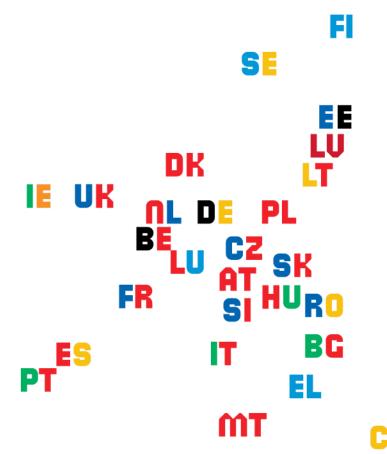


České předsednictví v Radě EU

Czech Presidency of the Council of the EU

Présidence tchèque du Conseil de l'UE

2009







The Future Internet Conference

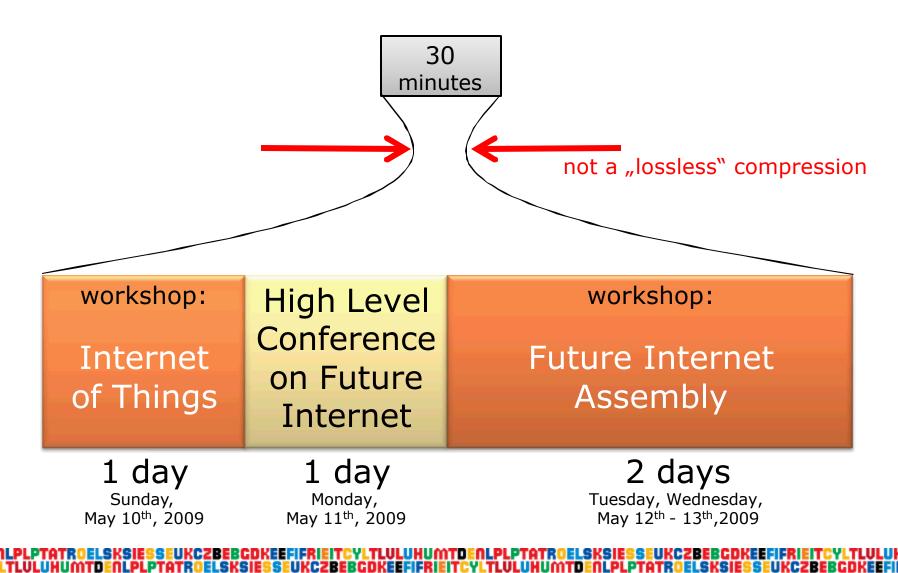
Jiří Peterka

Charles University, Prague, CZ jiri@peterka.cz



Subject of my talk





Europe wants to be a key player shaping the future of the Internet

has several "Future Internet related" activities:

- with immediate/short time horizon (0 to 5 years):
 - mainly regulatory issues, see Telecom Package
 - review of the European Regulatory Framework
 - recently added: ICANN (Internet governance) revision by Oct. 1st, 2009
- with a **medium** time horizon (5 to 10 years):
 - mainly the "Internet of Things"
 - massive connecting of active&passive devices, objects etc. ("things") to the Internet
- with a long time horizon (10 to 15 years):
 - Q: Is the Internet of today able to face the increasing number of requirements and expectations?
 - A: evolution or clean slate design

non-technical issues to be solved (privacy, ethics)

mainly: research



question of politics & legislation

How it all began?



- 1st conference on Future Internet
- The **Bled Declaration**:
 - a significant change is required ...
 ... to meet Europe's societal and commercial ambitions
 - calls for a boost in R&D and better coordination in Future Internet research

The BLED Declaration: Towards a European approach to the Future Internet

Slovensko predsedstvo EU 2008 Slovenian Presidency of the EU 2008

La Présidence slovène de l'UE

Current Internet: Success & Challenges

With over a billion users world-wide, the current Internet is a great success – a global integrated communications effective effective and service platform underplaning the fabric of the European economy and European society ingeneral. However, today's Internet was designed in the 1970's for purposes that bear fifte resemblance to current and foresen usage scenarios. Mismatches between original design goals and current utilization are now beginning to hamped the Internet Storethil. A larger number of challenges in the raisms of technology, business, society and geverance have to be overcome if the future development of the internet is to subtain the enhercided loodey of tomorow.

