie door Wetenschap en Technologie (IWT): www.iwt.be

4.2.2. MISCELLANEOUS

IBBT: http://www.ibbt.be/en

4.3. Czech Republic

4.3.1. RESEARCH AGENCIES

1. GACR - The Czech Science Foundation (Grantová agentura Ceské republiky): http://www.gacr.cz/international.htm

2. Academy of Sciences of the Czech Republic: www.cas.cz

4.3.2. ORGANISATIONS

— Czech Republic Ministry of Education, Youth and Sports

— Czech Academy of Sciences

4.3.3. PROJECTS & INITIATIVES

CESNET

Current R&D activities in Future Internet area in the Czech Republic are systematically demonstrated mainly by those created and realized by CESNET, z. s. p. o. (the NREN operator in the Czech Republic) related to development of the Czech NREN CESNET2. Even if these activities seem to be performed by

single legal entity in the Czech Republic only, due to close relation of this subject to the entire research and education community (CESNET was established in 1996 by Czech Universities and Academy of Sciences of the Czech Republic) and close co-operation with this sector, these activities are representing those in the Czech Republic well. It is necessary to mention, that there is a significant institutional support provided by Ministry of Education, Youth and Sports.

4.4. Denmark

4.4.1. RESEARCH AGENCIES

Danish Agency for Science, Technology and Innovation: http://en.fi.dk/

4.4.2. ORGANISATIONS

— Danish Centre for Visual Impairment, Children and Youth

4.4.3. PROJECTS & INITIATIVES

Robraille

RoboBraille solves a universal problem regarding usability – the service makes otherwise inaccessible electronic documents accessible to people with visual or reading impairments. It is an e-mail service which can convert digital text documents into either Braille or audio files. Translation processes which traditionally take a long time, making the user reliant on assistance from others, can now be accessed done in a matter of minutes by the user himself. The RoboBraille service is available free of charge to all non-commercial users, and users do not need to register before using it.

4.5. Finland

4.5.1. RESEARCH AGENCIES

1. AKA - The Academy of Finland: http://www.aka.fi/en-gb/A/

2. Tekes – the Finnish Funding Agency for Technology and Innovation: www.tekes.fi

4.5.2. ORGANISATIONS

— Strategic Centre for Science, Technology and Innovation in the Field of ICT (TIVIT)

— University of Oulu

4.5.3. PROJECTS & INITIATIVES

ICT SHOK

The programme addresses short, medium and long term issues of the Internet infrastructure, which are essential both for Finnish industry as well as for Finnish society to be ready for recovery from the economic crisis.

The Programme is part of TIVIT – the Strategic Centre for Science, Technology and Innovation in the Field of ICT (= "ICT SHOK"). Tivit was founded by a group made up of forty different firms, universities or public bodies. The centre coordinates an annual investment of approximately forty million euros in research and in development of ecosystems based on ICT technology.

Other running TIVIT programmes are 'Flexible Services' (FS), 'Device and Interoperability Ecosystems' (DIEM) and 'Cooperative Traffic' (CT). In addition currently there are two programmes under preparation: 'Next Media' (NM) and 'Open and Web'd Software' (SW). Together these programmes cover the whole area of "Future Internet". Recent descriptions of the programmes can be found here.

Raiic

Currently, obtaining reliable, contractually guaranteed WAN connectivity increases connectivity price by orders of magnitude. This project focuses on a concept called Redundant Array of Inexpensive Internet Connections (RAIIC) which aims to provide a more economical alternative that would have equivalent capabilities to existing reliability solutions. The concept is based on the idea that unguaranteed access still works adequately for most purposes – if we could bundle several of these cheap links seamlessly together, traditional High Availability approaches could be implemented with fraction of a cost. Existing economical alternatives, such as multi-homing using routing protocols, suffer from long recovery times during outages. The project addresses and studies the background and issues in current operating environment, implements a possible technical approach, and includes studying of the economical impact of RAIIC if deployed.

Tivit Programs

Tivit (Strategic Center for Science, Technology and Innovation in the field of ICT) was founded 2008 by a group made up of forty six different firms, universities or public bodies. The centre coordinates an annual investment of approximately fifty million euros in research and in development of ecosystems based on ICT technology. The Tivit coordinated programs address several short, medium and long term issues of the Internet infrastructure, which are essential both for Finnish industry and helps in the recovery of the economic crisis.

Currently running Tivit programmes are 'Future Internet' (FI), 'Device and Interoperability Ecosystems' (DIEM), 'Cooperative Traffic' (CT), 'Next Media' (NM), and 'Cloud Software' (CSW). Together these programmes cover basically the whole area of European "Future Internet"-PPP. Descriptions of the programmes can be found at www.tivit.fi

4.6. France

4.6.1. RESEARCH AGENCIES

1. Agence Nationale de la Recherche: http://www.agence-nationale-recherche.fr/

2. Centre national de la recherche scientifique (CNRS): http://www.cnrs.fr/index.php

4.6.2. ORGANISATIONS

— Cap Digital

— Thales

4.6.3. PROJECTS & INITIATIVES

ImaginLab

Imaginlab is a telco grade Next Generation Network which is dedicated to experimentation. All the technologies involved in ImaginLab are the pillars of Future Internet for telecommunication operators, broadcasters, content providers, application developers and end users.

ImaginLab targets are Interoperability and Compliancy Testing as well as Product and Services Usability Testing. ImaginLab promotes User Driven Innovation including User Panels management and relying on various methodologies like Focus groups, Benchmarking, On-line surveys …

Technical Environment includes:

- IMS Core Network and Services (Very High Speed Internet, Rich Communication Suite, …)

- Very High Bandwidth optical fibre Access Network (FTTH/FTTB)

- Very High Bandwidth cellular Access Network (4G LTE, 3GPP Rel.8 compliant, FDD, 2,6 GHz)

- Very High Bandwidth Broadcast Network (DVB-T2).

THD Platform

The THD experimental platform is an open platform for digital content and services businesses in the Ile-de-France region (around Paris). This is a cooperative project piloted by the competitiveness cluster Cap Digital which brings together many public and private partners. The THD platform seeks to accelerate the prototyping and industrialization of online innovative services. It comes into play for the final stage of R&D, the technological adjustment of the interface or the ergonomics of the service, via experimentation in real utilization conditions with optical fiber users.

More than thirty companies are already using the THD platform via 28 experimental digital services and content projects in domains such as e-learning, video games, serious games, 3D, HD video, videophones, search engines, IPTV, web 2.0…

SEANET

SEANET project consists in developing ad hoc communication networks dedicated for high data rate ship-to-ship exchanges.

One of the main targets being to provide high data rate Internet to the ships while being on the open sea, different means enabling to interconnect these ad hoc networks to the rest of the world, such as satellite and ship-to shore communications, are considered in addition.

Such a network has to withstand the mobility of the nodes by using mechanisms of dynamic connectivity reconfiguration. Basic range and data rate requirements (30 Nautical Miles, 10Mbps) require the use of relaying functions and smart directional antennas.

SensLab

SensLAB is a very large scale open wireless sensor network testbed. It provides automation tools to remotely deploy and easily experiments, assess and analyse results produced both by the user's experiments and by the monitoring facilities offered by the testbed. In its current implementation, fully operational, SensLAB is based on the deployment of 1024 nodes among four interconnected sites in France, (Grenoble, Lille, Rennes and Strasbourg). Each site offers 256 nodes (two sites have mobile nodes) with different topologies (3D grids, 2D plans or more irregular topologies), environment and hardware specificities (868MHz or 2.54GHz). SensLAB will be extended thanks to the FIT project – Future Internet of Things – to gain more nodes (up to 2500), more powerful (ARM 3 and ARM 8) and will offer more than 200 mobile nodes. SensLAB is a key element of a global federation of testbeds that will play a key role in testing the Future Internet.

4.6.4. MISCELLANEOUS

Groupe de Reflexion Internet du Futur – GRIF:

http://www.telecom.gouv.fr/fonds_documentaire/consultations/09/09annexesif.pdf

4.7. Germany

4.7.1. RESEARCH AGENCIES

1. Deutsche Forschungsgemeinschaft (DFG): www.dfg.de

2. BMBF - Bundesministerium für Bildung und Forschung: www.bmbf.de

4.7.2. ORGANISATIONS

— Akt Infosys

— BCIX

— Deutsche Thomson

— Digital Film Postproduction (formerly Grass Valley Germany)

— Eurescom

— Fachhochschule Lübeck

— Fraunhofer FOKUS

— German Aerospace Centre (DLR)

— German Ministry of Education & Research (BMBF)

— Hochschule für Angewandte WissenschaftenHamburg

— Infosim

— T-Systems

— Tixel

— Universities: Berlin, Bremen, Darmstadt, DuisburgEssen, Hannover, Ilmenau, Kaiserslautern, Lubeck, Passau, Stuttgart

4.7.3. PROJECTS & INITIATIVES

G-Lab

The G-Lab project aims at the development of future Internet technologies which overcome the challenges posed by new Internet applications with high demands on the Internet infrastructure. For that purpose it relies on both experimentation and theoretical research work in a complementary manner.

