SPANISH CONSTRUCTION TECHNOLOGY PLATFORM

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November 20th 2007
The Spanish Construction Technology Platform (PTEC) started working in October 2004, only 3 months after the ECTP. Currently, we have 170 organizations working together in PTEC.
Spanish Construction Technology Platform
Toward 2030: Innovation and efficient change in the Construction Sector

November 20th 2007
Spanish Construction Technology Platform (PTEC)

Structural Organization

High Level Group
(CNC)

Regional Sub-commission

Professional associations Sub-commission

Associations Sub-commission

Support Group
(DRAGADOS)

Secretariat (SEOPAN)

Focus Areas

ECTP

General Assembly
Toward 2030: Innovation and efficient change in the Construction Sector

Focus Areas

- **CITIES AND BUILDINGS**
  - ACCIONA

- **UNDERGROUND CONSTRUCTION**
  - DRAGADOS

- **TRANSPORT NETWORKS**
  - SACYR AND SENER

- **CULTURAL HERITAGE**
  - GEOCISA AND LABEIN

- **SUSTAINABLE CONSTRUCTION**
  - FERROVIAL, OHL

- **MATERIALS**
  - Sika, Portland Valderrribas

- **HEALTH AND SAFETY**
  - FCC, Isolux-Corsan

- **INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**

November 20th 2007

Spanish Construction Technology Platform (PTEC)
Strategic Research Plans for Construction Sector

Vision 2030

- Joint the different stakeholders in the Construction Sector (Industries, Researches & Universities, Clients and Users, Financial Organizations, Public Authorities…) in order to:
  - Identify innovation challenges
  - Develop different strategies and plans
  - Introduce results in the organizations
Strategic Challenges

- **Improve competitiveness**: 30% minor than in other sectors
- **Social integration and sustainable communities**: construction of buildings and cities more inhabitable and friendly
- **Climatic change and sustainability**: reduction in energetic and resources consumption; reduction in residual production
- **Involve different agents to identify and address barriers to RTD and the take-up of innovations and technology**
OBJECTIVES

-Improve competitiveness: increasing the technology in the sector

-Reduce environmental impact

-Increase safety and security

-Improve the quality of life: taking into account the citizens requirements
Work done

- Development of the Vision 2030 and the strategic Research Agenda
- Two specific Research Priority Areas for Construction Sector have been included in the Spanish R&D Plan 2008-2011
- Construction, territory planning and cultural heritage
- Transport and infrastructures
Research projects in PTEC

- Currently, PTEC has supported around twenty-five projects for different Spanish calls of proposals.
- Projects are presented to the Support Group and if they are of high quality & interest, PTEC supports it.
- Then, the Coordinator of the Support Group delivers a letter to the Project Coordinator to be included in the proposal together with PTEC logo.
- During the evaluation by the different Public Administrations, a project supported by PTEC has slightly more possibilities to be approved.
The Multidimensional City

Coordinator: Dragados

Partners: 34 organizations

Budget: 36 millions euros

Duration: 4 years, 2005-2008

Make free spaces in the surface for citizens use, moving infrastructures, transport, some offices and commercial centres to the underground space.

In a comfort grade and quality with similar value to surface spaces
HABITAT 2030: Materials and components

Coordinator: Acciona
Partners: 18 organizations
Budget: 12 millions euros
Duration: 4 years, 2005-2008

Manage sustainable constructions improving building durability and safety.
Improving productivity and safety and security and reducing associated costs to the construction process.
ARFRISOL: Bioclimatic Architecture and solar cold

**Coordinator:** Ciemat

**Partners:** 12 organizations

**Budget:** 25 millions euros

**Duration:** 4 years, 2005-2008

Demonstrate the viability in the use of bioclimatic architecture and solar energy, to acclimatize buildings and produce electric energy.

Managing using only 10-20% of the conventional energy during the building exploitation.
CLEAM: Clean Construction, Efficient and Environmental Friendly

Coordinator: Ferrovial and OHL
Partners: 21 organizations
Budget: 25 millions euros
Duration: 4 years, 2007-2010

Manage lineal transport (roads and rails) sustainability along its life cycle:

- Reducing environmental impact (zero residual production)
- Minimizing the impact in sensitive environments (protected areas)
- Increasing emergencies security and improving the accessibility for all citizens
PATRAC: Accessible Cultural Heritage
R&D for a no barriers culture

Coordinator: Geocisa
Partners: 22 organizations
Budget: 14.5 millions euros
Duration: 3 years, 2007-2009

Investment in the development of strategies and methodologies to facilitate the access, contemplation and capture of cultural heritage in a no discriminatory way, compatibles with the monument exigencies.
SIC: Integral Security in Construction

Coordinator: Isolux-Corsan

Partners: 10 organizations

Budget: 7.5 millions euros

Duration: 4 years, 2007-2010

- Reducing risks and damages during construction
- Multimedia guides
- Systems for experts training and validation
Relations with Europe

-PTEC promotes the participation of Spanish organizations in European projects with the organization of different events to explain how to participate in projects

-7th Frame Program

-Eureka projects through EurekaBuild umbrella:

-Spanish representatives are:

- OHL (NUS, Industrial representative)
- CDTI (NUP, Public Administration representative)

-Last November 5-6th, PTEC has organized the "Nanomaterials and Nanotechnologies for Construction Applications" brokerage event in Valencia, with the collaboration of OHL, AIDICO and UPM.

-ERA-NET: Spanish Administration is participating in two ERA-NETs (FP7) on Construction and Operation of Buildings (ERACOBUILD) and on Cultural Heritage.
Next PTEC General Assembly
December 11th, Madrid

www.construccion2030.org

Thanks for your attention