



# What does Future Internet mean for enterprise?

## Session Description, Context, Themes & Topics

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# Session Description

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Session document: [http://www.future-internet.eu/fileadmin/documents/valencia\\_documents/agenda/FIA\\_Valencia\\_Enterprises\\_description\\_v2.0.pdf](http://www.future-internet.eu/fileadmin/documents/valencia_documents/agenda/FIA_Valencia_Enterprises_description_v2.0.pdf)

- Context
  - New drivers for prosperity and growth
  - Additional factors for future competitiveness
  - Opportunity for European enterprises to thrive in the post-crisis landscape
- ***Smart Enterprises of future***: business model as the glue for innovation
- FI to provide enterprises with **a new set of capabilities** not possible today
- ***DNA of the Future Internet***: building blocks for potentially an unlimited array of value-added enterprise applications

# Setting the Context

## EUROPE 2020: Three Priorities

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- ***Smart growth***: developing an economy based on knowledge and innovation
- ***Sustainable growth***: promoting a more resource efficient, greener and more competitive economy
- ***Inclusive growth***: fostering a high-employment economy delivering social and territorial cohesion

# EUROPE 2020: 7 Flagship Initiatives



- 1 Innovation Union
- 2 Youth on the move
- 3 A digital agenda for Europe
- 4 Resource efficient Europe
- 5 An industrial policy for globalization
- 6 An agenda for new skills and jobs
- 7 European platform against poverty

Josè Manuel BARROSO (2010): EUROPE 2020, A European strategy for smart, sustainable, inclusive growth

**3. A digital agenda for Europe.** The aim is to deliver sustainable economic & social benefits from a **Digital Single Market** based on fast and ultra fast internet and interoperable applications, with broadband access for all by 2013, access for all to much higher internet speeds ( $\geq 30$  Mbps) by 2020 &  $\geq 50\%$  of European households subscribing to internet connections above 100 Mbps. At EU level, the Commission will work:

- To provide a stable legal framework that stimulate investments in high speed internet infrastructure and in related services;
- To develop an efficient spectrum policy;
- To facilitate the use of the EU's structural funds in pursuit of this agenda;
- To create a true single market for online content and services with adequate protection and remuneration for rights holders;
- To reform the research and innovation funds and increase support in the field of ICTs so as to reinforce Europe's technology strength in key strategic fields and create the conditions for high growth SMEs to lead emerging markets and to stimulate ICT innovation across all business sectors;
- To promote internet access and take-up by all European citizens, especially through actions in support of digital literacy and accessibility.

# EUROPE 2020: EU Digital Agenda



*Make no mistake – the rest of the world is working hard for their growth and making these plans. People in China and Brazil and Mexico and Australia are not assuming anything. Instead they are reforming and innovating and pushing their limits. **We have to do the same.***

Neelie KROES, Commissioner for the Digital Agenda (2010): Economic Growth in EUROPE (Maastricht, The Netherlands, March 12<sup>th</sup> 2010)

**Digital Agenda** will consist of 6 key themes, which will have an impact on your daily life – both as business people and as citizens:

1. **Fast internet:** this is the backbone of future business. How fast? At speeds like 100 megabits per second, you are sending and receiving important information quicker than you can blink your eyes.
2. **Digital Single Market:** are you sick of it being hard to buy and sell things across borders when you are online? We aim to end this patchwork of national markets.
3. **Digital Citizenship:** you need skilled workers; you want access to online public services; you deserve protection of your rights online. My co-ordinating role will make this a reality sooner.
4. **ICT research and innovation** need greater priority: we don't get amazing new technology by accident. It takes blood, sweat and tears and it also takes money. We will mobilise and create the incentives for more public and private R&D to support entrepreneurs throughout the life-cycles of their innovations.
5. **Trust & Security:** it sounds obvious, but if you don't trust technology you are not going to use it. We are not forgetting this basic fact in our strategy.
6. **Interoperability:** a digital society can only take off if its different parts and applications are interoperable and based on open platforms and standards.

# Session Themes

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- ***Vision***: Smart Enterprises of the future and Innovation as a business routine
- ***Business Models***: business models to support new value propositions and drive new business values
- ***Future Internet Systems***: next generation systems that will support enterprises to innovate and thrive in the post-crisis landscape

Emphasis: The central role of innovation in catalysing Europe's economic recovery and pursuing future growth and prosperity

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# Topics for Session Themes

# Vision

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1. Exit from the crisis - what does it mean for enterprises?
2. Enterprises of the future - is it time to re-think and even to re-invent the nature of business, the characteristics of enterprises and the role of firms in a potential “new global order”?
3. Innovation Union - what is the role of FI for enterprise (and especially SME) innovation?
4. In terms of European research in FI, does it make sense to consider “enterprises” as a generic research domain?

# Business Models

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1. What will be the key drivers for business models in the Internet economy of the future?
  - Technology? Customers and end-users? Organisations and staff? Public Sector and laws & regulations? Others?
2. What will be the characterising elements of those business models?
  - Value proposition (goods and services)? Business processes and enterprise architectures? New value creation paradigms? New forms of innovation and IPR? Others?
3. Are there emerging examples of those business models?
  - e.g. Apple/Google Apps factory, emerging idea of *iAd*, SaaS-based business models, Amazon Mechanical Turk, Daimler Car2go etc.
4. What are the lessons that can be learnt so far? Are there already major barriers to business model experimentations?
  - e.g. Cultural resistance? Lack of innovation attitude? Inertia of enterprise organisations? Cost of re-engineering? Lack of appropriate or new skills?

# Future Internet Systems

Ref: ICT research and innovation (key Theme #4 of the Digital Agenda )

What are the main RTD priorities to support Enterprise Innovation & SMEs post-crisis?

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## 1. Which FI technologies will specifically help revolutionise Enterprise Systems (FInES)?

Future Network (Universal Business Infrastructure / Networks Convergence)

Internet of Services (Cloud Computing / Service Web / Public Data Access)

Internet of Things (Sensor Networks / Smart Objects / Distributed Intelligence)

Internet by/for People (Social Networks / Empowerment / Enterprise 2.0)

Internet of Contents/Knowledge (3D Media / Fifth freedom / Openness)

## 2. In which Product Lifecycle phase(s) is FI representing the most promising post-crisis exit strategy for European Industrial SMEs?

New product development (3D Models / Virtualization / Open Innovation LLs)

Sustainable manufacturing (Smart / Virtual / Digital Factory of the Future)

EU Single Marketplace (virtual-physical points of sale / collective intelligence)

After Sales Services (extended products / intangibles / dismantling / recycling)

Where to start from for ICT as a Service in Industry? (Privacy / Legal / Trust / Security)

## 3. Is FI an Innovation Opportunity for European ICT SMEs?

What is the role played by EU ICT SMEs in the Internet of the Future?

Infrastructure, Platform, Software, Consultancy as a Service?

Smart-Niche Applications (Use Cases) on top of an Open Core Platform?

Is what sense “Openness” intended/understood? Open Source / Common Specifications / Standards?

Closed Innovation / Collaborative Innovation / Open Innovation (Living Labs)?

Is partnership with ICT Big Names mandatory? Just EU or also US Big Names?

# Looking forward to Your Contributions

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FIA Enterprise Wiki

<http://services.future-internet.eu/index.php/Enterprises>

FIA Enterprise Blog

<http://fiaenterprise.wordpress.com/>

FIA Enterprise Twitter

<http://twitter.com/FIAEnt>

FIA Valencia Enterprise Session Webpage

<http://www.future-internet.eu/home/future-internet-assembly/valencia-april-2010/session-agendas/enterprises.html>