The G-Lab consists of a Germany-wide research and experimental facility used to investigate the interplay between new technologies and the requirements of emerging applications. The BMBF funded project consists of 32 partners. The first phase started in October 2008 with six partners and runs for three years. The second phase started in September 2009 and consists of nine additional research projects. The G-Lab

experimental facility is composed of wired and wireless hardware with over 170 wired nodes which are fully controllable by the G-Lab partners.

G-Lab Deep

G-Lab DEEP explores innovative composition-approaches for cooperation between network and application level services with the focus on security in the Future Internet. The main focus of the research is the secure exposure, interaction and composition of future network capabilities with services from the web, telecommunication and business process world. This Future Internet approach builds upon a cooperative network and service monitoring security approach to detect, prevent and mitigate network and service level attacks. G-Lab DEEP utilizes a federation approach to make resources from heterogeneous testbeds, networks and domains available within the cross-layer, cross-domain composition approach. The German Future Internet testbed platform G-Lab is used and extended for the evaluation of the developed concepts.

G-Lab Ener-G

The mission of G-Lab_Ener-G is to develop a comprehensive approach to the future Internet architecture that includes energy efficiency as a fundamental principle. Key enablers for reaching this goal are the virtualization and consolidation of communicational and computational resources and the exploitation of energy-saving features of hardware. Specifically, the project addresses all successive layers in the protocol stack by providing energy saving mechanisms to the layers above on each respective layer. In addition to the initial aim of achieving a more energy-efficient operation of the G-Lab research testbed, the project has evolved and is now on route to demonstrate an architecture that optimizes energy efficiency through virtualization without violating quality of service constraints. The envisioned architecture allows the easy setup of virtual routers to form virtual networks that fulfil an application-tailored quality of service (QoS) while minimizing the required energy resources.

IKT2020

General objective of IKT 2020 is to consolidate and expand technological leadership in the ICT sector. Furthermore, the competitive ability of Germany as a place for research, production and employment is to be secured and enhanced by ICT both for specific branches and across different branches. The intention is to address all the links in the innovation chain. IKT 2020 focuses on applications in the branches automotive, mechanical engineering, health, logistics and energy/environment. Basic technologies under consideration are electronics, microsystem technologies, software technologies and communication and network technologies. Within this program, several initiatives contribute to future internet, among which the most important are:

- Transport technologies for future internet (100GET)

- Studies and experimental platform for the internet of the future (G-Lab, Germany-Lab)

- Enablers for ambient systems and services (EASY C)

- New internet-based services

- Internet of things

MultiNext

MultiNext proposes and analyses models for efficient operation of virtualized and federated networks, a key technology of the future Internet. It demonstrated the pooling and concurrent use of resources from different networks. MultiNext technology manifested in 6 publications (incl. FIA Book 2011) and 12 talks. MultiNext facilitated FI research across 4 EU institutions.

4.8. Greece

4.8.1. RESEARCH AGENCIES

N.H.R.F - The National Hellenic Research Foundation: http://www.eie.gr/index-en.html

4.8.2. ORGANISATIONS

— LamdaNet

— Universities: Athens, Piraeus

4.9. Hungary

4.9.1. RESEARCH AGENCIES

1. OTKA - The Hungarian Scientific Research Fund: www.otka.hu

2. The National Innovation Office (NIH): http://www.nih.gov.hu/english

3. National Development Agency: http://www.nfu.hu/?lang=en

4.9.2. ORGANISATIONS

— HTC

⸺ Hungarian National Authority

⸺ iGlue Ltd.

⸺ T-Mobile

⸺ Universities: Budapest, Hungary (Fine Arts), Lorandt Eotvos

4.9.3. PROJECTS & INITIATIVES

BudapestAR

Online industry trends have been emphasizing consumers demand on virtual communities throughout the last years (eg. Facebook, Second Life). Our mission is to build a real community in the real world with the help of smartphones' technological toolkit. The BudapestAR project is a service that uses smartphone capabilities on highest levels. Consumers get on demand information according to their location, needs and social relations in real time on the go via their everyday widgets.

The technology behind this solution is based on the new technological wave called Augmented Reality that help to embed virtual communities to our everyday life. Featuring the newest technological solutions it has never been easier to reach high volume of consumers with certain information while providing them satisfaction.

Creative Selector

Creative Selector supports the formation of new businesses that use advanced web, mobile and social networks. It allows individuals to share business ideas with other innovators to support the formation of the final business concept and in the promotion to build trust and community.

eBook Reader

One of the key motivation was to find the potential of HTML5 related technologies by identifying and many times exceeding the limits of future web standards. We wanted to build the world's first eBook reader experience based on the promise of HTML5 as the application platform and it's best in class implementation using Internet Explorer 9 and Windows Azure as the backend. In order to achieve the broadest consumer reach we partnered with Alexandra Ltd., Hungary's largest book retailer to find a very visible source of content with huge online distribution channel (400K registered users, 50K unique visitors per day). The team involved not only developers but a user experience specialist and even a sound engineer who composed atmospheric sound structures to amplify the feeling of immersive reading. The result is a cutting edge showcase of the platform capabilities.

fullXS

The project aims to develop a content delivery platform for mobile devices optimized for live and recorded video content, including live user generated content (UGC) from mobile devices.

fullXS is an open platform, which enables anyone with basic online experience to create a mobile content service and deploy it to various mobile platforms. This eliminates the barrier for content owners and generators to mobilize their assets and easily monetize from it with no need for software development and infrastructure building.

The platform leverages all advanced mobile phone features (sensors, GPS etc) and is complete with advertising and payment solutions and advanced recommendation engine. This gives complete flexibility for the content provider-to-be to create specific business models and content services with the highest impact.

Grandparents-Grandchildren Competition of Informatics

The main idea of the project is to close the digital gap between generations using family bonds. It is generally known that most of the people above 50 are digital illiterate and excluded from the information society. Grandparents-Grandchildren Competition of Informatics as an inter-generational project aims at raising awareness of all family members and the whole society to involve the older generation into the information society.

Grandparents-Grandchildren Competition of Informatics events encourage grandparents and their grandchildren to compete as a pair with other grandparents-grandchildren pairs in filling out a test using an internet search engine as a support. The competition followed by huge media attention therefore it has strong multiplication effect in countrywide.

iGlue

iGlue is the revolution of meaning. It not only helps us understand information on the Internet better but it will also make the Net understand us and adapt to us.

iGlue, an integrated online content manager and search engine that goes beyond today's widespread, language-dependant search mechanisms based on identifying character strings. iGlue identifies and manages entities, not keywords. Whether he is called Alejandro Magno, Büyük İskender or Lissandru lu Granni, these names all refer to the same person: Alexander the Great, and most likely we would like to find information about the person himself. This is the principle iGlue uses to manage entities appearing in web content, and it will find relevant information even if the given element appears in a form that is different from what we used in launching the search.

Integrated programme to support FI research

General goals are:

- Concentration of the financial and human resources

- Focusing the R&D activities on the fields related to Future Internet

- Coherent and integrated projects

- Long term financing of the activities

- EU and international cooperation in Future Internet research and experimentation

The objective of the program is to coordinate and strengthen the Future Internet related research activity in Hungary and to ensure the required financial support and the critical manpower that is necessary to have a successful program.

Participation in the Future Internet research programs is vital for Hungary to keep steps with the European and worldwide research activities. Based on the earlier research results and international co-operations it is anticipated that Hungarian researchers could successfully participate in the Future Internet initiatives of the 7th Framework Programme. Furthermore it is an important goal to include industrial partners in the program. The concept of the initiative is similar to the ongoing US and EU programs taking into account the Hungarian capabilities and strengths.

mindenki

The project permits users to download their own personality, using interaction connected to the content. By defining their relation to the contents, the users process them jointly at the same time. In the background a Relevancy Network is constructed between the users and the contents, which is a significance based, web 3.0 semantic web. By means of the Relevancy Network, a new generation content recommendation system is operated, that is able to define content distance between certain elements. This recommendation is not a sales driven process functioning in a closed system, that is in action in order to sell some website product. This is a user driven process, where the digital personality is managed by the user, in order to access person-specific content. This way the user is not obliged to browse the internet, since the relevancy dns is able to collect contents of interest from the whole spectrum of the web. The Relevancy Network is an organic system, permanently molded by the users, in which knowledge, gained from interaction is spread the same way as in the nervous system. 'Mindenki' connects Long tail contents in an integrated cross-reference system.

