Achievements and New Goals

Luc Bourdeau, CSTB
ECTP Secretary, acting Support Group Chairman
ECTP Mission

• **Industrial driven platform** to mobilise the construction sector, fully supported by EC.

• **New strategies on R&D&I** to improve competitiveness and satisfy the **societal needs**.
STAKEHOLDERS:

- Industries
- Institutes & Universities
- Clients and Users
- Financial Organizations
- Public Authorities
- ...
**Current Structure**

**EurekaBuild**

- **HLG (Bouygues)**
- **Secretariat (CSTB)**
- **Focus Areas**: Underground construction, cities & buildings, networks, cultural heritage, materials, quality of life, processes & ICT.

- **Plenary Assembly**
  - Nov. 19-20, 2007
  - ~1200 members

- **Mirror Group**

- **AG (clients & users)**
- **AG (SMEs)**

- **National TPs (24+7 countries)**

- **WG Research Infrastructures**
- **WG Standardization**

- **3rd ECTP Conference**

Amsterdam, November 19-20, 2007
# 7 Focus Areas

<table>
<thead>
<tr>
<th>CITIES &amp; BUILDINGS</th>
<th>UNDERGROUND CONSTRUCTIONS</th>
<th>NETWORKS</th>
<th>CULTURAL HERITAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCIONA and Sant Gobain</td>
<td>BOUYGUES and ZÜBLIN</td>
<td>Autostrade and DWW</td>
<td>Univ.Ljubljana and VINCI Constr.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATERIALS</th>
<th>QUALITY OF LIFE</th>
<th>FA PROCESSES &amp; ICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heidelberg, Universita Politechnica delle Marche</td>
<td>Soletance Bachy, Hochtief</td>
<td>ARUP, VTT</td>
</tr>
</tbody>
</table>
## National Construction Technology Platforms

1. Poland  11. UK  21. Romania
2. Finland  12. Croatia  22. Portugal
5. Slovenia  15. Austria  25. Latvia
10. Germany  20. Italy  30. Estonia
14. Belgium  23. Ireland
15. Austria  24. Turkey
16. Lithuania  25. Latvia
18. Switzerland  27. Hungary
19. Cyprus  28. Luxembourg
20. Italy  29. Ukraine
31. Iceland

3rd ECTP Conference  Amsterdam, November 19-20, 2007
Achieved Goals

Vision 2030

Identification

Prioritising + Roadmap

Agenda 2030

Research areas

- Meeting Client Requirements
- Becoming Sustainable
- Transformation Of The Construction Sector
- Indoor Environment
  New Image of Cities
  Using Underground Space
  Mobility and Supply

Challenging and Changing Europe’s Built Environment
A vision for a sustainable and competitive construction sector by 2030

February 2005
European Construction Technology Platform (ECTP)
www.ectp.org

February 25th, 2005

Version v1

Strategic Research Agenda Implementation Action Plan

3rd ECTP Conference

3rd ECTP Conference

Amsterdam, November 19-20, 2007

March 2005

February 2005

June 2007

November 2005

+ FAs SRAs
New Goals for ECTP

1. **Promote and Update** its Strategic Research Agenda and its Implementation Action Plan

2. **Promote and Follow** Research Projects in line with its Implementation Action Plan

3. **Launch and Support** a Joint Technology Initiative on Energy Efficient Buildings

4. **Promote** the dissemination and exploitation of R&D results within the Construction Sector, in order to improve innovation developments

→ A new structure to meet a new challenge
1. ECTP is promoting its SRA Implementation Action Plan

Roadmap for the next 6 years on how ECTP wishes that these priorities be fulfilled through:

- European programmes (FP7, ...)
- Multinational programmes (Eureka, Eranet, Eranet+, ...)
- National programmes
- Research infrastructures
- JTI
- ...
### SRA Implementation Action Plan Priorities

| A | Technologies for Healthy, Safe, Accessible and Stimulating **Indoor Environments** for All |
| B | Innovative Use of **Underground Space** |
| C | New Technologies, Concepts and High-tech Materials for **Efficient and Clean Buildings** |
| D | Reduce Environmental and Man-made **Impacts of Built Environment and Cities** |
| E | Sustainable **Management** of Transports and Utilities **Networks** |
| F | A Living **Cultural Heritage** for an Attractive Europe |
| G | Improve **Safety and Security** within the Construction Sector |
| H | New Integrated **Processes** for the Construction Sector |
| I | High Added Value Construction **Materials** |
## Needed Budget for R&D 2007-2013

<table>
<thead>
<tr>
<th>Priority</th>
<th>FP7 Projects Costs (M€)</th>
<th>All Other Programs Costs (M€)</th>
<th>Total Costs (M€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Indoor Environment for all</td>
<td>100</td>
<td>330</td>
</tr>
<tr>
<td>B</td>
<td>Underground construction</td>
<td>120</td>
<td>600</td>
</tr>
<tr>
<td>C</td>
<td>Efficient and clean buildings</td>
<td>245</td>
<td>535</td>
</tr>
<tr>
<td>D</td>
<td>Impacts of built environment and cities</td>
<td>110</td>
<td>545</td>
</tr>
<tr>
<td>E</td>
<td>Transports and utilities networks</td>
<td>175</td>
<td>875</td>
</tr>
<tr>
<td>F</td>
<td>Cultural heritage</td>
<td>225</td>
<td>300</td>
</tr>
<tr>
<td>G</td>
<td>Safety and security</td>
<td>105</td>
<td>525</td>
</tr>
<tr>
<td>H</td>
<td>Integrated Processes</td>
<td>210</td>
<td>1 890</td>
</tr>
<tr>
<td>I</td>
<td>High added value materials</td>
<td>260</td>
<td>1 240</td>
</tr>
<tr>
<td></td>
<td>All Priorities together →</td>
<td>1 550</td>
<td>6 840</td>
</tr>
</tbody>
</table>
2. ECTP is promoting R&D projects

