



ITS Services Interoperability Certification: overcoming technical approach

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FI-PPP Information day

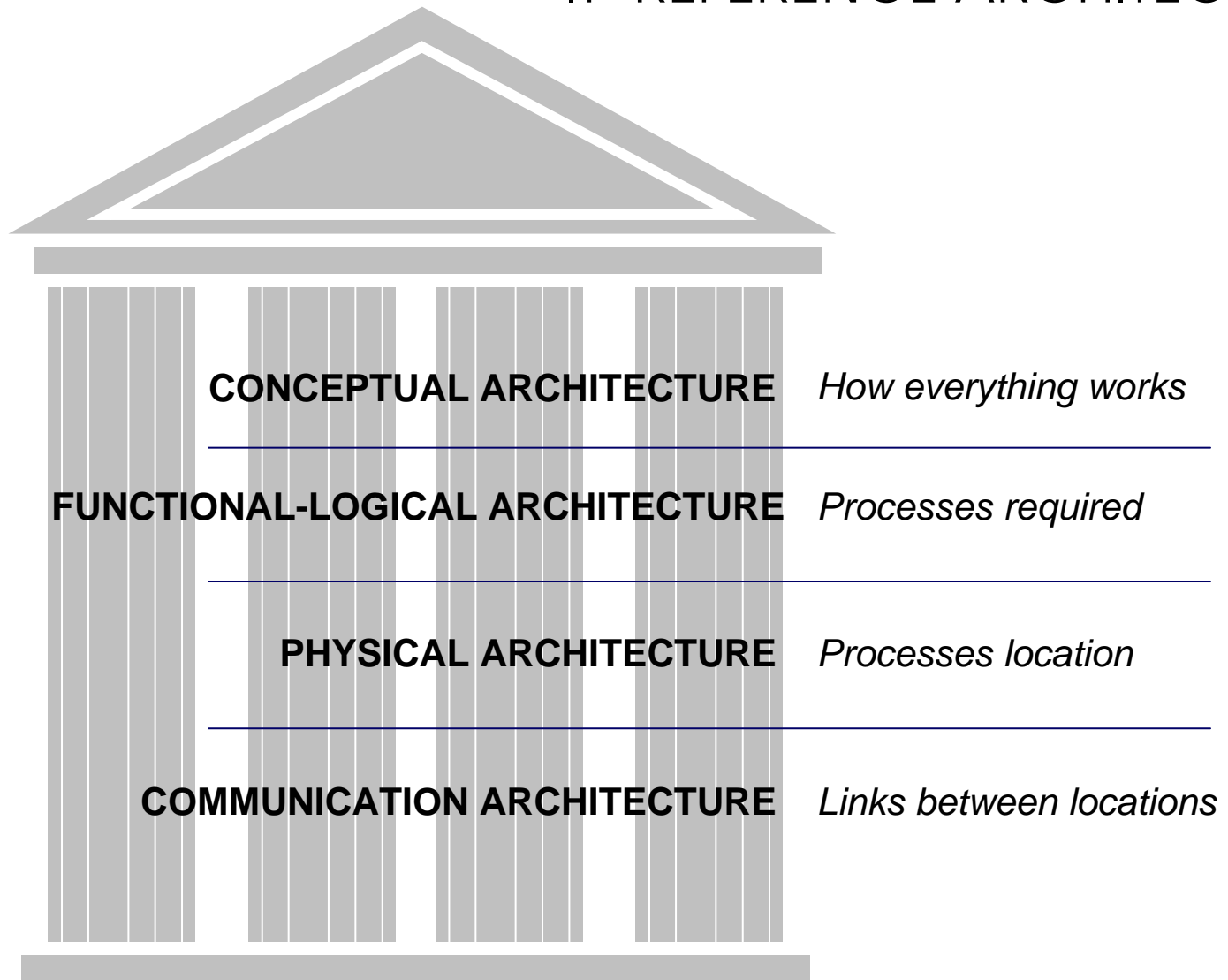
Brussels, 8th July 2010

THE TRADITIONAL SCENARIO IT REFERENCE ARCHITECTURE



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GLOBAL MARKET

Business every-where in the World

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Web Services, Cellular phones,
Navigation devices, Net-books,

URBAN & INTERURBAN

Residential de-localization

MULTIMODALITY

Road, Rail, Ship, Air, Public,
Private

TOURISM & IMMIGRATION

Multilingualism, different mobility
habits

URBAN POLLUTION

Hybrid/Electrical vehicles &
Infrastructures

INTELLIGENT TRANSPORT SYSTEMS (ITS)

