



Coordination of the European Future Internet Forum of Member States



D4.2 - Thematic Workshop 1: EX-FI

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1. Introduction

The ceFIMS Coordination Action, which began its work in September, 2010, will provide functional ongoing support to the European Member State Future Internet Forum (FIF). ceFIMS will facilitate FIF activity by providing a secretariat and support structure and by establishing the ceFIMS FI web-portal. ceFIMS will help foster and support knowledge sharing via the FIF to maximise synergies between EU and MS investments in Future Internet research. One of ceFIMS's first activities was to organise a joint workshop with the EX-FI Coordination Action¹ which took place on 29th September, 2010. The agenda and attendee list for this event are contained in Appendices A and B, respectively, of this report.

The primary workshop objective was to use the discussions as input towards the development of a position paper to inform greater alignment and closer cooperation between MS and PPP and to promote the engagement of Member States in the Public Private Partnership (PPP) process. The workshop represented the preliminary interaction of ceFIMS with the PPP process and focused on how Member States and the Regions can engage with the PPP and how to optimise the interaction between PPP and MS/Regional Future Internet Initiatives.

A central part of the workshop was the Round Table discussion on how to optimise the interaction between PPP and MS/Regional Initiatives. Discussions were based around: Opportunities for cooperation - how to maximise synergies and closer alignment between MS and PPP; Developing strategic PPP - MS relationships; Sharing best practices and experiences - the process for sharing information; Developing an implementation framework for closer alignment between MS and PPP (towards a position paper).

2. European Commission Context

This section outlines the overall policy context and a Future Internet Public Private Partnership overview, within which ceFIMS and EX-FI are carrying out their work.

2.1. Setting the Policy Context

The European Commission's 'Innovation Union'², tabled in Brussels on 6th October, 2010, sets out a strategic approach to innovation - driven at the highest political level. The Innovation Union will focus

¹ See <http://bit.ly/gmZyfG>

² The Innovation Union: turning ideas into jobs, green growth & social progress. See: <http://bit.ly/al26qT>



Europe's efforts - and co-operation with third-party countries - on challenges such as climate change, energy and food security, health and an ageing population. It will use public sector intervention to stimulate the private sector and to remove bottlenecks which stop ideas reaching the market. These include lack of finance, fragmented research systems and markets, under-use of public procurement for innovation and slow standard setting.

It is within this context that ceFIMS and EX-FI are setting out to achieve their objectives. Both projects are tasked with working towards and supporting the creation of a Future Internet Public Private Partnership (FI-PPP).

The FI-PPP initiative is expected to have a significant influence. In particular, it is seen as a possible instrument which could begin to bridge the gap between ICT supply and demand, by starting on the demand side. The *local* dimension within Member States is fundamental to this paradigm.

The EC have already consulted Member States on Framework Programme 8 (FP8), the timeline for which is now in place. The Future Internet will play a prominent role in FP8 and the EC will seek additional input from Member states in the coming months as work on defining the programme continues.

2.2. Updates on the FI-PPP

The FI-PPP is a process - not a solution. It has three phases:

1. **Planning and Proposals** - evaluated in January-February, 2011.
2. **Implementation** - projects starting in April 2011.
3. **Expansion** - where context will be considered, as will improving the localised Future Internet experience.

The FI-PPP will have a number of technical enablers, but it will also require support through policies implemented at Regional and Member State level. Local Authorities could examine the use of *Structural Funds*, for example, in this regard. Exemplar strategies produced by projects such as ceFIMS and EX-FI could also be useful here.

Roll-out models and processes for the FI-PPP are also still in production, with issues such as the role of SMEs and the required legislative framework still to be decided upon.

Work relating to the *core platform* is progressing considerably since the European Future Internet Initiative (EFII) and the Future Internet Research Alliance (FIRA) merged into one single entity called the European Future Internet Alliance (EFIA).

3. Overview of ceFIMS

ceFIMS: Coordination of the European Future Internet Forum of Member States

The ceFIMS project will support the coordination of Future Internet (FI) research activity across Member States (MS) at national, regional and transnational levels, for the full benefit of networking between EU-funded and national researchers. The ceFIMS consortium, comprising partners from Ireland, Luxembourg, the Netherlands, Hungary, Spain and Portugal, will support the FIF to help create synergies and reduce duplication and fragmentation in European FI research.

ceFIMS will provide support to the activities of FIF by providing a secretariat and support structure for its activities. ceFIMS will help foster knowledge sharing via the FIF, the establishment of expert Working Groups and the development of a Research Roadmap to maximise synergies between EU and MS investments in FI research. ceFIMS will help create a sound basis and implementation framework for an FI ERA-NET+ and also support the strong engagement of Member States in the Public Private Partnership (PPP).