Future Internet: Vital to continued economic Growth in Europe

In the future, even more users, objects, services and critical information infrastructures will be networked through the Future Internet which will underpin an ever larger share of our modern and global economissilk it therefore line to strungthen and focus European activities on the Future Internet to maintain Europe's competitiveness in the global marketplace.

A significant change is required and the European Internet scientific and economic ctors, researchers, industrialists, SMEs, users, service and content providers, now seret the urgent necessity to redesign the Internet, taking a broad multidisciplinary opproach, to meet Europe's societal and commercial ambitions.

Future Internet: Addressing the Challenges through EU Collaboration & Cooperation EU member states have already committed, through the renewed Liabon Agenda and the i 2000 mitiative, 69.1 billion of the nonfan, as part of a public-private partnership, for ICT research over the duration of FP2 However, we must ensure that, within this, continuous and long term support is given to the design of the future Internet as a lay element of the future networked society II: to of stategic importance for Europe to fully engage in the conception, development and innovation of a Future Internet ensuring the long term growth of the ICT sector full support to an ICT based economy, and the elimination of the digital divide for all citems.



The Future Internet Assembly is established

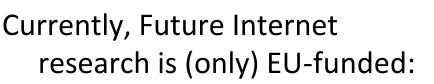
 as a body representing the R&D projects and coordinating R&D
 sig

RIEITCYLTLULUHUMTD

currently 95 EU-funded projects

signatories of ...

Financing



- the EU allocated € 400 mil. from FP7, WP 2009-2010
- a new wave of FI-related projects is expected to arise out of Calls 4 and 5
 - adding a potential 300 to 400 million € of new funding to the Future Internet activities within the WP

but: private sector co-financing is sought and expected

- based on a PPP scheme
 - Public-Private Partnership
- a "request for PPP" was contained in Bled declaration (March 2008)
- a PPP initiative from the private sector came only now
 - at Prague conference, May 2009
 - 16 companies willing to cover 50%
 of a 1 bln. € investment over 5 years



Future Internet Initiative



16 companies, wishing "to secure Europe's interests and establish its role in the Future Internet domain"

• through the PPP, time horizon is 2010-2015

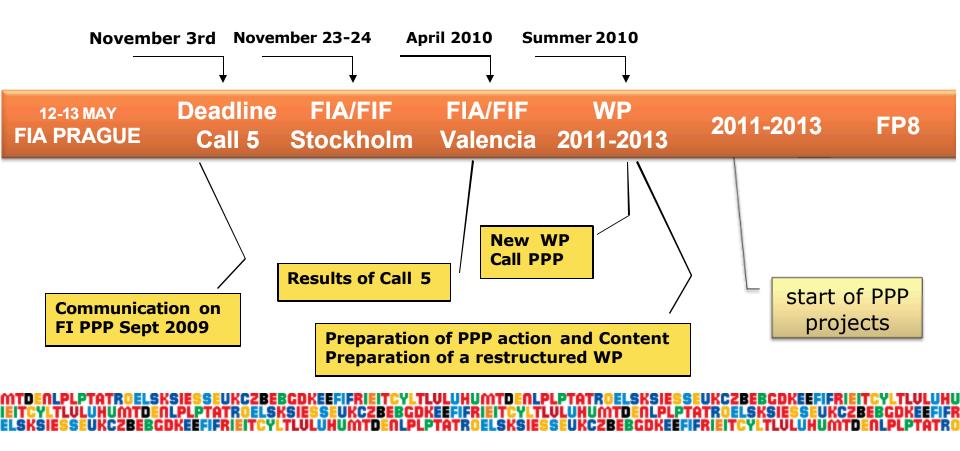


Timeline for new WP and PPP



Details of the PPP (Public Private Partnership) still have to be worked out

• *"to keep openness …"* etc.