NonStopLive.com

Content can be embedded into any website. Standardized platform, quick development. Affiliate program, commission system.

Communication with the website's server via live connection: live databases, immediate content update. Chat, Video Chat.

Building up global expert network, link experts' knowledge with users' questions through automated system. Dyamic load sharing of servers in order to easily expand the cluster in case of increasing number of visits.

T-City Szolnok

T-City is a long-term development and innovative programme of Magyar Telekom NyRt. and the city of Szolnok. The project started on 20th May 2009. The citizens, companies and institutes of Szolnok can test the new services and products of Magyar Telekom NyRt., and they can discover the advantages of the internet based information society. We organize tests on the following fields of life: convenience, culture, education, health, security.

The tests are being organized within the confines of T-City Home Lab.

As a reduction of the Digital Divide, we offer Internet Academy events for older citizens, and T-City Kids trainings for children.

VirCA

VirCA is an Internet-based network and toolkit that provides collaboration and knowledge sharing for laboratories and other R&D facilities. Combining advanced technologies (3D content management, ICE, CORBA, RT-Middleware), we propose a future platform for internet of things, where these "things" are capable of providing their own 3D representation, share the coupled real functionalities and remote capabilities, allows distant co-operators (human or intelligent devices) to use them in creative assemblies for building complex system in a plug and play manner. From the aspect of 3D internet and media, VirCA contributes in the sense that connects the reality and the 3D virtuality together in a kind of augmented collaboration. The manipulation of the 3D content of the today internet using keyboard and mouse is clumsy therefore VirCA provides surface for cognitive infocommunication devices that makes "3D Internet" applications effective and comfortable.

Visuland

We built Visuland to put the teaching and learning activities into an enviroment that is familiar and loveable for the new generation and make learning fun and entertaining. We integrated all the present communication forms, the Skype's, YouTube's, Power point's functionalities for the maximum usability and online games for entertaining purposes.

Visuland is perfect for any kind of communities (social portals, schools, teachers, companies) where people, friends, students, employes want to get together with One-Click – without any long downloading, long installation and registration process. They can talk there like in real life, they can make presentations, watch galleries for videos, or realtime sport events together. Or simply play with each-other.

- 1 minute overview: http://www.youtube.com/watch?v=C2i7jrPF2co

- Visuland in practice: http://www.youtube.com/watch?v=Bs8VB7ksj3M

Our innovation is how to develop all the present popular tools (Skype, YoutTube, Power Point) and 3D games and technologies and put it together into one 20Mbyte system that will run also in low-end computers.

3G Multimedia / Gaudio

Our project is a stream based music solution with a great new user experience to fulfil the following need of the people: Listen to any music you like anytime, anywhere and even benefit from doing so!

What makes gaudio so revolutionary is the "Mood" and the "You play, we pay" approach we embrace integrated into a music solution in a new way that can create the buzz straight away.

"Your Mood, your music" : Just enter your current mood criteria and an endless flow of tracks you wanted to hear start to play – yes it can also be an artist! Based on behaviour recommendation Your personal data and taste modifies the tracks coming your way. You can edit your channels and save them – still the tracks played will fit your present mood!

"You play, we pay!: Every activity one does using the system, from as simple as listening to music to buying a ticket through their mobile phone, will result in a increasing balance of benefit points, that can be used to unlock new features, enter games, gain more invitation possibilities and more.

4.10.   Ireland

4.10.1. RESEARCH AGENCIES

1. Science Foundation Ireland (SFI): www.sf.ie

2. Irish Research Council for Science, Engineering and Technology (IRSET): www.ircset.ie

3. Enterprise Ireland (EI): www.enterprise-ireland.com

4.10.2. ORGANISATIONS

— DERI

— Dublin City Council

— Dublin Institute of Technology (DIT)

— IBM

— Intel

— Intune Networks Ltd.

— Oracle (Sun Microsystems)

— Universities: Dublin (UCD), Limerick (UL), Maynooth (NUIM), Trinity (TCD), Waterford Institute of Technology / TSSG

4.10.3. PROJECTS & INITIATIVES

FI Forum & IPv6 Taskforce

The Irish Future Internet Forum (IFIF) was established by the Telecommunications Software and Systems Group at Waterford Institute of Technology, with the purpose of bringing the Irish ICT research community together in a common forum that would facilitate the discussion and knowledge transfer of issues related to Future Internet activities in the EU and globally.

The Irish IPv6 Task Force was set up in 2004, chaired by Mícheál Ó Foghlú of the TSSG. The Irish National IPv6 Centre was set up in 2005 as a collaboration between the TSSG in Waterford Institute of Technology, the Hamilton Institute in NUI Maynooth, BT Ireland and HEAnet. The role of these organisations is to encourage the transition of the Irish network to IPv6 to allow continued growth of the Internet and its services in Ireland.

FutureComm

As the move towards convergence of communications networks gains momentum, the academic and industrial research community is increasingly focussed on the evolution of networking technologies to enable the "Future Internet." However, we believe that addressing evolution of networking technologies in isolation is not enough. Instead, it is necessary to take a holistic approach to address the issues of communications services, their societal drivers and the requirements they place on the heterogeneous communications infrastructure. The three programme partners have strong track record in the areas of: communications network and service management (WIT-TSSG); network performance analysis (NUIM-Ham); interaction design and usability (UL IDC); and analysis of usage patterns of ICTs (NUIM-Soc). They

are ideally positioned to collaborate on the development of a framework for creation, deployment and management of communications services that serve societal needs.

GUILD

To date, computational modelling has not been fully exploited at the neighbourhood- or city-scale, because of the expense and time required to create computational meshes for the vast quantity of buildings involved. This project (GUILD) has made fundamental breakthroughs in the auto-generation of city-scale computational modelling by creating a pipeline to convert to aerial LiDAR into Finite Element Meshes without any manual intervention and without any reliance on a prior data. The long-term vision for this work would enable anyone to log onto a Google Map type site and conduct environmental modelling for alternative energy optimization, hazard exposure, and general environmental health. The project also has significant implications for disaster management planning and response and for the construction of major infrastructure projects.

National Digital Learning Resource

The key objective of this HEA-funded Irish National Digital Learning Resources (NDLR) service is to support sharing of digital learning resources and associated practice among the Irish academic community.

This is a unique and innovative portal and platform encourages the use, reuse and sharing of digital education resources and associated practices. The ethos of the service is that the sharing of resources, experience and information can contribute to raising awareness of best practice in teaching and learning and potentially improve efficiencies in the preparation of material by reusing and repurposing existing learning content. The NDLR enables development and sharing of digital learning resources between ALL of the Irish third level institutions. The service is a free and supports an open online community of resources designed primarily for faculty of higher education in Ireland to share their learning materials.

StragAG

Research and development of real-world applications for the Future Internet of Things is about delivering technologies built around management and access to real-time heterogeneous datasets. Analyzing these enormous volumes of data on mobile devices requires context-aware smart applications and services. 3DQ (Three Dimensional Query) is our novel mobile spatial interaction (MSI) prototype for data mining and analysis on today's location and orientation aware "smartphones" within 3D sensor web environments. Our prototype tailors a military style threat dome query calculation using MSI with hidden query removal functionality for reducing "information overload" on these off-the-shelf devices. The effect gives a more accurate and expected query result for Location-Based Services (LBS) applications by returning

information on only those objects/sensor enabled "things" visible within a user's 3D field-of-view (FoV) as they move through a built environment.

