

PREHEAT

**PREHEAT Workshop
CETIAT
Villeurbanne – 4 juillet 2006**

**PREHEAT
and the
European Construction Technology Platform**

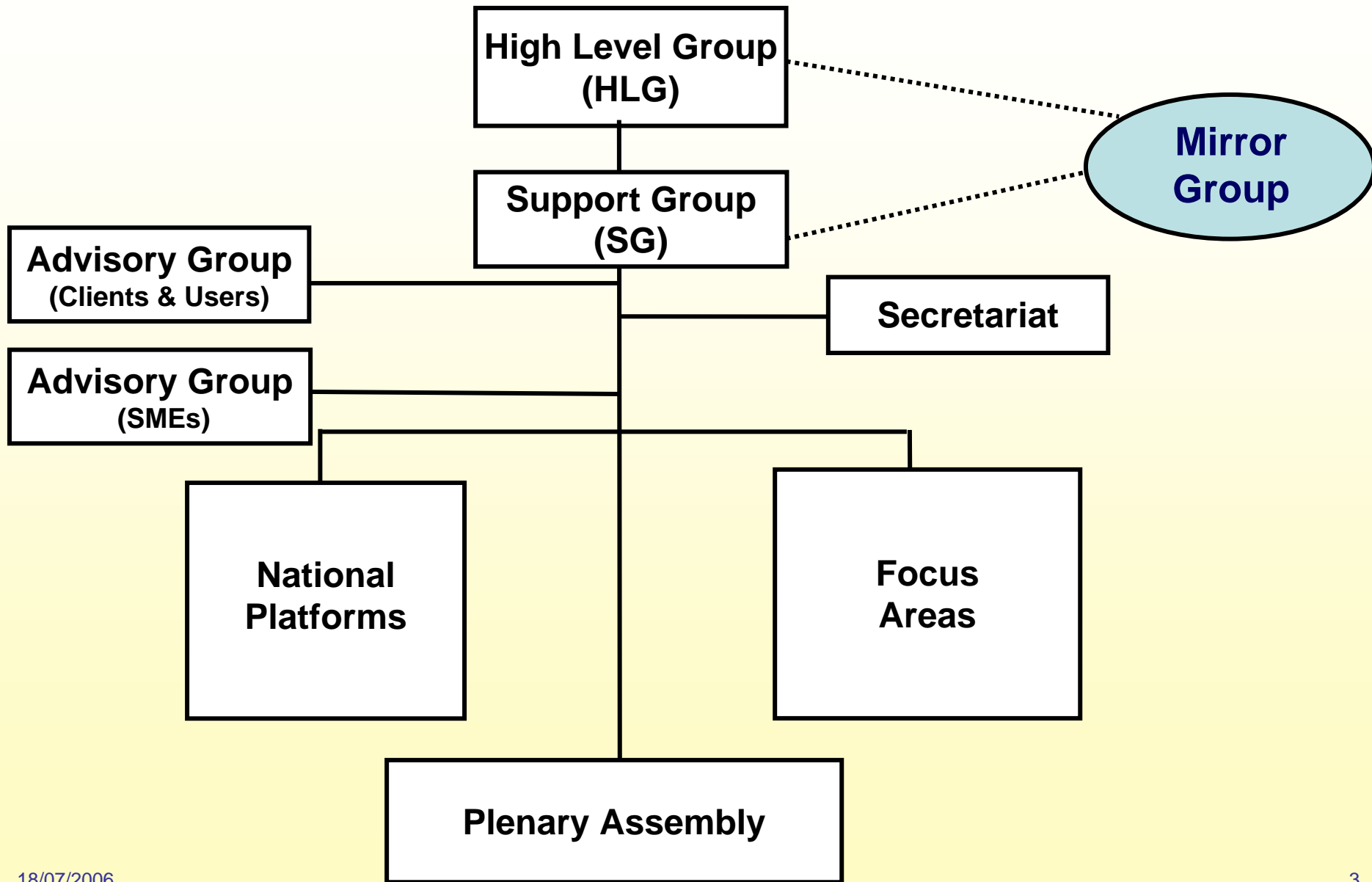
Luc Bourdeau
(CSTB - ECTP Secretary)
Daniel Quenard
(CSTB – PREHEAT project)

ECTP is an **industrial driven platform** with the contribution of all the stakeholders to mobilise the construction sector

A new way to achieve **Lisbon's goals** put forward by the European construction stakeholders and fully supported by the Commission



New strategies on **R&D&I** are being developed to improve the **competitiveness** of the sector and to satisfy the **societal needs**.