Europe is already one of the leaders in Internet research and adoption and has strategically identified the need to lead the definition, standardisation and implementation of the FI. However, Europe will achieve its FI potential only if there is well coordinated FI research activity at Member State, Regional and transnational levels. Duplication of effort reduces net output across all FI programmes, and the full benefits of networking between EU-funded and national researchers are not realised. This can result in fragmentation of research objectives and achievements. ceFIMS will help to minimise this fragmentation and support better coordination of research efforts by promoting engagement and knowledge sharing in FIF.

4. Overview of EX-FI

EX-FI: Expanding the European Future Internet Community

In order to maximise the funding for European R&D activities on the Future Internet, and to ensure that relevant and exploitable results will emerge from the significant investments, it is necessary to establish a community that develops and supports a coordinated approach that can be shared by all relevant European stakeholders. Establishing this community is the main goal of the EX-FI project.

The enlargement of the European Future Internet community will be carried out with a view to influencing the scope and objectives as well as initial planning of a European PPP (Public Private Partnership) on

Future Internet. Thus, work done and contributions made by the enlarged Future Internet community can be efficiently integrated within overall PPP activities. In particular the community should develop strategic documents presenting the major R&D areas to be addressed and how specific Future Internet calls and other instruments can support this.

The EX-FI project will establish a required membership scheme and facilitate discussions among the stakeholders, in order to specify challenges in collaboration with the usage areas and to prioritise the major R&D challenges. The initial usage areas in discussion are: Content delivery and production, eHealth, Smart energy grid, utilities, environment, as well as transport, mobility, and logistics.

5. Outputs from the Workshop: Optimising interaction between PPP & MS-Regional Initiatives

The following text categorises and presents the round table discussions from the workshop, based on the presentation from Dr. Sjoerd Meihuizen which was used to stimulate the discussion which is included in Annex E of this report.

5.1. Opportunities for Cooperation & Strategic Relationships

In the past, it has proven difficult to get some sectors involved as full partners in proposals. Potential industrial partners, for example, look at the usage areas proposed, decide they are interested and express their willingness to join proposal consortia - only to then realise the level of complexity, and the resources and commitment required of them if they are to sign up for a four/five-year project workplan.

The concept of an ‘associated partner’ should be explored in this regard. This model would be especially useful in a *Smart City* initiative, for example, where the number of partners could easily run to 70-80. This would mean partners need not dedicate resources for the entire project lifecycle, but rather to just the sections where they could contribute (and receive some knowledge/benefit in return).

Another issue to be examined is that of how Member States and the FI-PPP projects (when they begin in April, 2011) can work together outside of information sharing; e.g. optimising synergies between initiatives. This is also relevant with regard to engaging with different stakeholders on the Member State side (various ministries within any Member State, its funding agencies, consumer organizations, etc.) and the Private industry side (e.g. EX-FI, related large industries, SMEs, etc.).

5.2. Sharing Best Practice

One of the biggest current challenges is to get the *right* information about Future Internet activities and policies. This information provides the basis for writing position papers, roadmaps and strategic documents. At the moment, a number of Future Internet websites exist - we need to examine their structure and the various audiences which they address.

A high-level taxonomy which defines both the Future Internet and the data sharing implications it will involve, could assist in extracting and disseminating appropriate data. This would be especially useful when establishing contact with funding sectors who may not be familiar with the technical language sometimes used.

The issues of Privacy, Identity and Trust also present considerable obstacles/challenges for sharing data on Future Internet research. Every Member State and Region will have its own strategy for dealing with Privacy and Trust - complementarities between different initiatives in this regard should also be explored.

Data sharing can be a political issue - hence, framing and scoping the right use-cases can be difficult. For Governments, cross-border use-cases could be interesting and thus, might be more likely to get their buy-in. One possible solution would be to embed the data gathering process within each new project/initiative and then run a separate data-gathering project to analyse all the data at the end.