4.11. Israel

4.11.1. RESEARCH AGENCIES

1. ISERD: http://www.iserd.org.il/

2. Israel Science Foundation: http://www.isf.org.il/

3. Technological Incubators Fund: www.incubators.org.il

4. The Magnet fund: www.magnet.org.il

5. Ministry of Industry, Trade and Labor - The chief scientist fund:
http://www.tamas.gov.il/NR/exeres/79606C10-6797-4F5D-A743-CED7B05188C1.htm

4.12. Italy

4.12.1. RESEARCH AGENCIES

The National Research Council (Consiglio Nazionale delle Ricerche): www.cnr.it

4.12.2. ORGANISATIONS

— eXact Learning Solutions (formerly GIUNTI Labs)

— Interoute

— Nextwork

— Scuola Superiore Sant'Anna

— Telecom Italia

4.12.3. PROJECTS & INITIATIVES

Magazzini Sonori

Magazzini Sonori is a digital sound archive collecting artistic performances in theatres, celebrations and festivals, in concerts, conservatories and music schools of the Region Emilia-Romagna. Its main sectors are: Magazzini Net for theatres, music institutions, public and private festivals; Magazzini Free Zone for regional musicians and groups only; Magazzini Accademia, for music teaching activities, from

conservatories to schools and laboratories set up by production institutions; Magazzini I Maestri, for important musicians from the region; and Magazzini Coralità for choruses in the regional territory. Magazzini Sonori organizes streaming broadcasts of live concerts, operas and performances in the territory and recorded broadcasts in the afternoon in the formats called "Magazzini Break". Since 2008, Magazzini Sonori in collaboration with regional festivals and music institutions has been organizing the competition "La musica libera. Libera la musica" ("Music is free. Set the music free"), promoting young musicians from the region.

Radio Emilia Romagna

Magazzini Sonori is a digital sound archive collecting artistic performances in theatres, celebrations and festivals, in concerts, conservatories and music schools of the Region Emilia-Romagna. Its main sectors are: Magazzini Net for theatres, music institutions, public and private festivals; Magazzini Free Zone for regional musicians and groups only; Magazzini Accademia, for music teaching activities, from conservatories to schools and laboratories set up by production institutions; Magazzini I Maestri, for important musicians from the region; and Magazzini Coralità for choruses in the regional territory. Magazzini Sonori organizes streaming broadcasts of live concerts, operas and performances in the territory and recorded broadcasts in the afternoon in the formats called "Magazzini Break". Since 2008, Magazzini Sonori in collaboration with regional festivals and music institutions has been organizing the competition "La musica libera. Libera la musica" ("Music is free. Set the music free"), promoting young musicians from the region.

4.12.4. MISCELLANEOUS

TERIT: http://www.ict.cnr.it/documents.php?type=Actions

4.13.   Luxembourg

4.13.1. RESEARCH AGENCIES

Fonds National de la Recherche Luxembourg: www.fnr.lu

4.13.2. ORGANISATIONS

— Luxembourg Ministry of Communication

— University of Luxembourg

4.13.3. PROJECTS & INITIATIVES

IPv6 Council

Most of today's Internet and our corporate networks use IPv4, which is now more than three decades old. IPv4 has been remarkably resilient in spite of its age. In the early seventies, when IPv4 was originally developed, the current size of the Internet was beyond imagination. It is remarkable that this protocol is still able to be the transport for the Internet. But it has been hitting its limits for some time. The most obvious limitation is the address space, which is short and will run out in the near future. We have helped ourselves by using IP address sharing techniques such as NAT (Network Address Translation), but this is not a good long-term solution. By using the IPv6 address space of 128 bits (compared to 32 bits with IPv4), the limit on addresses has been extended from a theoretical 4 billion to 340 billion billion billion billion (3.4 x 10^{38}) — 2^{32} compared to 2^{128}).

4.14. Malta

4.14.1. ORGANISATIONS

— CISCO

— Living Lab Malta

— University of Malta

4.14.2. PROJECTS & INITIATIVES

DINOS

DINOS for Smart Cities is a hybrid system, developed on Android mobile platform, which collects and manages information and aid users while travelling in a city by making use of localisation services. It incorporates an intelligent information system managing the status of the queues at the attractions automatically and thus distributing visitors among different attractions. The system is able to decide which queue is most flowing. Using Artificial Intelligence (AI) techniques, DINOS in return suggests attractions to the users depending on this status and provide recommendations based on the proximity of the user to the relevant attractions. Natural Language processing (NLP) is employed to protect the tourists since by reducing their use of the traditional methods. The system is composed of a central server receiving information from nodes in attractions and interacting with users on their mobile device. These recommendations are brought together through linked data on web sources.

4.15.   The Netherlands

4.15.1. RESEARCH AGENCIES

1. Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO): www.nwo.nl

2. Technology Foundation STW: www.stw.nl

3. Agentschap NL: www.agentschapnl.nl

4. The Netherlands Organisation for Applied Scientific Research (TNO): www.tno.nl

4.15.2. ORGANISATIONS

— Cites of: Arnhem, Deventer, Nijmegen, Zwolle

— Novay

— Saxion

4.15.3. PROJECTS & INITIATIVES

HeerlenLive

HeerlenLive is a different approach to new media and the urban space putting the citizen in the centre of the city media landscape. We see new media as a logical part of the city, both the physical as the virtual city. Heerlenlive has created a platform. Based on a fiber network, we have developed a free wifi network,camera surveillance, urban screen network, walk-in studio for citizens, content distribution platform, streaming video platform for the city, QR-code storytelling and information and much more.

Internet Economy: Discussion Paper

The Dutch Ministry of Economic Affairs asked RAND Europe to explore the critical issues arising from the emerging Internet economy. It resulted in "The Future of the Internet Economy; a Discussion Paper on Critical Issues". The document provides a basis for a continuous exchange of ideas relevant for current and future policy making in response to the challenges posed by the emerging Internet economy. It addresses emerging trends and underlying values and the possible role of governments in dealing with the unfolding Internet economy. No specific actions are being taken in the field of the internet which can or will contribute to address the problems associated with the current economic crisis and prepare the ground for a recovery through innovation. The further development, roll out and take up of internet is carefully monitored in general, as the Internet is seen by Dutch government as a crucial driver of sustainable economic growth and innovation, and–by implication-Economic recovery.

NDIX

NDIX is a unique open platform to facilitate competition, innovation and the development of new digital services by offering unlimited and secure connectivity between suppliers/developers and (potential) users of services. NDIX is the prototype open digital marketplace. It interconnects FTTH and FTTB/I infrastructures and allows companies, institutes and households to connect over 1 fiber-access to any number of different suppliers of all kinds of electronic services simultaneously from all over the Netherlands and Germany (Nordrhein Westfalen) based on a flat-fee.

SURFconext

Currently, the market offers a great variety of online applications. The number of available online applications increases at a fast pace, they evolve quickly and tend to become more complex and specialized. At the same time users become more demanding and want to choose, mix and match tools from different vendors that best fit their online collaboration needs. The downside of this multi vendor approach is that users need to authenticate for each tool separately and that there is a lack of interoperability. To simplify identity management and to improve the interoperability of online applications, SURFnet and partners in higher education and research created a next generation collaboration infrastructure entitled SURFconext. The use of open standards like OpenSocial and SAML play a central role in SURFconext. SURFconext is a synergy of identity management, social networking and collaboration applications.

4.16. Norway

4.16.1. RESEARCH AGENCIES

The Research Council of Norway: www.rcn.no

4.16.2. ORGANISATIONS

— SINTEF Semantics

— Telenor

4.17. Poland

4.17.1. RESEARCH AGENCIES

1. Ministry of Science and Higher Education: www.nauka.gov.pl

2. National Centre for Research and Development (NCBiR): www.ncbir.pl

3. National Centre for Science (currently being set up): www.ncn.gov.pl

4.17.2. ORGANISATIONS

— Det Norske Veritas

— Polish Ministry of Health

— Poznan Supercomputing and Networking Center(PSNC)

— University of Poznan (Economics)

4.17.3. PROJECTS & INITIATIVES

Future Internet Engineering

The project "Future Internet Engineering" is the strategic polish research project aimed at improving capabilities of the current Internet by proposing more efficient network infrastructure and new set of applications. The project activities are grouped in four main work packages that correspond to: (1) transformation of the current IPv4 network into IPv6, (2) designing, prototyping and testing of the system for Future Internet that is based on novel architecture exploring the concept of virtualization, (3) designing, prototyping and testing selected advanced applications, and (4) designing and building national research network for supporting experimentally driven research in the area of Future Internet, named PL-LAB. The project collects more than 120 researchers from 9 top organizations (research centers and academia) in Poland working in the area of ICT.

Ego: Virtual Identity

One of the most important factors that will enable shift to the Future Internet, as it is believed it should look like, is a revolution in means of communication with one another via the Internet. Emerging services are expected to accelerate a transfer of increasing number of real-world activities to the Web. It is crucial for users to facilitate understanding of their needs by aforementioned services and content providers. This will enable full utilization of opportunities, that will be provided by the Future Internet with regard to access to information.