ECTP

Stage 1: getting together

- **ToR** : Terms of Reference
- **Vision 2030** ←

Stage 2: define SRA

- **SRA** : Strategic Research Agenda



Stage 3: Implementation Plan



2030

**EUROPEAN CONSTRUCTION
TECHNOLOGY PLATFORM
ECTP**

BUILDING FOR A FUTURE EUROPE

Terms of Reference

ToR
Dec. 2004

www.ectp.org



Vision 2030

Feb.2005

Challenging and Changing Europe's Built Environment

A vision for a sustainable and competitive construction sector by 2030

February 25th, 2005

European Construction Technology Platform (ECTP)
www.ectp.org

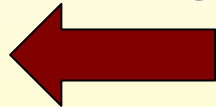
ECTP

Stage 1: getting together

- **ToR**
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Stage 2: define SRA

- **SRA**

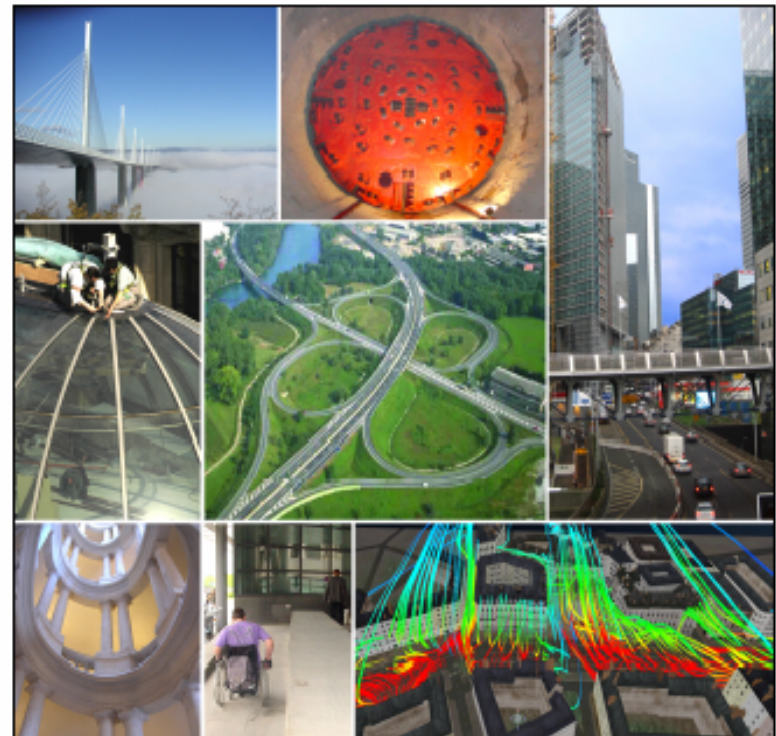


Stage 3: Implementation Plan

Strategic Research Agenda (SRA)

Research priorities

- Meeting client/users requirements
- Becoming sustainable
- Transformation the construction sector



Strategic Research Agenda for the European Construction Sector

Achieving a sustainable and competitive construction sector by 2030

Working Version 0.111, Nov 18th, 2005

European Construction Technology Platform (ECTP)
www.ectp.org

Meeting Client Requirements

1. Healthy, Safe and Accessible Built Environment for All
2. A New Image of Cities
3. Unlimited Underground Spaces
4. Mobility and Supply through Efficient Networks

Becoming Sustainable

1. Reduce Resource Consumption (energy, water, materials)
 - Cost-effective and Eco-efficient Built Environment
 - Efficient and Environmentally Friendly Building Materials
2. Reduce Environmental and Anthropogenic Impacts
 - Protecting Land and Water
 - Impact of Infrastructure on the Environment
3. Sustainable Management on European Assets
 - Transports and Utilities: a European Asset
 - A Living Culture for an Attractive Europe
4. Improve Safety and Security
 - Mastering Natural and Man-made Hazards
 - Safety and Security of Infrastructure Against Natural and Anthropogenic Hazards

Transformation of the Construction Sector

1. A New Knowledge-Based Construction Process
2. ICT and Automation
3. High Added-value Construction Materials
4. Attractive Workplaces

Table 2 List of Strategic Research Priorities

ECTP

Stage 1: getting together

- **ToR**
- **Vision 2030**

Stage 2: define SRA

- **SRA**



Stage 3: Implementation Plan



Implementation Plan 2006

- **Selecting research priorities** ←
- **Research actions**
- **Dissemination**
- **Networking**
- **Other:**
 - **Training and education**
 - **Standardization**
 - **.....**



Groups of research priorities

1. Technologies for healthy, safe, accessible and stimulating indoor environment for all
2. Underground innovative construction technologies
3. **New technologies, concepts and high tech materials for efficient and clean buildings**
4. Reduce environmental and man-made impacts of build environment and cities
5. Sustainable management of transports and utilities networks
6. A living cultural heritage for an attractive Europe
7. Improve safety and security within the construction sector
8. New integrated processes for the construction sector
9. High added value construction materials

Becoming Sustainable

Reduce Ressources Consumption :energy, water, materials

Cost Effective and Eco-Efficient Build Environment

.... the development of new and improved materials with high **heat storage capacity** and release on demand ...

