

Enterprise **C**ollaboration & **I**nteroperability



COIN Position Statement

FI Assembly Session

What does Future Internet mean for enterprise?

Stockholm, November 23rd 2009

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TXT e-solutions SPA



The COIN Vision & Motto



COIN VISION: *“By 2020 enterprise collaboration and interoperability services will become an invisible, pervasive and self-adaptive knowledge and business utility at disposal of the European networked enterprises from any industrial sector and domain in order to rapidly set-up, efficiently manage and effectively operate different forms of business collaborations, from the most traditional supply chains to the most advanced and dynamic business ecosystems.”*

COIN MOTTO: *“Enterprise Interoperability and Enterprise Collaboration are the two sides of the same COIN”*



The COIN Integrated Project

Project No:	216256
Project Full Name:	Collaboration & Interoperability for Networked Enterprises
Duration:	48 months
Start date:	January 1 st 2008
Partnership:	21 partners, 9 countries
Strategic Objective:	FP7 ICT-2007.1.3 ICT in support of the networked enterprise
Total Eligible Cost:	14.383.834 EURO
EC Contribution:	9.996.480 EURO



The COIN Consortium & Funnel Model

Industrial Partners



Academic & Research Partners



Jožef Stefan Institute, Ljubljana, Slovenia

User Partners



Finanziaria laziale di sviluppo





The COIN Metaphore

COIN MOTTO: *“Enterprise Interoperability and Enterprise Collaboration are the two sides of the same COIN”*

- **The SIDE A of the COIN:** *Enterprise Interoperability*
- **The SIDE B of the COIN:** *Enterprise Collaboration*
- **The Substrate of the COIN:** *Service Platform*
- **The Value of the COIN:** *Software as a Service-Utility SaaS-U*
- **The Market of the COIN:** *Enterprise Networks (mainly SMEs)*