Ego project, financed by the Polish Ministry of Science and Higher Education, aims to enable people to semi-automatically create their representations, called virtual identities, to manifest their information needs in various Web sources. Project goal is also to enable Web sources to agilely adapt to users' expectations. Fulfilment of this goal will enable better understanding of users' needs by information sources and services to enhance customisation and flow of information in the Web.

eXtraSpec

The goal of the eXtraSpec project is to create a solution that analyzes internal documents of the organization and external Web sources in order to find an appropriate expert from the specific domain or who has specific competencies.

Project eXtraSpec is an innovative solution that identifies problems from HR domain. Project result might be used in a wide spectrum of organizations where appeared a need to find an expert with a particular skills. Our solution can be use in public institution as well as in enterprises. It is possible to search experts among employees (e.g. while composing a team for internal project) or while looking for a potential candidates. Project results will contribute to decreasing information asymmetry at labor-market and partially converting tacit knowledge into explicit and widely used knowledge.

NOR-STA

The project aims at development and deployment of innovative services to support processes of achieving and assessing conformance to standards and norms. The services provide for representing and maintaining conformance arguments, integrating these arguments with the supporting evidence and assessing the compelling power of the arguments. All these services are accessible through standard Internet browsers and their deployment is planned in accordance of the SaaS cloud computing model. The project integrates three main viewpoints on standards: owner, user and assessor. NOR-STA services support all three viewpoints and move the whole problem of conformance demonstration and assessment to the Internet in a way which respects security and privacy perspectives. The project runs a series of Case Studies with partners from medical and business sectors including hospital quality management and secure outsourcing management. Expansion to other sectors is foreseen in the project course. It is expected that the project will conclude with a spin-off company.

PLATON

The project focuses on development of e-Services for Polish scientific community based on the infrastructure of the national optical research and educational network PIONIER. The PIONIER network covers the whole territory of Poland and connects research entities and higher education establishments with the GEANT network and scientific networks of neighbouring countries. Basing on the infrastructure of the PIONIER network, the project PLATON develops e-Science services that will be accessible for all researchers from all over the Poland.

The main goal of the project is to implement 5 advanced s-Services: videoconference services, campus services, eduroam, archiving services and scientific HD TV services for educational and research purposes (e.g. visualisation for telemedicine, medical research and education).

Semantic Monitoring of the Cyberspace

Internet is evolving rapidly, being present in every aspect of our lives. Today's society except from using Internet for fun or work, has also to handle multiple cyber threats. The major objective of the SMC project is to integrate data from heterogeneous sources and enable for automatic detection of cyber threats. The project therefore faces the following challenges related to automated detection of Internet threats:

- handling large amount of structured and unstructured data,

- integrating data from diverse sources,

- evaluating if particular activity or data indicate a cyber threat.

Information from chosen Internet sources, like social network sites or on-line auction services, will be filtered applying a threat profile to find a particular threat. Experts' role will be limited to definition of the detection process and a profile of a cyber threat.

4.18.   Portugal

4.18.1. RESEARCH AGENCIES

The Science and Technology Foundation (Fundação para a Ciência e a Tecnologia):
http://www.fct.mctes.pt/

4.18.2. ORGANISATIONS

— Portugal Telecom Inovação

— Universities: Madeira, Porto (Engineering & Psychology)

4.18.3. PROJECTS & INITIATIVES

Cloud Counselling for Youths

Taking advantage of Portugal's mobile phone penetration rate of 117% this project provides a service of cloud counseling support to young members of communities facing social issues via sms communication. This initiative relies on a network of qualified volunteers that log in to a robust Web-based interface in order to manage conversations. The information collected from each interaction is automatically forwarded on a daily basis to the appropriate social institutions according to the type and urgency level assigned to each interaction. The use of mobile technology for these situations presents an innovative platform with which youths are deeply comfortable with, and compared to traditional help lines this

system offers a higher level of anonymity and discretion, which are crucial requirements to be met when dealing with youths in socially susceptible situations.

Panorama Networks

The proliferation of the Internet and wireless access technologies introduced the constant mobile paradigm, where users want to be always connected making use of the best available networks and technologies. In order to provide seamless connectivity among the new wireless access technologies, such as Wi-Fi, WiMAX and 3GPP (UMTS, HSPA and/or LTE), the IEEE 802.21 standard has defined the media independent handover framework. However, although there is a recognized importance of the IEEE 802.21 framework in the vertical handover optimization procedures, it is still necessary to improve this framework to the radio access technologies individual features. The networking part of this project aims to integrate the process of the IEEE 802.21 framework with the aforementioned wireless access technologies, enabling the complete support of all the envisioned IEEE 802.21 handover phases in the support of handovers with Quality of Service between all technologies: Ethernet, Wi-Fi, WiMAX, 3G, LTE.

4.19. Romania

4.19.1. RESEARCH AGENCIES

National Authority for Scientific Research: www.mct.ro

4.19.2. ORGANISATIONS

— Romanian National Institute for Research and Development in Informatics

— University of Bucharest

4.19.3. PROJECTS & INITIATIVES

Risc-Expert

The main purpose of the project is the development of a system and of a portal for analysis, description, classification and recording of the major occupational risks and of the preventive measures and computer-assisted training and consultancy for employees in organizations with major occupational risks.

The system will be adaptable for any domain with major occupational risks (industry, health, biology, construction, transportation, environment, agriculture etc) and will rely on a specialized language, on specialized knowledge and semantics for the risk prevention description. It will include software tools for the 'operator-activity-machine' communication and for the translation of the instructions existing in

natural language (including in English) into a formalized, specialized and synthetic language for the risk prevention.

ROLINEST

Given the development of library information systems in Romania and the development of virtual libraries in Europe at project starting date, the project proposed, for the first time in Romania to setup a national system for information and documentation in science and technology based on the principle of virtual library catalogue. The design of the system was based on sharing information between involved libraries to create a virtual national library in science and technology, resulting in Romanian Library Network in Science and Technology – ROLINEST. In the same time, based on the National Data Communication System for Education and Research ROEDUNET, it was ensured high quality communication among involved libraries and the central server, representing the node ROLINEST. The project proposed to improve internal infrastructure of involved libraries and their connectivity to ROEDUNET. Improved accessibility to content information is provided to users. Librarians involved in project working team established common cataloguing rules, to setup national accepted and spread cataloguing procedures. The system allows access to both bibliographic records and full text digital documents. Databases access is provided by multilingual interface both for users and librarians. Search procedures are based on ontology technologies also.

4.20.   Spain

4.20.1. RESEARCH AGENCIES

1. The Spanish National Research Council (CSIC - Consejo superior de investigaciones cientificas)

2. Ministry of Industry, Tourism and Commerce (MITYC), Several R&D programmes, www.mityc.es

3. Ministry of Science and Innovation (MICINN), Several R&D programmes, www.micinn.es

4. Centro Desarrollo Tecnologico e Industrial (CDTI), Several programmes, www.cdti.es

4.20.2. ORGANISATIONS

- Atos Origin
- City of Barcelona
- Indra
- Institute de Telecomunicações
- ISDEFE

- Sayos & Carerra
- Telefonica I&D
- Universities: Madrid, Murcia, Navarra
- VallettaLocal Council
- Vicomtech

4.20.3. PROJECTS & INITIATIVES

Asturcon

The Network Asturcón is a fibre optic access network to home (FTTH), with GPON technology that, for its characteristics and performance, is at present among the most advanced in the world and it is the pioneer of being simultaneously public, neutral and of high capacity. Network is operated by a public neutral operator (GITPA).It's Neutral, scalable, transparent, open, secure, flexible and attractive.

Catalunya Connecta

Catalunya Connecta is the deployment plan for infrastructures of electronic communication services of the Government of Catalonia. This plan has enabled universal access to new telecommunications services to citizens, administrations and the Catalan business, providing coverage of digital terrestrial television services, mobile and broadband, al least in the villages of more than 50 people, and coverage of broadband and mobile telephony to all industrial estates in Catalonia. Its goal is to become an advanced and competitive territory, where citizens, businesses and the Government are fully connected, in order to improve the quality of life, competitiveness and efficiency of the country.

es.INTERNET

Spanish Administration is highly interested in participating in the development of the Future Internet. An initiative promoted by the Ministry of Industry, Tourism and Trade (MITYC), the Ministry of Science and Innovation (MCI), and the CDTI (Industrial Technological Development Centre) with the support of important industrial companies and main Research Centres, resulted in the creation of the national Technological Platform es.Internet The Spanish Association of Telecom Operators, Information Technologies and Electronic of Spain (AMETIC), is the main driver and core of the Secretariat of this Platform ensuring a transparent and dynamic body capable of amalgamating the participation of large, medium and small enterprises.

