

**TOWARDS A FUTURE INTERNET PUBLIC PRIVATE PARTNERSHIP:
SECOND USAGE AREA WORKSHOP
BRUSSELS, 21 - 22 JUNE 2010**

Co-organised by the EX-FI Support Action and the European Commission

Objective

This workshop will build on the conclusions of the 1st FI-PPP Usage Area Workshop, held in March 2010¹ and will enable a broader discussion on the needs of the Usage areas and their requirements on the Future Internet. The workshop addresses the need to achieve an appropriate balance in the Future Internet Public-Private Partnership between provider "technology push" and user "application pull".

Terms of reference

During the Presidential conference "The European RTD Framework Programmes: from economic recovery to sustainability" in October 2009, a new Public- Private Partnership on the Future Internet (FI-PPP) was launched, following a Commission Communication calling for its set-up.

The Commission Communication proposes to leverage the high European research investments and momentum on Future Internet technologies through comprehensive network and service platforms, which will enable the advent of Internet enabled innovative applications of high societal and economic relevance. A multi sector approach will be adopted, that will cover important economic and policy usage sectors, including health, energy, transport and the environment. An EU budget of 300 M€ has been earmarked over the period 2011-2013 to support this PPP, which should be implemented under the existing legal framework of the ICT Theme of the 7th Framework Programme, with a first Call for Proposals foreseen to open in summer 2010.

More information about the FI-PPP initiative is available on the Europa website of the European Commission http://ec.europa.eu/information_society/activities/foi/index_en.htm, and on the European Future Internet Portal <http://initiative.future-internet.eu/>.

The FI-PPP initiative is innovation driven with emphasis on the pragmatic implementation of new services and consequently a leading role is expected to be played by industrial ICT actors. While such a proactive move by the ICT industry is welcomed, it is still regarded as extremely important to achieve a good balance between technology push and application pull. This balance will ensure that the Future Internet developments under the FI-PPP will be driven by real user application needs. The ICT industry view must be complemented by the views of the economic and policy sector usage areas, and their stakeholders, who are expected to have a significant presence in the FI-PPP initiative.

The issues and open questions to be addressed during the Workshop include:

- (1) What use case and scenario in your area would you consider the most appropriate and representative one for large-scale experimentation with the Future Internet platform to be built starting from 2013 (please refer to the documents referred to on the above websites for inspiration)?

¹ (http://ec.europa.eu/information_society/activities/foi/events/fipp3/fi-ppp-workshop-report-final.pdf),

- (2) What innovative Internet functionality and technologies would you consider important for your suggested use case and scenario (e.g. context awareness, sensor networks, advanced real time processing capabilities handling huge volume of data, ad hoc service composition and mash-up, managed broadband connectivity and services, embedded media support for interfaces easing the interpretation of processed contextual data, etc.)?
- (3) Which of the identified functionalities would you expect the Future Internet core technology platform to deliver to support your and other usage area scenarios?
- (4) What kind of experimentation environment would you consider necessary for broad large scale testing of the platform to be developed in your use area? What would be needed to experiment new services and applications cutting across use areas (services and application mash-up) and building a new services and application ecosystem around the prototype implementations of the platform?
- (5) How do you see the potential role of your organisation in the FI-PPP, in the context of Usage areas taking a prominent role in the Initiative, to ensure an appropriate application driven approach?

Response to the open questions

The Global Information Society

The Information Society is also challenged to resolve various antagonisms, not least to avoid society permanently locked into an information-rich and poor, creating an ‘information feudalism’ (Bauwens, 2006). This would result in widening the present digital divide of access and motivation in society, (van Dijk, 2004) and greatly hamper the development of a Global Sustainable Information Society (GSIS), (Fuchs, 2004, Hofkirchner et al, 2006) in order to facilitate a global consciousness, in the form of collective intelligence, to emerge, which in turn is the problem solving capacity of self-organising systems to meet global challenges. Information acquired through ICTs gives us the power to decide. Knowledge is the capacity to act and the resulting wisdom creates the capability to make the right decisions for sustainability.

The International Telecommunications Union (ITU), an agency of the United Nations based in Geneva, recommended the convening of the World Summit of the Information Society, which was held in two stages in Geneva in 2003 with over 11.000 participants from 174 countries, including representatives of Civil Society, and in Tunis 2005 with over 19.000 participants from an equal number of countries. The summit was supported by UNESCO which contributed 11 documents drafted by scientific bodies. There have been several follow-up meetings and the ITU has published ‘The World Information Society Report 2007’, which includes a ‘Digital Opportunity Index’ which is an attempt to quantify the ‘digital divide’ and facilitate the development of a strategic plan to reduce it.