What is the FIF?

reminder: FIA is the Future Internet Assembly

- a body composed of R&D projects' (representatives)
 - not politicians, not bureaucrats,

so another "governing" body was formed

- the Future Internet Forum (FIF)
 - "of Member States Initiatives"



- official "ribbon cutting procedure" at the Prague High Level Conference
 - first meeting of the Forum one day later
- members representing national bodies & national Future Internet activities

EU2009.CZ

Prague event, past & future events **EU2009.C2**

- The Prague event, hosted by CESNET, aimed to:
- "review the strategic orientations and trends governing the future societal and economic developments of on-line Internet and Mobile societies"
 - mainly: the 1-day High Level Conference



The FIA meets 2x a year

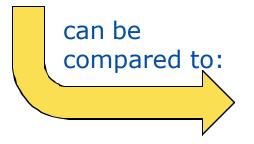
- 2-day workshops
- will now meet in parallel with the FIF
- 2008:
 - Bled, Slovenia, March 30th April 2nd
 - Madrid, Spain, December 9-10th
- 2009:
 - Prague, CZ, May 12th 13th
 Stockholm, SE, November 23rd -24th
- 2010:
 - Valencia, ES, April
 - ?????

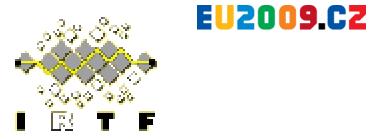


FIA Working Groups

- Future Content Networks
- Management and Service-aware Networking Architectures
- Trust and Identity
- Future Internet Service Offer
- Future Internet Socio-Economics
- Real World Internet







IRTF Working Groups:

- Anti-Spam Research Group
- Routing Research Group
- Delay-Tolerant Networking Research Group
- Peer-to-Peer Research Group
- Host Identity Protocol Research Group
- IP Mobility Optimizations Research Group
- Network Management Research Group Charter
- Transport Modeling Research Group
- Scalable Adaptive Multicast Research Group
- Crypto Forum Research Group
- End-to-End Research Group Charter
- Internet Congestion Control Research Group

Commissioner Viviane Reding in Prague **EU2009.C2**



"Europe is taking steps to become a major player in the Future Internet debates"

"At a moment when we are reflecting on our "post Lisbon" and "post i2010" strategies, it is crucial that the Future Internet gets the right level of recognition under the innovation strategy that the next Commission will put in place"

"Currently, my services are working with industry to define the content and structure of this Public Private Partnership, towards an operational kick-off in 2011"

Commissioner Viviane Reding in Prague





- Openness of the Internet must be preserved ...
 - through open standards and open interfaces
- Net Neutrality:
 - use for maintaining QoS is ok,
 - use for anti-competitive behaviour is not ok
 - at the press conference: mentioned a German mobile operator trying to block VOIP traffic – not ok
- Security and Privacy
 - must be balanced
- (rural) broadband infrastructure: EU invests 1,02 bln. €
 - but: other regions of the world (.AU, .JP, .CN, .US etc.) invest much more
 - also: EU Member States can decide whether to use the money for rural broadband or for agricultural projects (milk subsidies, for example)

Usefull URLs:



- Prague Conference website:
 - <u>http://www.fi-prague.eu</u>
- European Future Internet Portal:
 - <u>http://www.future-internet.eu</u>
- EC website on the Future Internet:
 - <u>http://ec.europa.eu/foi</u>
- Connectivity Scorecard 2009
 - <u>http://www.connectivityscorecard.org/</u>

CZBEB ٢R ELSKS 0. ELSK UKCZB 5 IE S EBGDK 5 E DK SEUKCZBEBG RO EΠ ELS ULUHUMTO LTLULUHUMTD KCZBEBGDKEEFI DENLPLPTAT EFIFRIEITCYLTLU **FR** BGDKEEFIFRIE ATROELSKSIESS SEUKCZBEBGO DE ٢R LPLPT 01 EUKCZBI FIFR 5K5 IESS OF THE INTERNET UHUMTDENLPLP. EUKCZBE SKS PT DELSKSIES **m FR** Prague | May 2009 TDEALPLPTATROELSKSIESSEUKCZBEBGDKEEFIFRIEI CZBEB ELSKS KEEFIFRIEITCYL ТПЕП I PI PTOTR LULU NLPLP EUH DKEEF thank you for your attention ROELS EΠ ТΠ KEEFII TLUL LU пеп RIEITCYLTLULUHUMTDENLPLPTATROELSKSIESS EUKC2 EEEE DE SEUKCZBEBGDKEEFIFRIEITCYLTLULUHUMTDENLPLPTATR LUHUMTDENLPLPTATROELSKSIESSEUKCZBEBGDKE CYLTL ٢R UKCZBEBGDK EEFIFRIEITCYLT E5 UKCZBI FIFR D D 5 5 PLPTATR DELSKSIESSEUKCZBEBGDKEEFIFRIEI HU