Diversity amongst different Member State and Regional activities should be encouraged, rather than attempting to align them. Real meaning from and analysis of the outputs of the various activities should be extracted. CeFIMS through its stocktaking and analysis activities can provide useful inputs in this regard. Also, the sharing of data between Member States on a bilateral basis should be encouraged, rather than there being a central gathering and distribution of data.

5.2.1. Granularity of shared data

To better quantify the activities of the various ongoing initiatives, it may be necessary to define the level of data granularity sought from same. This would make it easier to input results from the most relevant Future Internet initiatives into future scenarios and use-cases.

Similarly, a need exists to allow *Smart City* initiatives in large cities transfer their knowledge and experience to small cities, and vice versa. The sharing of data between these entities could lead to the specification of a framework which would allow the replication of trials in different areas.

5.3. Developing an Implementation Framework

A common platform, used by all new FI-PPP projects, will be beneficial; it will be recommended that each project use it, though its use will not be enforced. The work of developing the core platform is ongoing. Keeping this development open means that specific use cases may be defined across a broad range of areas. There has been considerable investment in Future Internet trials and infrastructure at national and regional level within the European community. The ability to incorporate functionality and infrastructure from some of these initiatives within the core platform would substantially enhance the platform offering and the potential scope of the user case scenarios and subsequent trials. How to achieve this is a major challenge. It needs to form part of the work of the FI PPP Capacity Building and the Coordination-Support Actions of the FI PPP.

6. Results and Conclusions

- The workshop was an important first step in ceFIMS engagement with the PPP. As the Ex-FI project is focused mainly on supporting the establishment of the PPP co-ordination process prior to its establishment, the focus of this thematic workshop was mainly on identification of priorities and actions that can maximise the potential for engagement of MS and Regional FI initiatives within the upcoming FI PPP call. It resulted in a greater understanding of the importance of reflecting the Member State and Regional dimensions in the PPP and laid the groundwork for the involvement of Member States (through ceFIMS) to be recognised in a PPP Capacity Building Proposal and a proposed PPP Programme Facilitation and Support CSA.
- The importance of leveraging external investments (outside of the PPP) was brought into sharp focus. In order to maximise the effectiveness of the PPP projects, there will need to be a determined effort to bring in a wide range of complimentary external investments and to ensure close alignment between these investments and the PPP-funded programme. A large number of advanced infrastructures are available in Europe through national, regional or city-level initiatives which have the potential to deliver enormous capacity for Future Internet developments and contribute to the richness and multiplicity of environments and use cases. However these infrastructures need to be identified and documented in a manner which can be harnessed to support the infrastructure needs of the Core Platform and Use Case projects. In particular, the role of the regions must not be underestimated. The ceFIMS database when fully developed, will be an invaluable tool in this respect and can also be used in the mapping and assessment of national and regional infrastructures with respect to the PPP. As a corollary to this point the input from the regions needs to be considered also in roadmapping exercises to ensure that the regional dimension is fully appreciated and respected. The Core Platform should evolve and bring in

additional new functionality from other initiatives (external projects), including those trials and platforms at regional and national level

In order to optimise this external engagement in PPP and in particular from Member States and the regions, the issue of interoperability needs to be closely looked at. In many cases interoperability considerations were not prioritised in the initiation of many of these Member State and Regional initiatives. However in order to harness the synergies from these infrastructures, interoperability will need to be carefully considered and a higher degree of interaction achieved between all stakeholders. While the PPP is not a Standards body, it will, however, make technical contributions to some of the Standards groups. The interoperability that is required can be supported by standardisation, in particular the interoperability of various test bed and systems infrastructures which can be federated to facilitate large scale testing. The identification of common roadblocks—both technical and legal roadblocks—is also important. The legal roadblocks for instance could usefully be discussed at the FIF where each Member State is represented

- In order to involve a comprehensive a set of stakeholders as possible, consideration should be given to examining the possibility of ‘Associated Partners’ in PPP projects. This mechanism could for example, be used to involve additional ‘non-core’ partners for focused short term activities in the PPP e.g. SMEs for development of applications and end-users as consumers.

- Diversity amongst Future Internet research projects should be encouraged. There must be however, a considerable level of openness and a willingness to share results between such projects in order to avoid duplication of effort. This leads on to data sharing and data protection issues, which are not straightforward. These have the potential to delay the roll-out of any new Future Internet-related services/initiatives. A structure is needed to support data sharing among PPP and ‘external’ projects. This is important, as for FP7 projects, this was supported by the existing European Commission concertation and clustering supports. In the new PPP projects, careful consideration will need to be given to this issue e.g. data sharing between PPP and Smart Cities initiatives.

