

- >> BOOST PERFORMANCE
- >> REDUCE COST
- >> INCREASE AGILITY
- >> ENHANCE CRM
- >> SHORTEN TIME TO MARKET
- >> DRIVE INNOVATION
- >> IMPROVE EFFICIENCY
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CONSULTING > SOLUTIONS > OUTSOURCING

Contribution of NESSI

European Technology Platforms Conference 2010

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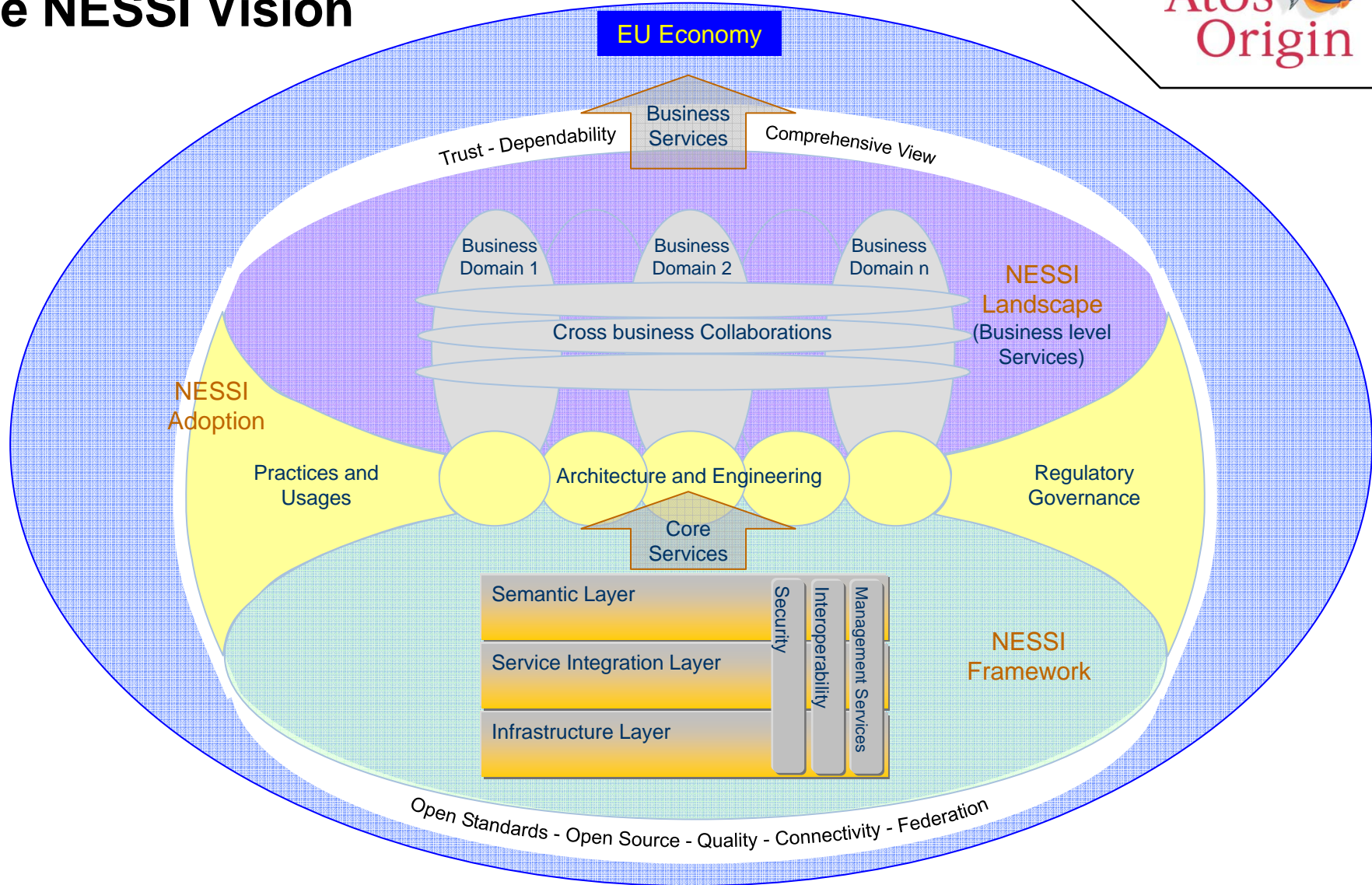
Brussels, May 11th 2010

NESSI



- » How does Healthcare fit into the NESSI constellation
- » NESSI paves the way for a new constellation of services on the web
- » Both PHS and VPH are included in the picture
- » The EFII was constituted by NESSI, NEM, and eMobility members
- » Atos Origin leads the healthcare group also in EFII