Castells maintains that the kind of social movements emerging in the Information Age are essentially mobilized around cultural values. This underlines the axiological aspect of social movements in the Information Age. The emerging organisations within social movements of CS, according to Castells, fill the gap left by the crisis of vertically integrated organizations inherited from the industrial era. Further there is a globalisation of social movements taking place, bypassing the institutions of the nation-state. This is especially true in the area of Human Rights. Castells goes on to state that these social movements “have found their own appropriate medium of organisation, developed and opened new avenues of social change, which in turn enhanced the role of the Internet as their privileged medium.”(Castells, 2001).

‘Commons Sharing’

The ‘commons’ is a metaphor for the basic human rights of mankind. Sustainable Social Development can be augmented and furthered by the concept of ‘commons sharing’ (Ostrom, 1990) which originally focused on natural resources, such as water, forest, fisheries and wildlife. This has now extended to include knowledge,

scholarly information, digital media, and the internet, which was conceived by Berners Lee, from the outset, as a public resource or commons. A 'commons' referred originally to a public pasture ground or to a piece of open land for recreational use in an urban area (Webster's Dictionary, 1913). In other terms it refers to the shared heritage of mankind.

Natural resources are regarded as "subtractive", whereby uncontrolled common use reduces the benefit for the other participants in the commons. Knowledge on the other hand tends to be "non-subtractive". Knowledge, through its dissemination, can greatly contribute to and indeed increase the resources of the shared 'commons'.

Hess and Ostrom maintain (2007) that "whether the focus is traditional or new, however, the essential questions for any commons analysis are inevitably about equity, efficiency and sustainability." Equity is looked at in the sense of the maintenance of a resource; sustainability as a long term approach; and efficiency with regard to the optimal use of a resource. The 'commons' concept lends itself to the concept of self-organisation and collective action because the efforts of those sharing the commons are needed to accomplish its sustainability. Sustainable Social Development can hence be treated as a self-organising concept of 'Commons Sharing'.

A so called 'Creative Commons' has also emerged where artists, authors and scientists offer their creative and scientific work, without renegeing completely on their authorship and copyright. Creative Commons' licenses let people copy and distribute the work under specific conditions. General descriptions, legal clauses and HTML tags for search engines are provided for several license options. One of the primary uses of a 'Creative Commons' license is to allow people to copy the material as long as it is not made a part of any commercial venture. Founded in 2001 by James Boyle, Michael Carroll, Lawrence Lessig, Hal Abelson, Eric Saltzman and Eric Eldred, 'Creative Commons' was started at Harvard Law School and later moved to Stanford Law School.(www.creativecommons.org). This could also augment endeavours to strive towards a global consciousness.

The 'enclosure' of knowledge is perhaps the final step in a series of enclosures that began with the enclosure of common land and forests, from commons to commodities or from commons to real estate, which began in England in the 16th century leading to an "ownership society". For centuries in England and in much of Europe the 'common man' had access to land and water as a source of sustenance. Water resources were in time 'enclosed' through dams, and mining schemes. The destruction of parts of the commons was deemed essential for the industrial revolution, to provide raw material to industry.

People themselves became commodities through their labour. As Fleissner (2007) pointed out work became treated as a commodity in England in the early 19th century and today cultural services are commercialised for sale and protected by property rights. The United Nations agency of the World Intellectual Property Organisation (WIPO) is endeavouring to counteract this trend especially with regard to the traditional knowledge of the so-called 'least developed countries'. "The 'commons' often means the most to those who have the least" Rowe, (2005). The commons is equivalent to the concept of "public trust" which goes back to Roman times and Rowe maintains "that government has a duty-a public trust- to maintain such property for the common good."

Hardin (1968) postulated the 'tragedy of the commons' and maintained that commons are inherently prone to overuse and that only state established institutions such as government and private property, or the 'enclosed commons' could sustain the commons long term. This corresponds to Hobbes 'Leviathan' (1996) which stresses that the state plays an essential role, as it guarantees self-preservation based on the social contract. Locke on the other hand stressed the freedom of individuals to regulate their own society by consent. Multidisciplinary research shoes that 'Adaptive Governance Systems' (Folke et al 2005) can be "effective stewards" (Dietz et al. 2003) of common resources.