• at **FP7** level
  • 1st calls in 2007
  • 2nd calls planned in mid-November

• at **trans-national** levels, through the support to
  • An Era-net on Construction and Operation of Buildings: **Eracobuild**
  • An Era-net on Cultural Heritage
  • A Eureka Umbrella: **EurekaBuild**

• at **national** levels, through the support to NTPs
Eracobuild (2008-2010)
Cooperation between national programmes
on Construction and Operation of BUILDings

- 6 joint calls in Erabuild (2004-2007)
  (ICT, Industrialization, RFID, BIM-IFC, Sustainable Renovation, Performance Indicators)

- Significant and increasing budgets made available for transnational research projects
  (> 5 M€ national money in Erabuild)

- Growing importance of other joint activities

NEW FP7 Eracobuild towards an ERANET+
To mobilise the construction sector in each country in order to prepare Eureka projects, close to ECTP & NTPs research priorities

Contacts with Public National Administrations to get support for Eureka projects

EUREKA UMBRELLA PROJECT:
Technologies for a Sustainable and Competitive Construction Sector
EurekaBuild Partners

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

2006 - 2009
EurekaBuild Workshops

- January 22-23, 2007 (Rotterdam, The Netherlands): Towards a Reliable and Available Public Infrastructure
- May 7-8, 2007 (Oslo, Norway): ICT and New Integrated Processes. Building Smart
- May 21, 2007 (Athens, Greece): Towards a sustainable Built Environment and a Living Cultural Heritage
  May 22, 2007: Steering Committee with NUP/NUSs (Athens)
- June 4-5, 2007 (Telc, Czech Republic): Advanced Building Materials and Technologies
- Nov. 5-6, 2007 (Valencia, Spain): Nanomaterials and Nanotechnologies for Construction Applications
- Nov. 19-20, 2007 (Amsterdam): ECTP conference & brokerage events
  Nov. 20-21, 2007: Steering Committee with NUP/NUSs (Amsterdam)
- May 22-25, 2008 (Dubrovnik, Croatia): Networks for Sustainable Environment and High Quality of Life
- Other planned workshops in 2008: ICT (Poland), Energy Efficient Construction (Lithuania), Cultural Heritage (Slovenia)…
EurekaBuild Ideas

More than 85 project ideas available on the website
3 new projects so far endorsed by Eureka
3. ECTP is promoting the E2B JTI. Why?

• A big challenge for Europe
  All countries must drastically and rapidly reduce their CO2 emissions
  and Europe should also increase its energy independence

• What about construction?
  – Are we all aware that construction has its share of responsibility?
  – Buildings use 40% of total EU energy consumption
  – Construction industry generates 1/3 of GHG in Europe
  – Even new buildings are far from being all energy efficient
  – Replacement rate is very small (1 to 2% per year)

We have to provide NOW solutions for NEW and EXISTING buildings
• **Our Big Challenge**

  - A huge challenge therefore lies in the hands of the Construction Sector
    - It is of strategic and vital importance for Europe
    - It should be seen at transnational level
    - Construction market organisation is not ideal
    - Existing Community instruments are inadequate
    - Business as usual is not an option

  - But it raises high hopes and could:
    - Significantly contribute to CO₂ reduction
    - Bring new knowledge, raise awareness and boost research
    - Develop new markets and transform the construction sector

**ECTP High Level Group decided in June 2007 to fully support the preparation of a Joint Technology Initiative (JTI) on Energy Efficient Buildings (E2B)**
"The overall objective of E2B JTI is to deliver and implement building and district concepts that have the technical, economic and societal potential to cut drastically the energy consumption in existing and new buildings within 2030, thereby contributing to improve the energy independence of EU."

Leaders: Acciona, Bouygues
A new structure to fulfill these new goals efficiently: PULL: “Promote, Update, Lobby, Launch”

• Directives from the HLG (June 20)

• SG set up a WG on reorganisation (Sept 19)
  • WG met twice in October and prepared a proposal

• Proposal presented at SG (Dec 4) before final agreement by HLG
The new proposed structure

- is more simple and straightforward (with clear governance rules),
- is based on the principles of a large representation of the stakeholders of the sector, the leadership of industry and the need for moderate fees
- keeps the main elements of the existing structure
  - a High Level Group, which will be now assisted by an Executive Committee,
  - Focus Areas,
  - Advisory Groups,
  - and a Support Group, which will take the name of Operational Group.
- has a clear decision system, empowering the General Assembly of the Members
- introduces a Secretary General, leader of the activities of the platform, with the responsibility to implement the decisions of the governing bodies
- gives a full responsibility to the Operational Group to implement concrete actions within the Focus Areas in liaison with the National Technology Platforms, under the steering role of the Secretary General
- will improve communication between Focus Areas and the Executive Committee for lobbying activities coordinated by the General Secretariat
- recognizes that the JTI should build its own structure, but keeping strong links between the two bodies
ECTP MEMBERS
(Organisations, Associations, NTPs)

**4 Levels of Fees**
- Large-size companies
- Large-size ROR
- Small-size companies and ROR
- Associations and Universities

3rd ECTP Conference
Amsterdam, November 19-20, 2007
All concerned stakeholders are invited to join forces and to support ECTP in order to meet its/our new challenge.