Energy Efficiency in Buildings
Brokerage of Project Ideas
LITEXPO, Vilnius, April 24, 2008

Strategies and Implementation Plan of Research in European Construction Sector”

Luc Bourdeau, CSTB
ECTP Secretary, acting SG Chairman
An Industrial-driven platform

- New RDI strategies
  - to improve competitiveness and
  - to satisfy societal needs

STAKEHOLDERS:
- Industries
- Researches & Universities
- Clients and Users
- Financial Organizations
- Public Authorities, …

FP7, Era-net, EUREKA, Cost, CIP, JTIs, National projects,…

- All European countries together
- Group of countries
- Each country alone
A structure with 2 pillars

- Mirror Group
- HLG
- SG
- Secretariat
- AGs
- WGs

26 National Technology Platforms
7 Focus Areas

From Summer 2004 until January 2008

2004-2008

2009-2014

Graph shows data from 2004 to 2014.
NTPs Network 2004-2007

25 NTPs!
## NTPs – more initiatives

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact Person and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>Contact person: Prof. Luis Braganca (University of Minho) - <strong>LAUNCHED IN FEBRUARY 2008</strong></td>
</tr>
<tr>
<td>Egypt</td>
<td>Contact person: Mr. Rahman</td>
</tr>
<tr>
<td>Estonia</td>
<td>Contact person: Tõnu Laigu</td>
</tr>
<tr>
<td>Ireland</td>
<td>Contact person: Prof. Owen Lewis (University College Dublin), Adrian Joyce (Architects' Council of Europe), Prof. Deirdre Hunt</td>
</tr>
<tr>
<td>Latvia</td>
<td>Contact person: Prof. Ainars Paeglitis (Riga Technical University)</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>Contact person: Fabrice Absil (Centre de Recherche Public Henri Tudor)</td>
</tr>
</tbody>
</table>
A cooperative approach

National Technology Platforms

7 Focus Areas
2 AGs + 2 WGs

Achieved Goals

Vision 2030

Identification

Prioritising + Roadmap

Agenda 2030

Meeting Client Requirements

Becoming Sustainable

Transformation Of The Construction Sector

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

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

New Construction Process
ICT & Automation
High Added Value Materials
Attractive Workplaces

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

February 2005

November 2005

June 2007

Strategic Research Agenda Implementation Action Plan

Version v1
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

+ **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
### SRA Implementation Action Plan Priorities

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Technologies for Healthy, Safe, Accessible and Stimulating <strong>Indoor Environments</strong> for All</td>
</tr>
<tr>
<td>B</td>
<td>Innovative Use of <strong>Underground Space</strong></td>
</tr>
<tr>
<td>C</td>
<td>New Technologies, Concepts and High-tech Materials for <strong>Efficient</strong> and <strong>Clean Buildings</strong></td>
</tr>
<tr>
<td>D</td>
<td>Reduce Environmental and Man-made <strong>Impacts of Built Environment and Cities</strong></td>
</tr>
<tr>
<td>E</td>
<td>Sustainable <strong>Management</strong> of Transports and Utilities <strong>Networks</strong></td>
</tr>
<tr>
<td>F</td>
<td>A Living <strong>Cultural Heritage</strong> for an Attractive Europe</td>
</tr>
<tr>
<td>G</td>
<td>Improve <strong>Safety and Security</strong> within the Construction Sector</td>
</tr>
<tr>
<td>H</td>
<td>New Integrated <strong>Processes</strong> for the Construction Sector</td>
</tr>
<tr>
<td>I</td>
<td>High Added Value Construction <strong>Materials</strong></td>
</tr>
</tbody>
</table>

#### Implementation in European, National and Trans-national Programs

- FP7, Era-net, CIP, JTIs... EUREKA, Cost... National programmes or projects

#### Eureka Projects

- EurekaBuild

#### ERACOBUILD

- ERACOBUILD

#### NMP, IST...

#### E2B
## Priority

<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. Promote R&D Projects

• at **FP7** level
  • **1st** calls in Dec 2006
  • **2nd** calls in Nov 2007
  • Next calls in 2008...

• at **CIP**... levels

• 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
First FP7 Call Results

Results Evaluation NMP 2007(1)

- Topic: “Resource efficient and clean buildings”
  (Call Identifier FP7-NMP-2007-4.0-5, Large collaborative research projects)
  - Stage 1: 19 eligible proposals received
  - Stage 2: 7 eligible proposals submitted

- 4 proposals selected for funding
- EC funding requested 33 M€ - Budget 295 M€
- Success rate: 37% stage 1
  57% stage 2

Overall 22%
First FP7 Call Results

Results Evaluation NMP 2007(2)

- **Topic:** "Innovative added-value construction product-services"
  
  (Call Identifier FP7-NMP-2007-4.0-6, SME collaborative research projects)
  
  - **Stage 1:** 27 eligible proposals received
  - **Stage 2:** 10 eligible proposals submitted

- 4 proposals selected for funding
- EC funding requested 11.5 M€ - Budget 75 M€
- **Success rate**
  - 37% stage 1
  - 40% stage 2
  - **Overall 15%**
First FP7 Call Results

Results Evaluation NMP 2008

- Topic: “Industrialization of construction processes”
  (Call Identifier FP7-NMP-2008-3.4-2, Industrialization through new integrated construction processes)

- Stage 1: 10 eligible proposals received

- 5 proposals selected to GO
- EC funding requested 34 M€
- Success rate ~50% at stage 1
The 2008 call for proposals is your chance to apply for IEE (Intelligent Energy Europe) funding. Some 45 Mio€ will be made available, supporting up to 75% of eligible project costs.

