



FInES

**Future Internet Enterprise Systems
Research Roadmap - Preliminary results**

Michele Missikoff (CNR)

Future Internet Assembly
Stockholm, 23-24 November 2009

Future **I**nternet **E**nterprise **S**ystems

- Report goal: to draw the main lines for **future research** in the domain of **FInES**
- Such research lines are positioned in a long-term, highly innovative vision, with **2025** as time horizon.
- The work is carried out by the EC DG-INFISO, D4 “**FInES** Cluster”, including more than 600 participants, and a Task Force of 7 Editors.
- Preliminary results released on the 11 November. A Full Draft is expected mid December. Final Report early next year

Content organization

<i>Societal Vision and Values</i>	What will be the socio-economic context in which the future enterprises will operate?
<i>Future Enterprises Grand Objectives</i>	What will be the desirable qualities that will characterise future enterprises?
<i>FInES Research Challenges</i>	Having identified a set of desirable qualities, what will be the research lines aimed at developing <i>future enterprise systems</i> able to support them?
<i>Future Enabling Technologies</i>	What are the best ICT solutions, and the ICT research lines, to be developed to support the above FInES?

Chapter 1 - Vision and Values

THE BIG CHANGE

- Emergence of Virtual Individualism vs Social Networking
- Control and Ownership in the Information Society
- Infrastructure Models
- The Socio-Economics of the Disconnected Network
- When the Users Join the Team: the Case of Second Life
- New Value Systems
 - New Localisms (zero km logistics)
 - New Energy Forms

Chapter 2 – Future Enterprises: Grand Objectives

THE GRAND OBJECTIVES AS ENTERPRISE QUALITIES

- *Cloud Enterprise (who actually produces?)*
- *Sensible Enterprise (beyond knowledge)*
- *FEDS Enterprise (stability w/out equilibrium)*
- *Green Enterprise (... Reverse logistics 4 the Planet)*
- *White Enterprise (transparency, accountability, ...)*
- *Blue Enterprise (fantasy, innovation, ...)*
- *Glocal Enterprise (... Think globally, act locally)*

Chapter 3 - FInES Research Challenges

(under construction)

- Business process modeling and enactment
- Competency & Skill Management
- Project and team management
- Enterprise Interoperability / Collaboration
- Knowledge workers collaboration spaces
- Knowledge & Sense Management
- Business Innovation support and impact assessment
- Trust and Security
- Learning Enterprise Systems
- Continuous IT/ Business Alignment
- Social Business Networks
- Customers Community management
- Financial, operational transparency and accountability
- Reverse logistics and Environment impact management
- Enterprise sustainability management
- eSourcing / eProcurement

Chapter 4 - Future Enabling Technologies (under construction)

- FI: IoS, IoT, IoK, IoP
- SaaS, PaaS, IaaS
- ISU (Interoperability Service Utility), SaaS-U (SaaS-Utility)
- FOT platforms
- Cloud Technologies
- Universal Mobile Computing
- Mashup and System synthesis
- Dynamic Service discovery and composition
- Execution & monitoring
- Ontologies & Semantic Technologies
- New visualization and interaction (from multitouch to Olographic)
- Semantic Search and retrieval
- Knowledge Mining
- Semantic interoperability
- Model building, checking, sharing
- Social and System Simulation
- Measurement methods and tools

Conclusions and Validation

