
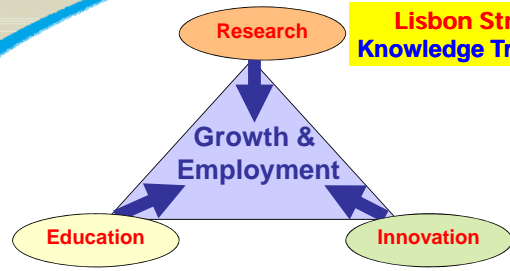



TURKISH NATIONAL CONSTRUCTION TECHNOLOGY PLATFORM


Christophe Lesniak
 European Commission
 DG Research-
 'Industrial Technologies'


 ANKARA 1st June 2007


Lisbon Strategy Knowledge Triangle



S&T contributes to the Lisbon objectives: economic growth, employment creation, environmental protection, social challenges: fight poverty, improve human health and quality of life...





ETPs AS THINK & DO TANK

European Technology Platforms – what are they?


... we see technology platforms as a smart, European way of working together to support industrial competitiveness (...) I have been struck by their enthusiasm and professionalism and their readiness to grasp this opportunity to become powerful actors in making the European Research Area a reality (...) The Commission services will continue to do all they can to facilitate this important and welcome development."


Janez Potocnik
 European Commissioner for Science and Research





ETPs AS PPP initiative

European Technology Platforms – how do they work?







CONSTRUCTION ETP

Agenda 2030


Research areas




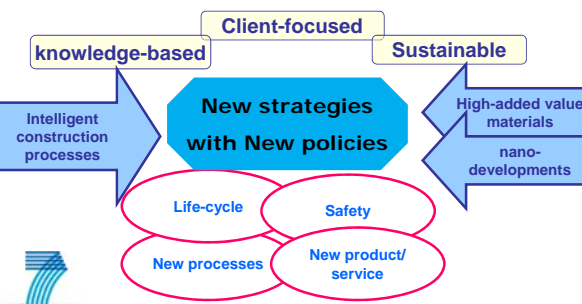
Meeting Client Requirements
 Indoor Environment
 New Image of Cities
 Using Underground Space
 Mobility and Supply

Becoming Sustainable
 Energy and Resources
 Reduce Environmental Impact
 Transport & Utility Networks
 Cultural Heritage
 Safety and Security

Transformation Of The Construction Sector
 New Construction Process
 ICT & Automation
 High Added Value Materials
 Attractive Workplaces




The challenge and the vision:
 "Building a knowledge-based, competitive and sustainable construction industry"



Client-focused

knowledge-based


Sustainable

New strategies with New policies

Intelligent construction processes

High-added value materials nano-developments


Life-cycle
 Safety
 New processes
 New product/service



Challenges and Opportunities

Need of industrial transformation – Sustainable construction

- Magnitude of Construction (energy example):
 - **Massive Market, Growth and employment for Social benefit**
 - **Common interest of all Member States**
 - **Multi national and multi sectoral energy mix : infrastructure, buildings, appliances, processes, transport, manufacturing...**
 - **CO2 reduction contribution**
 - **Complexity of energy efficient built environment, comfort & living space increasing..**
 - **Potential savings , buildings account for 40% of total energy use (passive solar, day lighting, reduced transmission losses, air tightness, night ventilation, use of building mass, storage....)**



Leveraging Our Common Interest

Responsible answer to stakeholders demand

Policy : policy and strategy for EU , European Performance of Buildings Directive (EPBD), Actions Plan for Energy Efficiency, Green Procurement, Eurocode

FP7 : Cooperation NMP : technologies for energy efficiency in buildings, ENV : reducing footprint and gas emission, TREN : Building Performance (indicators, regulation) , INFISO : Innovative Management (optimized design, control strategies)

CIP : Specific measures in industry and construction and for energy using products. Support for integration of new and renewable Energy sources and legislative measures, CPD...

Lead Market : creating "Towards Zero Energy Buildings" business environment to allow Construction industry develop and commercialise innovative products and services on a competitive basis, but also INFISO initiative, SET-plan....