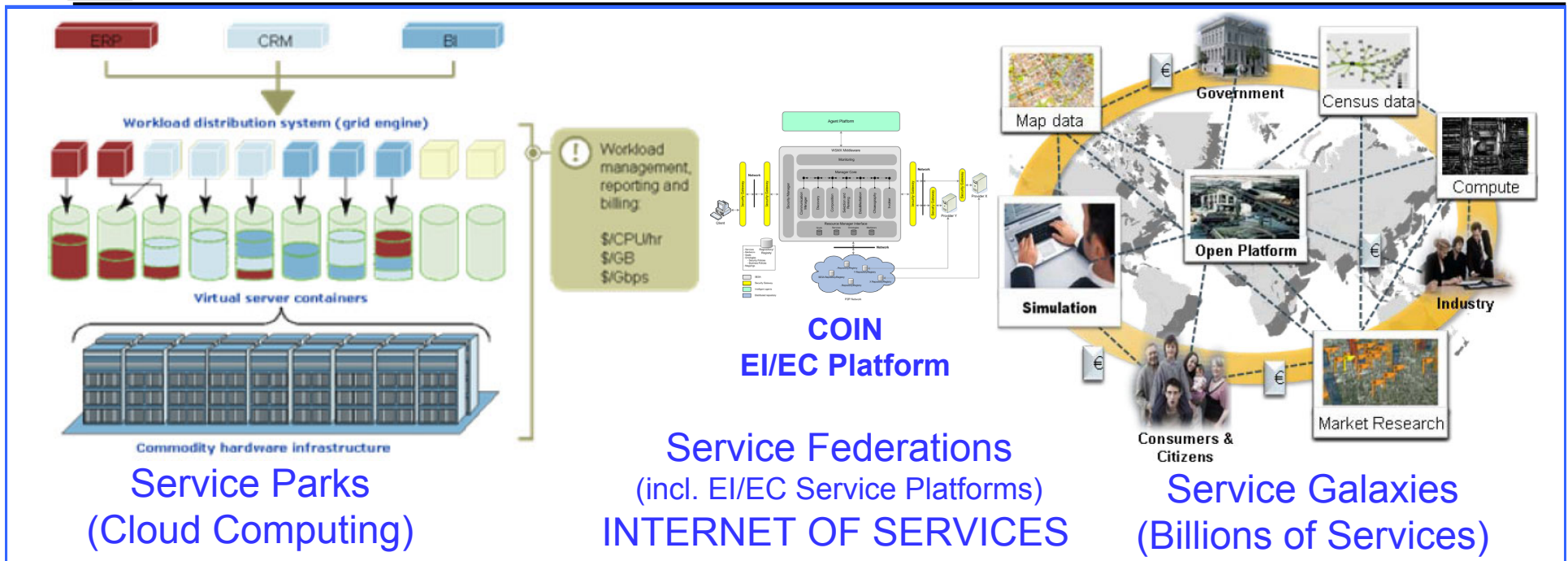


The COIN DOW 5 Objectives

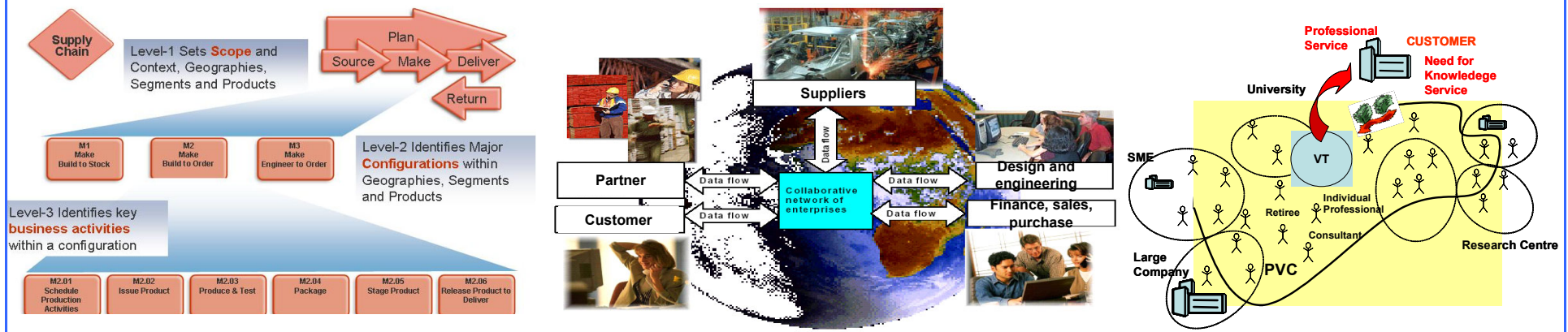
1. To design and develop a pervasive, adaptive **Service Platform** to host Baseline and Innovative COIN services for EI and EC and make them available under innovative on-demand, utility-oriented business models (i.e. the SaaS-U model) to European enterprises (and SMEs in particular) for running their business in a secure, reliable and efficient way.
2. To consolidate and stabilize the ICT results of both EC and EI FP6 research into some **Baseline Services** which constitute the service foundations for COIN.
3. To further enlarge, extend and improve the baseline services, by developing other more **Innovative Services** in the EC and EI fields, which could take into account the most recent and promising technology challenges (in the field of Web 2.0, semantic web, space computing) and put them at service of EC and EI purposes.
4. To represent a **pathway to convergence** for these two fundamental research streams: EI and EC, by integrating in the same project the most prominent stakeholders of the two research fields coming both from industry and from universities and research centres.
5. To **demonstrate, experiment, trial and assess** the project results into realistic industrial scenarios offered by our 6 test cases in Aeronautics (Aeronautic Cluster of Andalusia, Spain), Automotive (the Automotive Cluster of Slovenia), Aerospace (the Lazio Connect virtual enterprise network Italy), Pulp & Paper (the Poyry consultancy service providers), Healthcare (the VEN network in U.K.) and ICT (the Hungarian Association of ICT companies).



The COIN Enterprise view to IoS



ENTERPRISE COLLABORATIVE ENVIRONMENTS





COIN FI Position Statement

1. Enterprises (and more in particular SMEs aggregated in collaboration forms) to be enabled to access baseline (state-of-the-art) and innovative **EI/EC services** from the **IoS**, keeping them sharply separated from Enterprise Applications and Collaboration Platforms. **EI/EC Services Outsourced**
2. IoS to provide enterprises with a **Service Federation** of GSDPs (Global Service Delivery Platforms) between the two extreme visions of very sophisticated and professional **Service Parks** (Cloud Computing) and very naïve and spontaneous **Service Galaxies** (billions of services). **Open-Trusted Platforms Federation**
3. Among the federated-open-trusted Platforms, some of them will be specialized in providing enterprises with **Interoperability** (e.g. [semantic] data mappings, business processes synchronization, service compositions, [semantic] models reconciliation) and **Collaboration** (e.g. human communication, ad-hoc collaboration, VO formation and governance, project management) **Services**. **EI/EC Services in a Platforms' Cloud**
4. The **COIN EI/EC Platform** is one of these federated platforms and will provide a minimal set of EI/EC services as utilities (**SaaS-U**), following the ISU (Interoperability Service Utility) principles of low-zero cost, availability to all, non-rivalry and not locked (owned) by any single private entity. **EI/EC Services as a Utility**
5. The **COIN Collaboration Platforms** (supply chains, collaborative networks and business ecosystems in automotive, aeronautics, space, ICT, pulp & paper, healthcare) will provide those EI/EC Services which are not part of the above minimal set (e.g. development environments, tools, interactive wizards, domain specific services), allowing enterprises to become also providers of EI/EC services in the IoS. **Enterprises as Pro-sumers in the Internet of Services**



COIN & Knowledge Cafe's

- 1. Interpretation of the Future Internet (Knowledge Café I)**
 - i. Universal Business System for EI/EC services
 - ii. An initial minimal set of EI/EC Services populates the COIN Platform
 - iii. Implementation of the ISU concept of Utility, Universal Services
 - iv. Enterprises, freed from solving EI/EC problems, to focus on their business
 - v. COIN ISU as an enabler for Open Innovation in Enterprise Networks

- 2. New interconnection economics paradigms (Knowledge Café' II)**
 - i. Service Federations as a continuum between Service Parks and Galaxies
 - ii. Enterprises to be entitled to become Service Providers (Pro-sumers)
 - iii. Intelligent Reasoning tools for goals decomposition & service composition
 - iv. The Water Supply tap metaphor, beyond the plug and the switch ones
 - v. New stakeholders emerge, like the Service Platforms Providers

- 3. Collaboration, transactions, information mgmt (Knowledge Café' III)**
 - i. COIN Business Ecosystems to support very dynamic transaction chains
 - ii. COIN Platform to support intelligent and dynamic Service Composition
 - iii. COIN System to support mobile/nomadic users in business collaboration
 - iv. AAA (Authentication Authorization Accountability) services implemented
 - v. ICT commoditization as an enabler for Business Innovation (ISU model)

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