Interoperable Services, Intelligent
vehicles & infrastructures

REVOLUTIONARY IMPACTS

Information and Communication Technology
is quickly changing

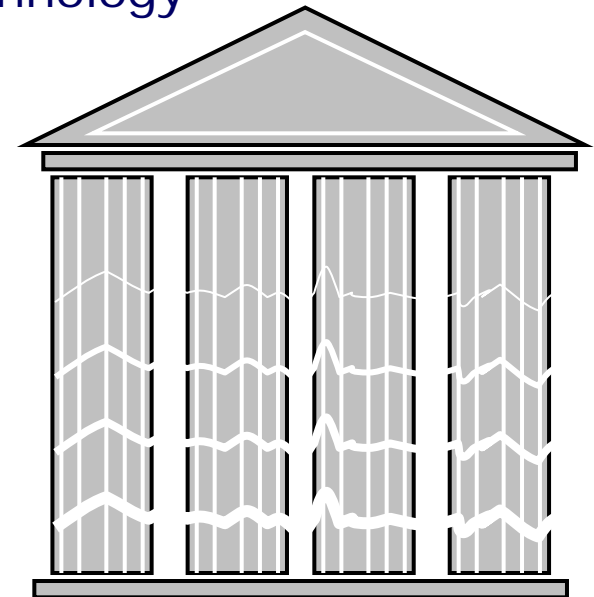
Mobile Accesses and Web Services

HW and SW allocation everywhere

Dynamic assumption of roles

New business actors

New business models



New Communication and Information Management context
(Internet, Web Services, Broad Band, Mobility, ...) and the
consequent Global Market

mine
the traditional architectural approach



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Internet and Web Services

are necessary to improve

ITS co-operative systems

but are not enough to create

a Business Context

for Applications/Services interoperability

MAIN REASONS

The new ICT architectures, web service and internet based, allow the ITS co-operative systems development.

But.....

**SYSTEMS INTEROPERABILITY
does not mean
SERVICES INTEROPERABILITY.**



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NEW BUSINESS CONTEXT

New co-operative systems enable the development of

complex and dynamic services

involving

many Providers and Stakeholders



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R&D FOR INTEROPERABILITY SERVICES

The complexity of the new business context needs reference models:

- to create and manage network and dynamic Businesses
- to govern the Relationship & Partnership among the Stakeholders
- to standardize the Processes Governance
- to establish Certification Framework to evaluate interoperability of Applications and Services



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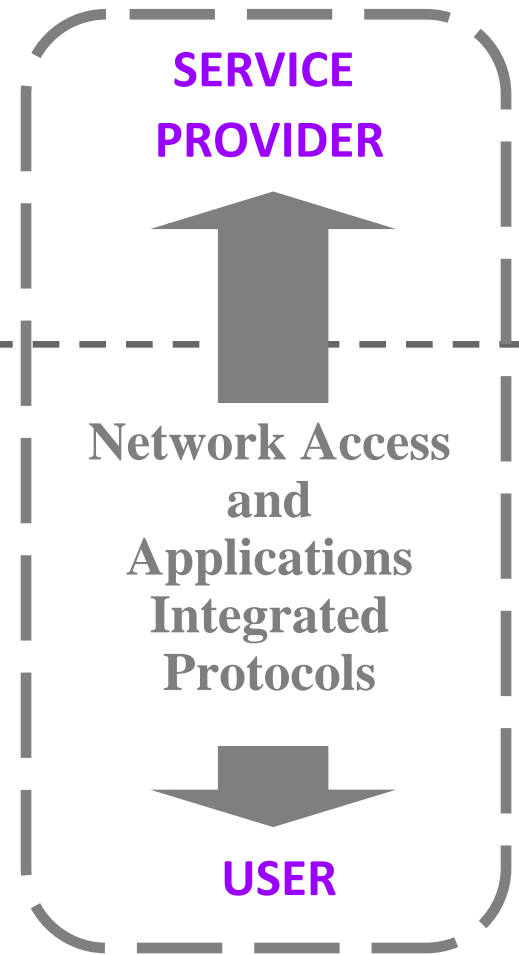
ISO-OSI STACK APPROACH