GEN6 (Spain)

Adaptation of current network infrastructure and systems of the Ministry with the help and contribution of multiple public and private organizations so that all the contents of the Ministry can be accessible from the outside using IPv6 protocol.

Creating and publishing a web portal under the domain name www.ipv6.es, with information and reference on IPv6 to promote the knowledge and use of this protocol.

The experience of this project will be used as a reference for the incorporation of IPv6 into other public and private organizations.

3DStroiTec

3DStroiTec is an innovative software that anticipates the future of the internet, providing to the major browsers new and powerful interactive 3D graphics capabilities.

3DStroiTec is being adapted for all major operating systems and platforms (Microsoft Windows, Mac OS X, Linux, iOS, Android)

The project consist in develop the version 2.0 (the current version available via our website is Beta 1.1)

This new version will be improved and expanded for industrial, scientific and medical uses.

I-Beds

This project exploits the use of Future Internet capabilities to enhance clinical services and extend these services seamlessly from the hospital to the home. Smart rooms in hospitals and homes support ubiquitous data collection, context and personal identification. Physiological and environmental data are collected, integrated and utilised to early detection of problems with the patient's health, and continuation of treatment and clinical supervision at home, after a patient is discharged from Hospital. For that purpose, this project has developed a platform for the patient's beds (MONERE), and a system for the clinical devices (MOVITAL) to provide a global connectivity and management capacity that links the patient to the Knowledge Based System, the Context Management Framework and the Identity Management Frameworks that will provide the functional capabilities of the whole infrastructure. The figure in Annex 1 illustrates the architecture.

4.21.   Sweden

4.21.1. RESEARCH AGENCIES

The Swedish Research Council (Vetenskapsrådet): www.vr.se

VINNOVA: www.vinnova.se

4.21.2. ORGANISATIONS

— Ericsson

4.21.3. PROJECTS & INITIATIVES

Ambient Sweden

Sweden, as well as all European countries, has much to gain from being a leding Internet nation. The Internet is becoming more and more integrated into our everyday lives – both at home and at work, not just in Sweden but everywhere in the world. To ensure we maintain a leading position, we need to fully understand our strengths and weaknesses in the field. In the IVA Internet Foresight project, we have identified Sweden's strengths and looked at threats and opportunities. We have also defined the concept of a "leading Internet nation," i.e. what is required in terms of infrastructure, usage, knowledge and leadership in order to be a leader in the field. The initiative's objective is to both secure and advance Sweden's positions with respect to the Internet of the future.

Sense Smart City

The project turn the small city in the northern part of Sweden, "Skellefteå", to a "smart city" – connected with sensors to measure, monitor, communicate and more efficiently allocate resources to provides better services for the citizens and use energy more efficiently.

The project support local SMEs in cooperation with municipality and research in mobile systems at the university to develop SmartCity products/services.

The project also develops a platform to manage collected sensor data and security, which will enable new and really smart services using combined data.

The project is mainly funded by EU regional development fund.

4.22.   Switzerland

4.22.1. RESEARCH AGENCIES

Swiss National Science Foundation (SNF): www.snf.ch

4.22.2. PROJECTS & INITIATIVES

Swiss IPv6 Council

Provide a platform for information and knowledge exchange about IPv6 deployment

Connect enterprises, governments, ISPs, users and support information exchange

Organize member events and business conferences

4.23. United Kingdom

4.23.1. RESEARCH AGENCIES

1. Engineering and Physical Sciences Research Council (EPSRC): www.epsrc.ac.uk

2. Technology Strategy Board: www.innovateuk.org

4.23.2. ORGANISATIONS

— British Telecom

— Hewlett Packard

— Universities: Essex, Oxford (Internet Institute), Southampton, Warwick

— UK Department of Transport

— UK Home Office (Interior Ministry)

— Virgin Media

— Zonerider Networks Ltd.

4.23.3. PROJECTS & INITIATIVES

Digital Economy Programme

The Digital Economy is a new €110m broad cross-research council programme, aimed at realising the transformational impact of ICT for all aspects of business, society and government. Three large thematic hubs will be created that bring together academia, businesses as users broadly in the areas of, respectively: a) ubiquitous computing (especially with Creative & Transport sectors) b) rural economy, especially with respect to peculiar healthcare and transport requirements and c) inclusivity, especially with respect to local government, healthcare, transport and with a large user-adopter panel.

EnCoRe

The EnCoRe project seeks to develop innovative technological mechanisms to enable and simplify the process of giving and revoking consent for the storage and use of personal data.

HIPNET (Heterogeneous IP Networks)

The UK has made substantial progress in creating one of the most competitive broadband markets in the world and is seeing 3G mobile starting to make a real impact on services.

The HIPNet project supports the advancement knowledge and skills in the validation and verification of complex next generation networks through a combination of experimental development and modelling.

India-UK Advanced Technology Centre (IU-ATC)

The initiative aims to establish the first virtual India-UK Advanced Technology Centre (IU-ATC) in Next Generation Networks, Systems and Services, which will put in place the support infrastructure to facilitate, develop and enable the Digital Economy of both countries.

Intelligent Transport Systems and Services

The Intelligent Transport Systems Services (ITSS) Innovation Platform is one of the very first pilots in a new way of thinking to address the societal challenges of travel. Its vision is for the UK and Europe to become a world-leader in innovation in intelligent transport systems and services.

Network Security

Present and future digital business models rely on interlinked and interdependent information infrastructures, enabled by appropriate security models. The Network Security Innovation Platform (NSIP) from the Technology Strategy Board looks into how to predict and mitigate information risks within digital services and infrastructures.

Oxford Internet Institute

The Oxford Internet Institute (OII) is part of Oxford University and is devoted to the study of the societal impact of the Internet with a mission to influence research agendas, policy and business practices in the UK and beyond.

UMA

User-Managed Access (UMA) is a protocol that enables individuals to use a unified control point for authorizing who and what can get access to their online personal data (such as identity attributes), content (such as photos), and services (such as viewing and creating status updates), no matter where these things live on the web. At this control point, a user can set policy that ensures that only requesters meeting criteria such as having a certain identity, being over a certain age, or being willing to agree to non-disclosure terms can succeed in gaining access. UMA can apply to a wide variety of sharing scenarios, such as sharing social data and calendars with friends, sharing health data securely with medical professionals, giving contract bookkeepers access to small-business financial data, and offering photos for

sale. An international team of computer industry professionals, web service providers, and researchers has been involved in designing and implementing the draft UMA specifications.

Note:

This input includes a small but representative selection of National initiatives and programmes relevant to the Future Internet that are UK funded.

In addition to these and amongst other funding institutions, the Research Councils are investing in a large number of academia-led programmes and projects with strong relevance to the Future Internet, including a combined €50m in 132 communications projects, a planned circa €100m in the Digital Economy programme and €17 in the e-science programme.

UK organizations are heavily involved and/or leading in FP7 programmes (such as OneLab2)

4.23.4. MISCELLANEOUS

Internet Centre Imperial: http://www.internetcentre.imperial.ac.uk/about_us

4.24.   EU-level

4.24.1. RESEARCH AGENCIES

1. Framework Programme 7: http://cordis.europa.eu/fp7/what_en.html

(Horizon2020: http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020)

2. Future Internet Public-Private Partnership (FI-PPP):

http://ec.europa.eu/information_society/activities/foi/lead/fippp/index_en.htm

3. FET Flagships: http://cordis.europa.eu/fp7/ict/programme/fet/flagship/home_en.html

4. EUREKA: http://www.eurekanetwork.org/

5. CELTIC: http://www.celticplus.eu/

4.24.2. PROJECTS & INITIATIVES

Apollon

APOLLON Project merges Living Lab approach and research and innovation processes with the local, real-life context (with ICT adoption in four specific domains: Homecare, Energy Efficiency, eManufacturing and eParticipation through Social Media). The Project will demonstrate then the positive impacts of cross-

border domain-specific Living Lab networks by setting up an advanced pilot composed of 4 thematically focused European-wide Living Lab experiments.