Overall the engagement gave CeFIMS a better understanding of the FI PPP process and thus enabling it to increase its capacity to engage with the PPP process, after the lifetime of the EX-FI project

Actions taken in support of the FI PPP as a result of the workshop:

CeFIMS engagement in the FI PPP Capacity Building proposal process.



- The CeFIMS project has actively engaged with one of the proposals to ensure greater synergy between the goals and objectives of the Capacity Building project and the CeFIMS roadmapping initiative
- CeFIMS has committed to make its database of National and Regional FI initiatives available to the Capacity Building CSA to support greater links between these initiatives and the FI PPP platform and projects
- CeFIMS promoted the establishment of a Concertation Board as part of the Capacity Building process. The Concertation Board will provide a platform for engagement between the PPP Core Platform and projects and representatives of national and regional decision-makers and stakeholders and manage the dialog between external and internal stakeholders.

CeFIMS engagement with the FI PPP Programme Facilitation and Support CSA

- Members of the Ex-FI project were engaged in the development of a PPP Programme Facilitation and Support CSA. It was agreed that if successful, the CeFIMS project will be invited to join the advisory board of the CSA

Appendix A. Call for Participation

CALL FOR PARTICIPATION

Workshop

PPP and MS / Regional FI Initiatives

Jointly organised by

ceFIMS (Coordination of the Future Internet Forum of Member States)

and

EX-FI (Expanding the European Future Internet Community)

Dear FIF Member,

The ceFIMS Coordination Action, which began its work in September, 2010, will provide functional ongoing support to the FI MS Forum. ceFIMS will facilitate FI MS Forum activity by providing a secretariat and support structure and by establishing the ceFIMS FI web-portal. ceFIMS will help foster and support knowledge sharing via the FI Forum to maximise synergies between EU and MS investments in FI research.

As one of its first activities, ceFIMS will organise a joint workshop with EX-FI CA (<http://initiative.future-internet.eu/>) to be held in the afternoon of **29th September (14:30 - 16:30)** at the **ICT 2010 venue (room ref. 1102)** The objective is to use the discussions at the workshop as input towards the development of a position paper to inform greater alignment and closer cooperation between MS and PPP and to promote the engagement of Member States in the Public Private Partnership (PPP). The workshop will focus on how Member States can engage with the PPP and how to optimise the interaction between PPP and MS / Regional FI Initiatives

A central part of the workshop will be a Round Table discussion on how to optimise the interaction between PPP and MS / Regional Initiatives, in particular:

- Opportunities for cooperation: - how to maximise synergies and closer alignment between MS and PPP



- Developing strategic PPP - MS relationships
- Sharing best practices and experiences: - the process for sharing information
- Developing an implementation framework for closer alignment between MS and PPP (towards a position paper)

You are cordially invited to participate in this joint working session. The workshop is open to ceFIMS partners: EX-FI partners: FIF Members and the Industry FI Group.

I would invite you to include this event in your diaries. Please note that the workshop takes place after the conclusion of the ICT 2010 programme.

Date: 29th September

Time: 14:30 - 16:30

Location: ICT 2010 Venue: Room ref. 1102

Please confirm your attendance with Brian Foley, ceFIMS Project at: bfoley@tssg.org

Appendix B. Agenda

Wednesday 29 September 2010, 14:30 - 16:30

Venue: ICT 2010 (room ref. 1102)

- (1) **Welcome by the Joint Chairs (14.30 - 14.35)**

- (2) **European Commission Context (14.35 - 14.45)**
 - i. Setting the Policy Context (Franco Accordino)

 - ii. Update on FI-PPP (Peter Fatelnig)

- (3) **i. Overview of ceFIMS Coordination Action Member State and Regional Future Internet activities (14.45 - 15.10)**

Willie Donnelly

 - ii. **Overview of EX-FI Coordination Action Future Internet PPP activities (15.10 - 15.30)**

David Kennedy

- (4) **Round Table: Optimising interaction between PPP and MS/Regional FI Initiatives (15.30 - 16.15)**

Chair: Sjoerd Meihuizen, NWO (ceFIMS Partner)

 - Opportunities for cooperation: Maximising synergies and closer alignment between MS and PPP

 - Developing strategic PPP - MS relationships

 - Sharing best practices and experiences: - the process for sharing information

 - Developing an implementation framework for closer alignment between MS and PPP (towards a position paper)