The NESSI Vision



The NESSI Vision

Walking towards a new economy



- » The NESSI initiative aims at providing a common basis for European research on Software and Services and their provision as a Service oriented utility in order to establish the technological basis and the strategies that will speed up the adoption of a service ecosystem dynamics, by:
 - Providing European industry, notably SMEs and public sector with technology to reliably master complex software systems for innovation and growth;
 - Transforming software and services industry in Europe to achieve a leadership position;
 - Fostering the well-being of citizens through new societal applications, enhanced efficiency of industry and public sector, and competitive labour market;
- » In this way driving the transformation of the European economy to a knowledge-based economy based on service-oriented business models

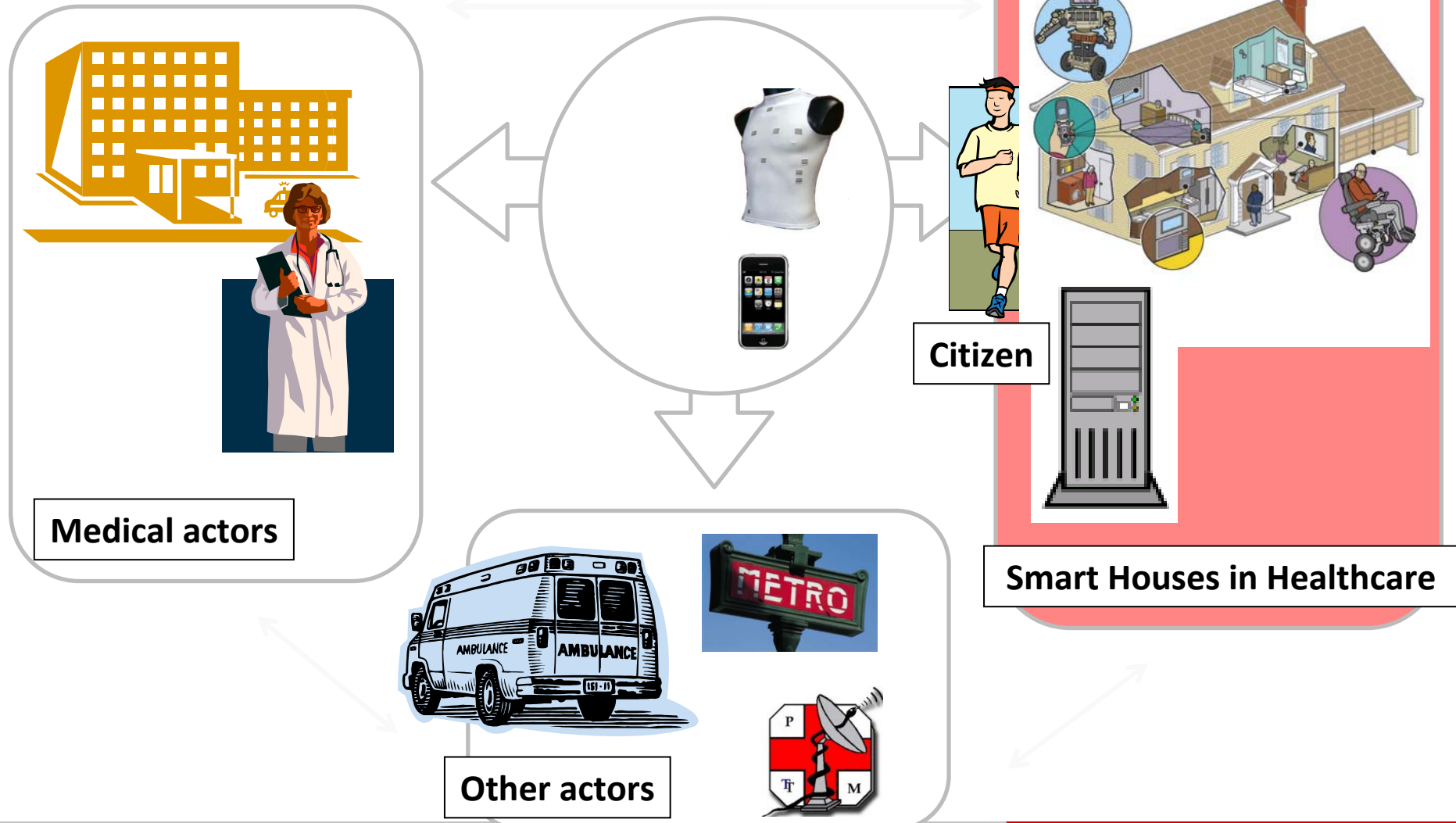
NESSI



1. How will NESSI will contribute to these domains?
 - a) NESSI paves the way for a new constellation of services on the web
 - b) Both PHS and VPH are included in the picture
 - c) NESSI eHealth sub-domains:
 - Interoperability of Electronic Health Records
 - ePrescription
 - Intelligent Homecare Monitoring
 - Virtual Physiological Human
2. Which parts do you intend to cover?
 - » Both, from the service and infrastructure points of view
3. What are the Challenges?
 - » For PHS, the constellation of actors, data and services
 - » For VPH, the cloud of clouds
4. Opportunities for collaboration?
 - » Getting enlarged in the Future Internet Initiative

Personal Health

Future Internet



Healthcare solutions based on FI: main



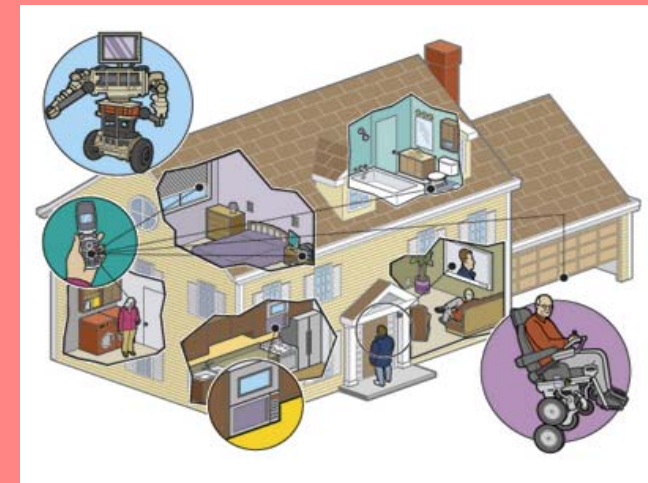
Hospital/Health centres and pharmacies: interoperability, information management, and M2M communications

Future Internet will allow to connect all potential actors/places related to healthcare.



Citizens: wearable and mobile devices to continuous monitoring and communication

Other services: emergency services, public transport...



Smart Houses: M2M communication, non-invasive monitoring, telecare



E-health: issues and enablers