Implementation Plan 2006

- **Selecting research priorities**
- **Research actions** ←
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 - **.....**



Research initiatives (JTIs)

- **BEE- Building Energy Efficiency (Acciona)**
- **Jules Verne- Underground Innovative Construction Technologies (Bouygues)**



NTPs & Eureka

- ECTP through most of NTPs is promoting an Eureka umbrella in construction related projects

EUREKABUILD

- June 7: Presentation of Eureka build at Eureka NPC meeting in Prague
- Sept. 26: Meeting with NTPs to promote projects

Eurekabuild

Eureka umbrella on construction

- Belgium
- Croatia
- Czech Rep.
- Denmark
- Finland
- France
- Greece
- Lithuania
- Netherlands
- Norway
- Poland
- Portugal
- Slovenia
- Spain
- Sweden
- UK



2006 - 2009

Eurekabuild Action Plan

WP1 Promotion and Dissemination
Leaders: Poland and Croatia

WP2 RDI project portfolio preparation
Leaders: Netherlands and Norway

WP3 Management
Leaders:

Dragados, Spain (chairman of the umbrella)
CSTB, France, (Secretariat of the umbrella)

Implementation Plan 2006

- **Selecting research priorities**
- **Research actions**
- **Dissemination** ←
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Dissemination

www.ectp.org

- **Nanocem: April 25, 2006 (Copenhagen)**
- **NTP conference: May 4-5 (Vienna)**
- **Eco-server seminar, May 18-19, Varsaw**
- **Underground const. workshop: May 22-2006 (Madrid)**
- **Cultural Heritage: May 31-June 1-3 (Prague) ←**
- **TRA conference: June 12-15, 2006 (Gothenburg)**
- **Eccredi: June 16, 2006 (Brussels)**
- **eBusiness and eWork in AEC, Valencia, Sep 13-15**
- **Cultural Heritage brokerage: Sep.14-17 (Croatia)**
- **ECTP conference: Nov. 21-22, 2006 (Paris)**

ECTP conference (Nov.21-22, 2006)

- To enlarge the number of stakeholders contributing to the change of the construction sector through new strategies on R&D&I.
- To promote research proposals for FP7, Eureka build,
- To identify synergies with other ETPs

ECTP conference (Nov.21-22, 2006)

Past, present and future on research in construction

- Research projects and networks
- ECTP & NTPs
- SMEs involvement in R&D&I
- Clients and users views

Synergy with other European Technology Platforms

Parallel sessions

ECTP Focus Areas and brokerage event for research proposals in FP7 and Eurekabuild

Implementation Plan 2006

- **Selecting research priorities**
- **Research actions**
- **Dissemination**
- **Networking** ←
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 - **.....**



Focus Areas

<p>CITIES & BUILDINGS</p> <p><i>ACCIONA and Saint Gobain</i></p>	<p>UNDREGROUND CONSTRUCTIONS</p> <p><i>BOUYGUES and ZÜBLIN</i></p>	<p>NETWORKS</p> <p><i>Autostrade and DWW</i></p>	<p>CULTURAL HERITAGE</p> <p><i>Univ.Ljubljana and VINCI Constr.</i></p>
<p>MATERIALS</p> <p><i>Heidelberg, Universita Politecnica delle Marche</i></p>			
<p>QUALITY OF LIFE</p> <p><i>Soletance Bachy, Hochtief</i></p>			
<p>FA PROCESSES & ICT</p> <p><i>ARUP, VTT</i></p>			

NTPs (~ 25 countries)

- Austria
 - Belgium
 - Croatia
 - Czech Rep.
 - Denmark
 - Finland
 - France
 - Germany
 - Greece
 - Lithuania
 - Netherlands
 - Norway
 - Poland
 - Slovenia
 - Spain
 - Sweden
 - UK
- Starting:**
- Cyprus
 - Estonia
 - Ireland
 - Italy
 - Portugal
 - Slovakia
 - Switzerland
 - Turkey
 -

NTPs (workshops)

- **Paris, January 31, 2006**
 - **Multinational research initiatives:**
 - Eureka
 - Eranet,

- **Paris, May 11, 2006**
 - Eureka build
 - Involvement of SMEs

- **Brussels, Sep.26, 2006**
 - Project proposals
(Eurekabuild, Erabuild, ...)



Advisory Group (Clients and users)

- **Leaders:**
 - **SBi (Denmark)**
 - **Eurocities**

- **Meetings:**
 - **January 25th, 2006**
 - **March 30th, 2006**
 - **June 22&23, 2006**



Advisory Group (SMEs)

Leaders:

BBRI (Belgium)

Labein (Spain)

Meetings:

- April 4: WG meeting
- May 11: ECTP & NTPs workshop
- June 15: 1st AG meeting
- June 16: Eccredi conference



ECTP

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www.ectp.org