(5) Conclusions and Next Steps (16.15 - 16.30)

Appendix C. Attendance

List of participants at ceFIMS/EX-FI workshop, 29th September, 2010

Name	Organisation
Didier Bourse	Alcatel Lucent
Brigitte Cardinsel	Orange
Johannes Riedl	Siemens
Petronela Burceag	European Commission
Sjoerd Meihuizen	NWO
David Kennedy	Eurescom
Brian Foley	Waterford Institute of Technology
Kieran Sullivan	Waterford Institute of Technology
Willie Donnelly	Waterford Institute of Technology
Arnaud Riviere de la Souchere	French Ministry of Finance
Huseyin Metin	TUBITAK
Ali Rezaki	TUBITAK
Zalan Heszberger	Budapest University of Technology
Edina Nemeth	NKTH, Hungary
Vilmos Nemeth	NKTH, Hungary
Bruno Francois-Marsal	Thales Group
Gregory Lopez	Thales Group
Joost van der Vleuten	Ministry of Economic Affairs, Netherlands
Blanca Jordan	ATOS Origin
Federico Alvarez	Technical Univerisity of Madrid (UPM)
Nuria De Lama	ATOS Origin
Linda Strick	Fraunhofer FOKUS
Julian Sesena	AETIC
Maurizio Pilu	Technology Strategy Board (UK)
Samo Zorc	Ministry of Higher Education and Technology, Slovenia
Simon Leinen	SWITCH
Nick Wainwright	HP
Colin Upstill	IT Innovation Centre
Jean Dominique Meunier	Technicolor
Paul Jenkins	BT
Latif Ladid	University of Luxembourg
Fiona Williams	Ericsson
Ana Ponte	UMIC

Appendix D. Photographs from Workshop

Section of participants (1)



Section of participants (2)





Appendix E. Introductory Presentation for Round Table Discussion



NWO
Scientific Excellence and Innovation

-  **Workshop PPP and MS FI Initiatives**
-  **29 September 2010**
-  **ICT 2010**
-  **Sjoerd Meihuizen**

NWO

Netherlands Organisation for Scientific Research



Information sharing

- Biggest challenge presently is to get the right information about FI initiatives / activities and policies related to it. The same accounts for FI Research and Development within industry. The only way to get this information is to work together and share this information.
- This information will be the base for writing position papers, roadmaps and strategic documents.
- Current state: a large amount of FI websites; we need to think about the structure and the various audiences.
- How are we going to do that? Can we divide work? EXFI: focus on industry; Cefims: focus on member states / funding agencies.
- Can we develop a common application / map of national initiatives together, incorporating as much public information as possible?
- What concrete actions must be undertaken?
- Proposition: Let's keep each other informed which data will be collected and who will be requested to deliver the data. And let's try to develop a common application.

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Opportunities for cooperation

- How can we work together, other than information sharing and collecting?
- The issues of Privacy, Identity and Trust remain the main obstacles/challenges for realizing the FI. Every country has its own ideas / strategies about this.
- Which barriers are there when it comes to policy strategy and non-technology issues and can we tackle them together?
- How to involve the EX-FI consortium when starting up a regional or national FI initiative?
- Can we work together towards a Joint Undertaking together, and which parties should be involved?

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Strategic PPP – MS relationships

- When we talk about “Member states” what do we mean?
- There are various key players when it comes to FI research and implementation:
 - the various ministries within one country;
 - the various funding agencies within one country;
 - consumer and other organizations
 - national authorities
- When we talk about the private side, what do we mean?
 - the EX-FI consortium
 - other large industries
 - SME's

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Position paper / roadmap / implementation

- Concrete plans and actions
- Timeline
- Written for multiple target groups or work towards one master document?
- Join forces and write the roadmap with other Coordination Actions (FIREBALL for example).

Netherlands Organisation for Scientific Research

The logo for the Netherlands Organisation for Scientific Research (NWO), consisting of the letters "NWO" in white on a red background.Three colored circles (blue, orange, green) arranged horizontally, resembling a window title bar.A black and white photograph showing two men from behind, standing in a dark, foggy environment. The man on the left is wearing a dark uniform and a cap, while the man on the right is wearing a light-colored trench coat and a hat. They appear to be looking at something in the distance.

"I think this is the beginning of a beautiful friendship"

Netherlands Organisation for Scientific Research