This is done at two different but tightly interconnected levels (vertical and horizontal): as for the vertical level, the focus is on validating the added value of a cross-border Living Lab network to deliver a domain-specific breakthrough and to engage business stakeholders (especially SMEs), end-users as well as public stakeholders in innovation at a European scale. The horizontal level includes transversal activities that will penetrate each of the vertical domains and where common methodologies and tools for cross-border Living Lab networking are being set up, tested and validated, and where work on governance and business models as well as European and worldwide transfer and dissemination will ensure a scalable and sustainable outcome.

Carmen

The EU project CARMEN addresses one of the fundamental challenges of the Future Internet, which is that of providing backhaul solutions for radio access networks. While previous solutions are very costly and have significant limitations, CARMEN has proposed a new paradigm based on mesh networks that enables lower cost solutions with greater flexibility, and is capable of delivering carrier grade services by using a heterogeneous radio technology multi-hop backhaul. This represents a high benefit for the end-users, providing them with new and higher quality services at a lower cost. The project has been consistently evaluated with the highest rating in all technical audits, and has been qualified by the reviewers as a "high-achieving project" with "an impressive contribution advancing the state-of-the-art". The CARMEN project has been successfully demonstrated in operators' testbeds and has led to successful technology transfer performed by manufacturers. Furthermore, its results have been standardized and are being applied to developing countries.

CrowdSense

Crowdsensing refers to the ability to detect the presence of pedestrians across an urban environment, and to react to that information accordingly. The CrowdSense project brings together two research teams from the University of Madeira (Portugal) and University of Oulu (Finland) to develop and deploy an urban infrastructure for pedestrian crowdsensing and modelling. The infrastructure will rely on a metropolitan 6LoWPAN backbone bringing together WiFi and Bluetooth hardware to sense mobile devices.

Demons

Trustworthiness of ICT network is a key component of the future Internet society in societal, economic development as well as safe and secure qualitf of life of citizens. DEMONS project addresses the network monitoring challenge to safegaurd the data security and privacy information following the legal

compliance. The project results will significantly enhance the ability to detect and respond to large scale threats while preserving citizens' right to privacy. The project will demonstrate ICT trustworthiness of network infrastructure in a cooperative operational environment across several major network operators, with few real life scenarios. The project development activities will be based on the latest service oriented architecture and workflow process technologies. The project will be active in standardisation groups to promote the international acceptance and adoption of project results, besides dissemination activities.

DEMONS in its approach will 1)design a more scalable, flexible and autonomic monitoring infrastructure 2)exploit monitoring intelligence distributed inside programmable traffic probes and mediating devices 3)improve monitoring applications performance, effectiveness and ita capability (in detection, reporting and mitigation) 4) operating in compliance with the customers' privacy rights, and 5) taking advantage of cross-domain cooperation mechanisms to permit improved defense againat global scale cooperative threats and operational failures.

Earth

Access to the Future Internet will be dominated by wireless devices. The resulting explosive traffic growth challenges the sustainability of mobile networks. EARTH is a concerted effort with partners from industry, SME and academia addressing improvements of the energy efficiency of mobile communication infrastructure. The overall goal is to derive solutions that together in an Integrated Solution will decrease the energy consumption by 50 % without degrading quality of service. These solutions act all the way from more efficient components in the radio base stations up to solutions on the radio network level. EARTH complements its theoretical studies with trustworthy proof-of-concepts for the individual solutions as well as for the overall integrated solution.

EARTH succeeded to be a flagship in its area. Its results are widely referenced and universally used in the community and it has established close collaboration with other projects and stakeholders in the area. Industrial and SME partners have already started to transfer their results into their product divisions.

Finest

Future Internet (FI) technology offers unique opportunities for transport and logistics (T&L) industry to address pressing challenges associated with international freight transport, including business efficiency, competitiveness and environmental sustainability. To address those challenges, FInest (an EU FP7 Future Internet PPP use case project) leverages FI technology to the benefit of all T&L partners, including large enterprises, SMEs and government bodies. It offers novel Web 2.0 business-to-business collaboration facilities (like iGoogle does for end-users), which seamlessly link third-party and legacy applications to create customized solutions, allowing for the "on demand" management of shipments and supply chains.

Through software prototypes, FInest will show that its services may be the beginning of a rich service eco-system, whose value also extends to other domains, such as smart cities and agriculture.

First

After the two years of activity, it can be stated that the FIRST project has reached all its objectives. FIRST has been able to attract significant interests from stakeholders in the targeted Latin American countries (Argentina, Brazil, Chile, Colombia and Mexico) and the process of creation of Latin American Technology Platforms (LATPs) in the Future Internet and ICT components is today a reality, similarly as European Technology Platforms that were launched several years ago. The Technological Platform tool represents an inflexion point on the way scientific and technological cooperation is fostered. Pioneer researchers and relevant stakeholders from all targeted countries are grouped and the actions related to the elaboration of LATP Vision, Organization and Governance, Strategic Research Agendas (SRAs) and Roadmap to the implementation of the SRAs have been completed.

GEN6

Piloting IPv6 upgrade for eGovernment services in Europe. The pilot GEN6 will have 4 different national experiments (also called pilots), some of them replicated in a complementary way in different countries, considering different existing approaches with IPv4.

GEYSERS

The current decoupling between applications and network layers leads to inefficient resource utilisation and over-provisioning, where the network connectivity is not tailored to the cloud dynamics. Thus, the convergence of the IT world with the optical network world is being addressed by GEYSERS. This project re-qualifies the interworking of legacy planes by means of a virtual infrastructure representation layer for optical network and IT resources. It also enables a new business model where the resources of Infrastructure Providers are partitioned and dynamically offered as a service to Virtual Networks Operators. GEYSERS's IT resources, consisting of storage and computational capacity at users' premises, are fully integrated with the optical network services procedures, both at the infrastructure-planning and connection-provisioning phases. Thus, GEYSERS is able to support 'Optical Network + Any-IT' resource provisioning seamlessly and efficiently.

Irmos

The main objective of IRMOS was to enable real-time interaction and collaboration between people, using distributed multimedia applications running on top of a cloud infrastructure, where processing, storage and networking are delivered with guaranteed levels of service. This has been successfully achieved.

The IRMOS approach and technical solutions constitute a new generation of Service Oriented Cloud Computing environment, which is available as four major bundles including more than fifty software components.

I2Web

I2Web is a research project that aims to enable an accessible Future Internet for people with special needs (especially people with disabilities and older adults). From a socio-economic standpoint accessibility and usability issues are becoming critical, considering the demographic change worlwide. For instance, according to the UN 2006 Revision of World Population Prospects, a third of the total EU population will be above 60 in 2025. When we add to this figure the percentage of the population afflicted with a disability, we are addressing the needs of more than 40% of the population.

Mains

Mains project will design, develop and implement a novel metro architecture supporting sub-wavelength granularity. It addresses requirements of Network of the Future at a metro level by proposing a novel solution leveraging combination of ring and mesh sub-wavelength switched metro network technologies, fully controlled by and advanced control plane. It will develop an extended GMPLS control plane capable of controlling and provisioning end-to-end connectivity in a sub-wavelength switched network. The MAINS solution will also propose a novel service to network interface to enable direct access to network services at sub-wavelength granularity directly from the application layer. Furthermore, the MAINS project will evaluate its outcome in hybrid mesh-ring testbed that features innovative sub-wavelength switching nodes from University of Essex and Intune. Finally, MAINS will perform a field trial involving real users in Cyprus, which will demonstrate a virtual PC application over sub-wavelength network as a proof-of-concept. MAINS outcome will allow efficient deployment of distributed application servers in a metro network by means of a novel service to network interface and an extended GMPLS control plane. As a result, both CAPEX and OPEX are reduced, while enhanced capabilities are achieved.

Medieval

Video traffic is a major challenge for the future Mobile networks and is not efficiently supported by the current Internet architecture, which was not designed taking its requirements into account. To address this issue, the EU project MEDIEVAL is developing an evolved mobile Internet architecture for efficient

video transport that provides improved quality of experience, reliability in a mobile world (anywhere, anytime), lower exploitation cost, and increased flexibility. In order to meet these objectives, MEDIEVAL proposes a cross-layer, operator-driven, network architecture that includes video specific enhancements at the different layers of the protocol stack, starting from the wireless access medium and moving up to the application layer. MEDIEVAL results have been successfully demonstrated and are being transferred to industry, disseminated in top journals and conferences, as well as brought to standards (3GPP, IETF and IEEE).