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Fonte CEN- ETSI



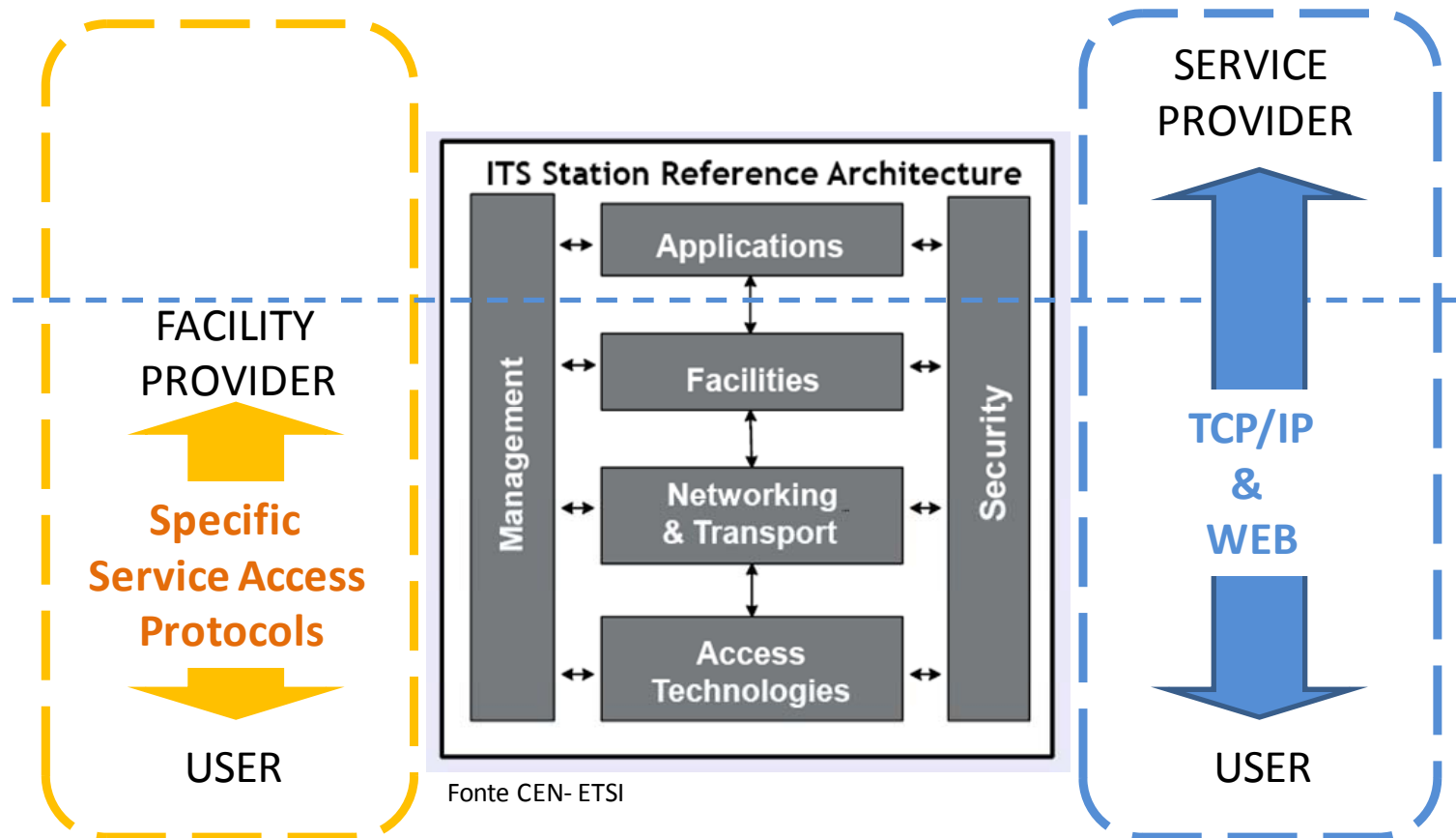
INTEGRATION OF THE PROTOCOLS :
NETWORK ACCESS TOGETHER APPLICATIONS

WEB SERVICE ARCHITECTURE EFFECTIVE APPROACH



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SEPARATION OF THE PROTOCOLS :
NETWORK ACCESS vs. APPLICATIONS

TRANSACTIONAL PLATFORM FOR INTERNET

Internet and Web Services

represent an effective

Communication Context

but are not

a Transactional Platform for Business



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- **PROJECTS FOR INTEROPERABILITY
MODELS DEVELOPMENT**
- **PROJECTS FOR WEB SERVICES
TRANSACTIONAL PLATFORMS**