Under the umbrella of Smart City, the healthcare will allow the **empowerment of patients**, providing more participative services, a **better prevention, diagnosis and treatment**

Key Issues to overcome

- » **Interoperability and standardization** of computer-based medical systems.
- » Management and interoperability of Electronic Health Records (EHR)
- » **Interconnection** of hospitals and medical team remotely
- » Extreme **guarantee of privacy** and confidentiality of data
- » **Enhanced remote care of patients** (specially for chronic diseases and elderly people)

Technical Enablers

- » Interoperability of data- **Data Exchange**
 - » Semantic applications and Standards
- » Machine to Machine communications.
– **Better monitorization/Homecare**
- » High capacity networks- **improving Telecare and m-Health**
 - » Open and interoperable Cloud Services- Grid computing to process great amounts of data- **DSS/VPH**

Enablers needed to implement to carry out the pilots



Semantic Interoperability and standards to transmit information

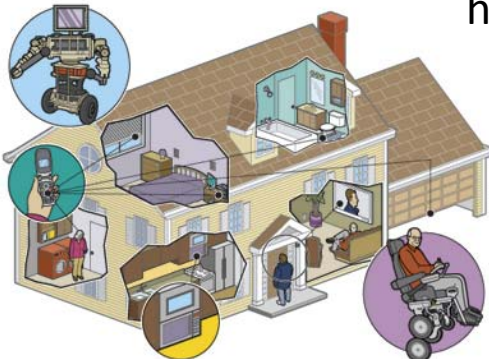


High Capacity & Trustworthy Networks



Cloud & Grid Computing to develop the VPH and Decision Support Systems

IoT: Devices and M2M communications in houses and hospitals



» **Ambition 1:**

Setup a pan-European knowledge space based on semantic technologies involving a large number of participants (knowledge sources and) from different countries. Interoperability of ontologies across the internet and advanced services developed on top of that are crucial for the deployment of the info space. This will allow field for growth of thousands of hi-tech SMEs around the environment.

» **Ambition 2:**

Develop a large scale infrastructure to provide Collaborative tools for hospitals, as well as to enhance homecare. Services based on mHealth to connect the whole set of involved actors in the healthcare provision constellation.

» **Ambition 3:**

Enabling the beginning and interoperability of the initial VPH services, duly connected to the info space and accessible by the mHealth infrastructure.

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