NOBEL

The NOBEL project will build an energy brokerage system with which individual energy consumers can communicate their energy needs directly with both large-scale and small-scale energy producers, thereby making energy use more efficient. We have set an ambitious goal: based on previous studies, we expect our brokerage system to achieve a 30% reduction in energy consumption. The brokerage system will use a middleware system to communicate relevant data and IPv6 technology to interconnect the middleware with sensors and energy meters on individual devices.

The key to NOBEL's efficiency improvement is that users become sources of both energy and information. The information allows the energy system to better adapt the amount of electricity in the network to the real time demand. The performance of the entire system is enhanced by exploiting the locality of the processes in monitoring and control that normally do not consider the detailed behaviour of the actual consumers.

OneFit

The OneFIT project will develop and validate the vision of opportunistic networks that are managed and coordinated with the infrastructure, by advanced cognitive systems. Validation will show enhanced wireless service provision and extended access capabilities for the Future Internet, through higher resource utilization, lower costs, and management decisions with a larger "green" footprint. OneFIT leads to better services for the user and creates market opportunities for manufacturers, operators and service providers. OneFIT efficiently addresses several technical challenges, and evolves, bundles and exploits different types of approaches, ranging from dynamic spectrum management and infrastructureless networks to social networks.

Paradiso2

The PARADISO2 FP7 project coordinated by Sigma Orionis and involving the Club of Rome has explored the foreseeable interactions between the Internet and societies in the next decades in order to identify new (more disruptive) innovation paths. This forward-looking analysis has benefitted from the support of a

multidisciplinary high-level expert panel composed of around 40 representatives of leading institutions, companies, research institutes, and NGOs from Europe and all over the world. One of the main project outputs is the "PARADISO reference document" addressing recommendations concerning research topics to be developed in the framework of EU-funded programmes (FP7 Call 10 and Horizon 2020). These recommendations have been welcomed by the European Commission on the occasion of the "Internet and societies – New innovation paths" conference that PARADISO has organized in Brussels (Charlemagne building) in September 2011. The event attracted over 450 delegates (among them DG Infso's DG, Deputy DG, several Directors and many Heads of Units) and was opened by Commissioner Neelie Kroes. The PARADISO reference document and the event reached a high press and TV impact.

Reservoir

Reservoir was a pioneering project which defined, developed and validated the fundamental building blocks of cloud computing infrastructures, including infrastructure elasticity, cloud federation and and flexible deployment of services across federated clouds.

The European Commission has explicitly referred to Reservoir as its "Flagship Project on Cloud Computing Research." (see http://cordis.europa.eu/fp7/ict/ssai/newsletter-march2011_en.html).

Sail

The current way of using the Internet differs greatly from the initial ideas that sprouted 40 years ago. Wireless, mobility, new ways to produce, consume and share content and social networks all have put new requirements on the future Internet. In the SAIL project, through Network of Information, we are looking at new ways of searching and delivering content by identifying content itself rather than the location where to find it. With Cloud Networking, we are considering the network as an elastic and on-demand resource to be optimised along with computing and storage for quickly scaling up and down applications as well as distributing cloud resources in the network to better deliver the applications to the end-users. We are defining new open connectivity services to optimise content delivery taking advantage of multi-path, multi-point and multi-protocol technologies and providing elastic networking for distributed cloud applications. Finally, we are also investigating for new business models, evaluating socio-economic impacts and identifying potential regulatory issues.

SmartHouse/SmartGrid

We develop a holistic concept for Smart Houses situated and intelligently managed within their broader environment. Intelligent networked ICT technology for collaborative technical-commercial aggregations enables Smart Houses to communicate, interact and negotiate with both customers and energy devices in the local energy grid so as to achieve maximum overall energy efficiency as a whole.

SmartSantander

SmartSantander proposes a unique in the world city-scale experimental research facility in support of typical applications and services for a smart city. Tangible results are expected to greatly influence definition and specification of Future Internet architecture design from viewpoints of Internet of Things and Internet of Services. This unique experimental facility will be sufficiently large, open and flexible to enable horizontal and vertical federation with other experimental facilities and stimulate the development of new applications by users of various types including experimental advanced research on IoT technologies and realistic assessment of users' acceptability tests. The facility will comprise of more than 20,000 IoT devices (sensors, nodes, etc), 12,000 of them deployed in the city of Santander and its surroundings, and the rest in the locations of Lübeck, Guildford, Belgrade, Århus, and Melbourne. SmartSantander will enable Future Internet of Things and Services become a reality.

Trilogy

Trilogy focused on the key control functions of the Internet, in particular Reachability and Resource Control. The project's results include architecture, protocols, simulations, prototypes and standardisation at the IETF. Our bold objective was to re-architect the world's ICT infrastructure. We believe we have succeeded: in particular by developing two new, important control functions that will be deployed widely on the future Internet and will significantly improve it. These are Multipath TCP and CONEX. Economic thinking has been central to our work and has strongly influenced our protocols. They have also been influenced by real measurements that we performed on the Net. We have also successfully invested a lot of effort on standardising our work at the IETF. We believe that these factors greatly increase the chances that our work will see real deployment and so change the world. Already some parts are in use and industry outside Trilogy is working on implementations.

Uloop

Wireless technologies such as Wireless Fidelity (Wi-Fi) currently complement Internet access broadband technologies, forming the last hop to the end-user. This has given rise to highly densed networks in urban environments which can be evolved to a new level by developing networking mechanisms that allow adequate resource management and a future Internet architecture to scale in an autonomic way. This is the underlying idea of ULOOP, which shall provide software functionality to sustain a user-centric robust, secure, and autonomic network growth. ULOOP objectives are two-fold. Firstly, to develop and to validate identified core mechanisms that aid in the development of user-centric robust, trustworthy, low-cost, user-centric networks. Secondly, to bring awareness to the topic of user-centric networking, both from a standardisation and from a legislation perspective.

Webinos

webinos envisions web applications running on and utilizing resources across a range of connected devices, interacting seamlessly with each other to contribute to the development of the Internet and facilitate users with more attractive, innovative and valuable applications.

To fulfil its vision, webinos will has defined and delivered an Open Source Platform which extends existing Web technologies to enable Web applications and services to be used and shared consistently and securely over a broad spectrum of connected devices, including mobile, PC, home media (TV) and in-car units. This platform is be built upon open standards and will move them forward.

This platform has a concrete implementation that is accessible to all as an open source asset.

Zonerider

Zonerider wants ordinary businesses and individuals to open their broadband connection, and earn free income as a result. Our patent pending platform recruits ordinary people to become Stakeholders in the broadband and increasingly knowledge economies of today and the future. The platform is new, but not necessary newly formed, and constitutes a paradigm shift in thought on how future internet connectivity can be provisioned, by forming an arbitrary tool to deliver better and more efficient means of connectivity. At its heart is a dead simple control mechanism that controls and monetizes data flow and shifts access costs from end user to media and advertising depending on market sentiment at any particular time or place. This goes against the established order and can bypass expensive incumbent gateways; thus fuelling innovative community broadband initiatives on a local and global scale.

4.24.3. MISCELLANEOUS

Bulgaria

EXECUTIVE AGENCY "Electronic Communication Networks and Information Systems": http://www.esmis.government.bg/?t=agency

Cyprus

1. Research Promotion Foundation: www.research.org.cy

 2. Planning Bureau of the Republic of Cyprus: http://www.planning.gov.cy/planning/planning.nsf/dmlindex_en/dmlindex_en?OpenDocument

Estonia

Research Council: The Estonian Science Foundation (Eesti Teadusfond): www.etf.ee

Iceland

The Icelandic Centre for Research – RANNIS: www.rannis.is

Latvia

The Latvian Academy of Sciences: http://www.lza.lv/

Slovakia

Slovak Research and Development Agency (SRDA): www.apvv.sk

Slovenia

Slovenian Research Agency (ARRS): www.arrs.gov.si

Appendix A. Template for Data Gathering

Member States Initiatives/Activities on Future Internet

Template for gathering information from Member States

Please complete this template as completely as possible.

Please visit the database on the ceFIMS website (www.cefims.eu/database) to see examples of the type of information sought.

1. Member State name

Please include contact details (e-mail, postal address and any relevant websites)

2. Title and overall scope of the initiative(s)

Insert the title of the initiative and a brief summary (10-line max.). If no initiative is formally established in the Member State, R&D activities related to the Future Internet can equally be mentioned. For established initiatives, please include their duration and associated keywords.

3. Key Project Results/Outputs *(max. 3 bullet points)*

-
-
-

4. Budgets *(NOTE: This information will **not** be made public)*

Total Budget and Funding Mechanism: e.g. National public, National private, EU, other, etc.