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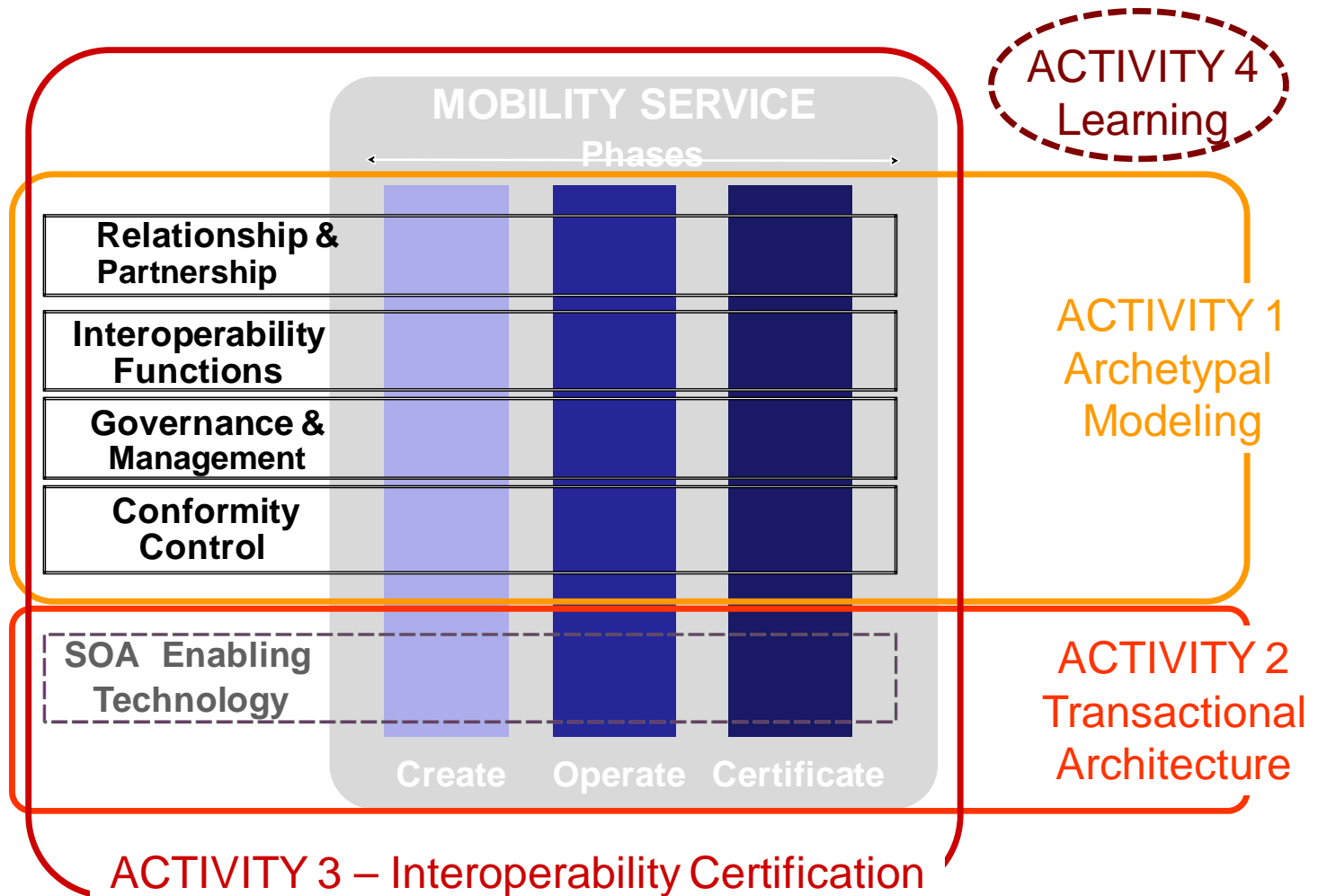
- **Contract Models**, to allow transparent managing of business and operative events in the services globalisation environment
- **Partnership Models**, to permit the definition and management of the actors role (User, Providers, Suppliers, Certifiers and Authority);
- **Functional Interoperability Models**, through the definition and management of :
 - virtual Meta-directory of the identification, authentication and authorisation services;
 - virtual Meta-Data Base, to implement a “minimum set of data” shared among the Service Providers;
- **Governance Models** of different operative processes
- **SLA Models** definition and management
- **Models to develop/manage PPP** (Public and Private Partnership)
- Criteria, rules and procedures of the **Certification**'s processes;
- Criteria, rules and procedures to manage the **technology change's transition**.

Dynamic mechanisms to update the model applications



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In any kind of mobility management systems it is fundamental to settle the relation rules of the involved stakeholders to achieve its best interoperability and governance.

The development of the archetypical models focused on the stakeholder involved in an event or business allows to generate rules and procedure that guarantee advantages greater than the traditional standardization approach.

MODELING ARCHETYPE



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ITS TRANSACTIONAL PLATFORM



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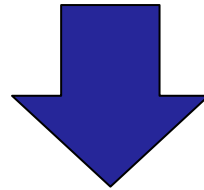


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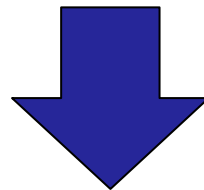
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SERVICE INTEROPERABILITY CERTIFICATION

Up to now are the ITS services are certified only with a technology approach → technical conformity



That it is not adequate for complex services involved by a Providers supply chain



SERVICE INTEROPERABILITY CERTIFICATION



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- Deployment into Mobility Services of SOA & Web Services based ICT architecture
- Promotion of the innovative ICT services/platforms in Transportation to ITS public and private managers
- Promotion of specific ITS Master to European Universities



**THANK YOU
FOR THE KIND
ATTENTION**

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