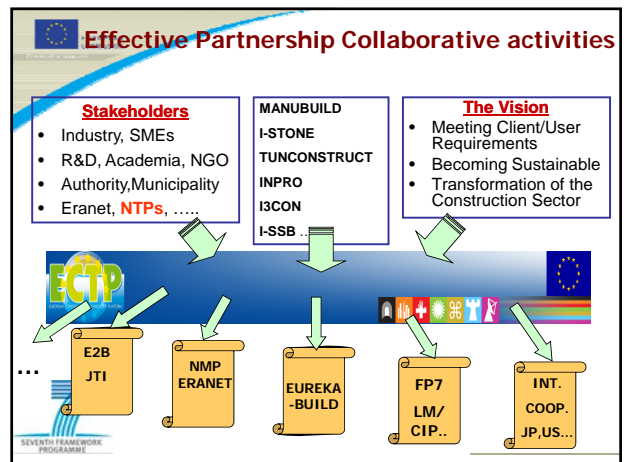


Construction Potential Impacts

New technologies, concepts and high tech materials for efficient and clean buildings

- Impacts: upgrade of 30% of existing buildings
 - ↘ 50 % of energy
 - ↘ 30% raw materials
 - ↘ 40% waste
 - ↘ water
 - ~100% construction materials recyclable
 - ~100% reuse of demolition wastes
- By 2050:
 - ~0% CO2 production for new building
 - 100% buildings (2005 stock) retrofitted
 - ↘ 50% energy consumption
 - ↘ 75% CO2

} of the sector

Current Construction FP7 Calls

4.4-5 Resource efficient and clean buildings – LA


The main development issues and targets are: new concepts, technologies, design tools and business models for "intelligent buildings", able to significantly reduce or even meet their own energy consumption; improvement of the building energy performance (through cladding and ventilation technologies, sensors and pervasive computing systems, utilisation of embedded renewable energy sources...) at building and at district levels.

4.4-6 Innovative added-value construction product-services – LA for SMEs

The main development issues and targets are: development of knowledge-based construction processes and products deployable by SMEs (in terms of investment costs and human resources), especially for the retrofit, refurbishment and maintenance of buildings; new manufacturing systems (e.g. robots and automation) and ICT infrastructures and tools to develop ubiquitous SMEs access to competitive knowledge; development of new "full" services with a high added value for clients


4.4-7 ERA-Net on Construction – ERA-net

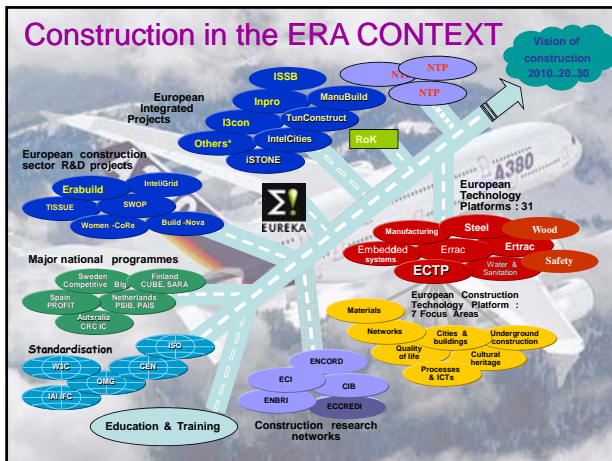
The Era-net on Construction aims at stepping up coordination of research programmes in the fields of construction and operation of buildings. A step towards this aim is identifying RTD priorities in view of implementing joint initiatives, including joint calls. A specific aspect which could be taken into account relates to the definition of reliable decision-support systems able to demonstrate an optimal balance between sustainability and operational costs of buildings.



NTPs roles/benefits

- > Disseminate the **Vision of the sector & connecting people** (Industry, R&D, universities, administration, clients,...)
- > Take part jointly in **EU initiatives**, Eureka, Eranet (+), JTI , Lead Market, etc...
- > Participate in the implementation **R&D roadmap**
- > The boundaries of NTPs are different than the ECTP, **they are independent with their own agenda**
- > **Stronger position** -> funding agencies, ministries, funding organisations, European Institutions, EIB,...
- > **Opportunity to increase the SME's impact** **transfer of technology & innovation**





**THANK YOU
for your attention**

<http://cordis.europa.eu.int/fp7/>

SEVENTH FRAMEWORK PROGRAMME