Thomas Jefferson, the U.S.A. President and author of the Declaration of Independence, referred to the field of knowledge being the common property of all mankind (Moritz, 2004). To the present time patents in the U.S.A. reverse to free common usage after a proscribed span of time.

The United Nations and the Commons

The United Nations (UN) can sometimes tend to be regarded, mainly, as a political forum, dominated by the Security Council, the General assembly and the Secretariat, whose task it is to implement the decisions and resolutions of the other two bodies. Comparatively little is known of the depth of scientific data, which several bodies of the complex UN System have gathered, and which is at the disposal of the world community. This has especially come to light with the rapid rise of the Information Society since the early 1990s and through steps taken by UN agencies to deal with its challenges.

In 1996, World Bank President James Wolfensohn, in advancing the concept of the World Bank as a "Knowledge Bank," explained that, "the challenge is to harness the technology to link people together and to leverage its impact for development. That means both accumulating the right kind of knowledge and helping our clients build the capacity to use it."

The Global Development Learning Network (GDLN) is one of a number of further World Bank initiatives that use technology to enhance development knowledge sharing. From an initial 10 Distance Learning Centers, (DLC) the GDLN had grown (as of November 2002) to over 40 centers in developing countries, with continued growth expected. "A part of this growth has involved, and will likely increasingly involve, the affiliation of national networks with the GDLN. Some of these affiliated networks are new and still developing, while others have established operations and create much of their own content...[.]Thus, from the initial pattern of one DLC per country (typically located in the capital), the GDLN is evolving into a network of networks." World Bank (2003)

Civil Society and Sustainable Development

Sustainable development (SD), is defined and based on ecological conservation, political participation, cultural development and self-determined empowerment, economic stability and access to technological facilities, and not solely on the original narrower approach to SD, as published in 1987 by the WCED (World Commission on Environment and Development) called the "Brundtland Report" (named after its Chair, the former Prime Minister of Norway, Gro Harlem Brundtland; WCED 1987), which focused on the challenge of overcoming poverty, meeting basic needs and integrating the environment into economic decision-making. The WCED then defined SD as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 43).

The fact that there is no normative concept of, no law making, law implementing or judicial institutions (Frost, 2004) in Civil Society (CS) or that it has no core, or no one essential nature, stresses its self organising character. The definition of CS offered by The Centre for Civil Society at the London School of Economics underlines the basic, intrinsically self organising, and continuously emerging character, of CS: "Civil society refers to the set of institutions, organisations and behaviour situated between the state, the business world, and the family. Specifically this includes voluntary and non-profit organisations of many different kinds, philanthropic institutions, social and political movements, other forms of social participation and engagement and the values and cultural patterns associated with them." (CCS, 2001).

The essence of the activities, goals and *raison d'être* of Civil Society (CS) is to enhance sustainable development (SD) in all its aspects and facets: in the socio-sphere including cultural, economic and political aspects and in the ecological and techno-spheres. CS, empowered by ICTs, is an important cooperative stakeholder in a synergetic approach of Global Society to deal with the challenges it has itself created. The High Level Panel on CS, under the chairmanship of the former president of Brazil, Fernando Enrique Cardoso, constituted in 2003 by the then United Nations Secretary-General Kofi Annan, underlines the increasing importance of CS institutions globally. Cardoso stated at its constituent meeting: "The legitimacy of Civil Society Organisations (CSOs) derives from what they do and not from what they represent or from any kind of external mandate. In the final analysis, they are what they do." The fact that CS has no mission and has to continually reflect on, reinvent and recreate itself, underlines the basic, intrinsically self organising, and continuously emerging character of CS.

More recent concepts of Civil Society refer to an Arena of Association (Malena, 2007). To adapt this approach to the United Theory of Information (Hofkirchner 2002) it would seem more appropriate to classify it as an 'Arena of Cooperation'. The concept of 'Arena' seeks to emphasise the commitment of the individual and not primarily that of civil society organisations, although this commitment will lead to self organised synergised cooperation, leading further to possible recognition of the cause espoused. Four dimensions of CS come into focus: (a) Structure (b) Environment (c) Values and (d) Impacts such as influencing public policy, exercising a 'watch dog' function on the state and private corporations with regard to accountability, responding to social interests, empowering citizens and meeting societal needs.

Civil Society Organisations have historically survived by owning their own data and information. These information resources were treated, in many cases, similar to a commodity (cf. Fleisner, 2007) and substituted for significant financial assets. CSOs however are increasingly realising the necessity to be constituent participants in the digital world themselves, a prerequisite of which is the readiness to inject their knowledge into a common resource pool. It has to be remembered that, in any case, exclusive information is not self-organising in the full sense of the word. Cooperation is an essential condition of human existence and is dependent on communication, which in turn is dependent on cognition processes (Hofkirchner W., 2002)

While computers only make sense when embedded in social systems, the continually emerging development of CS is a prime example of self-organising empowerment. Making use of ICT tools, as CS does, to the benefit of humanity enhances the creation of collective intelligence, leading to global consciousness in an increasingly global society. Peer-to-peer networking, and federation building, in a cooperative spirit is assisting grassroots organisations to strengthen themselves in terms of self-organisation. Over 100 NGOs who replied to a world-wide survey hosted by the King Baudouin Foundation, when asked what would most build the capacity of their organisations, rated increased networking, and help in building effective strategic alliances highest, ahead of greater financial support and fund-raising capacity. This underlines the need and desire of CSOs to cooperatively synergise and not rely solely on owning their own data and information.

Internet-Service-Commons-Forum: www.civilsocietynetworks.org

The NGO Committee on the Family at the United Nations Office Vienna, set up a Forum at www.civilsocietynetworks.org linking over 100 CSOs worldwide, free of charge, in 2004. This Forum emerged from a pilot project in Kenya to network family-oriented CSOs and has since spread to many other Eastern African Countries. A parallel network had been set up in post-communist countries of Central and Eastern Europe. At an international seminar organised by the Vienna NGO Committee on the Family in May 2004 at the United Nations Vienna International Centre under the title: 'Civil Society Organisations Networking,' with presentations by Prof. Jan v. Dijk, University of Twente and Prof. Mervyn Frost from the London Centre of International Relations at King's College, participant representatives requested, amongst others, that both networks be incorporated into a single network and be open to CSOs globally. The author, as moderator of the two existing Forums, recommended that the name of the domain be: www.civilsocietynetworks.org which went online the same year. This is an example of design as social self organisation, as well as the mutual shaping of civil society and technology. It also bears out the idea of CS being a producer and user of technology, in the sense of "producers" (Hofkirchner, W. 2007).

Each organisation has its own website within the Forum, which offers a level of cognition and recognition to the individual organisations within the network. The interactive facilities built into the Forum, such as an internal conference facility, as well as internal email and a discussion board, offer the possibility to communicate internally and not just with the outside world, such as with other CSOs, as well as with governments or international organisations. This could ultimately create a synergetic 'knowledge commons' geared to enhancing Social Development as defined here. By cooperating in the constitution of the network these CSOs have already created a 'network-service-commons', offering resources to members of society to enhance their quality of life and the opportunity to self-organise their communities and societies to more meaningful higher levels, which underlines the capacity for ICTs to be commons-creating- social instruments.

Internet Forums begin with a process of cognition. The information entered by each member of the Forum, on their own individual sub-homepage, allows a cognitive process to be set in motion, setting up the possibility of consensual coordinated cohesion, which in turn could eventually lead to a sustained cooperative entity. The constituent members of this interactive Forum had already entered into a process of communication and cooperation with the Vienna NGO Committee on the Family to set up the ‘network-service-commons’. Each constituent member organisation is a self organising system and by cooperating within the Forum, it creates a self-organising entity out of the Forum. This still leaves each organisation in its own independence, empowered in their individual endeavours, through constituent participation in the Forum. It further enhances active citizenship in democratic processes. Each organisation is encapsulated in the Forum, creating a supra-level, where each organisation becomes a constitutive sub system, which in turn needs to continue to function to maintain the sustainability of the new meta-system.

Logistics

Contacts: European Commission: Andrew Houghton, Max Lemke
EX-FI: David Kennedy, Eurescom

Workshop secretariat: Ms Luitgard Hauer, Eurescom:

Location: Husa President Park Hotel, Brussels
Timing: 21 June 2010 10:00 – 22 June 17:00

Registration of interest and submission of Position statement: 2 June 2010
Confirmation of participation to participants: 9 June 2010

<http://initiative.future-internet.eu/events/2nd-usage-area-workshop.html>