Capacity building; building and spreading of know-how, skills and methods; exchanges of experience; development of market and intelligence; policy input; awareness raising and information provision; and education and training.


Submit your application before the deadline (26 June 2008, 17:00 Brussels time)
Coordination of National Programmes

From 10 countries (18 partners) in ERABUILD to 21 countries (35 partners) in ERACOBUILD (17 EU + 4 Associated)

NEW FP7 NMP ERACOBUILD
34 Partners and 20 Member States
Might play a crucial role in the E2B JTI
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

34 Partners and 20 Member States in ERACOBUILD
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
18 NTPs joined out of 25 NTPs

- Austria
- Belgium
- Croatia
- Czech Rep.
- Denmark
- Finland
- France
- Greece
- Lithuania
- Netherlands
- Norway

+ Iceland interested

- Poland
- Portugal
- Slovenia
- Spain
- Sweden
- Switzerland
- UK

2006 - 2009
**EurekaBuild Workshops**

- January 22-23, 2007 (Rotterdam, 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
- 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, Netherlands): ECTP conference & brokerage event
- January 22, 2008 (Poznan, Poland): How to commercialize a good idea? ICT solutions as a source of development in the construction sector
- May 22-25, 2008 (Dubrovnik, Croatia): Networks for Sustainable Environment and High Quality of Life
- April 24, 2008 (Vilnius, Lithuania): Energy Efficiency in Buildings
- May 23-25, 2008 (Dubrovnik, Croatia): Networks for sustainable environment and high quality of life
- Envisaged also in 2008: UK, Slovenia...
More than 85 project ideas available on the website

<table>
<thead>
<tr>
<th>EurekaBuild Id</th>
<th>Title of the project idea</th>
<th>ECTP Priority</th>
<th>Status</th>
<th>Kind of partner expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT01</td>
<td>PHLICS Probabilistic Health and Lifetime Identification of Concrete Structures</td>
<td>G</td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>BE01</td>
<td>TelinspeX - automated chain for acquisition and treatment for the inspection of structures</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CH01</td>
<td>Transparent Methods for Monitoring the Environmental Footprint of Road and Rail Vehicles</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ01</td>
<td>Advanced Methods for Reliability and Risk Assessment of Structures</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ02b</td>
<td>Mortarless Masonry</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ03</td>
<td>Advanced Materials and Technologies in Underground Structures</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ04</td>
<td>ESBE Energy Sustainable Building Envelope</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ05</td>
<td>Technological Improvement of Bituminous Binders</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
<tr>
<td>CZ06</td>
<td>Micromechanical Modeling of Hardening Cement-based Materials</td>
<td></td>
<td></td>
<td>CIO</td>
</tr>
</tbody>
</table>
EUREKA PROJECTS IN FIGURES

- number of running projects: 714
- total budget for these projects: 1.4 billion euro
- number of organisations involved: 2619

Project quick search

- number or acronym

Enter a participant name

- portfolio advanced search
- propose a project idea
- download project application form

4 projects found:

EI 3796 EUREKABUILD Umbrella
Announced 29-Jun-2005
Technology: Industrial Manufacturing, Material And Transport
Market: Other Electronics Related
Start date: 01-Jun-2006
Duration: 36 months
Total cost: 20 M€
End date: 01-Jun-2009
Summary

EI 3872 EUREKABUILD GEOMETEXS Sub-Umbrella
Announced 14-Jun-2007
Technology: Electronics, IT And Telecoms
Market: Energy
Start date: 01-Jan-2008
Duration: 66 months
Total cost: 3.65 M€
End date: 01-Jan-2010
Summary

EI 4065 EUREKABUILD STABICOM Sub-Umbrella
Endorsed 01-Jun-2007
Technology: Industrial Manufacturing, Material And Transportation
Start date: 01-Jul-2007
Duration: 42 months
Total cost: 3.78 M€
End date: 01-Jul-2010
Summary
The Project Seeks To Develop A Solution, Conceived For The Characteristics Of The Spanish Market, For The System Called Slab Track, In Comparison To The Traditional Solution Of Ballast Track.

EI 4078 EUREKABUILD STABICOM Sub-Umbrella
Announced 14-Jun-2007
Technology: Stabilization/Solidification Method So That Those Responsible For Harbour & Other Areas With Contaminated Sediments & Other Impacted Materials Can Analyse & Apply The S/S Method As Alternative To The Current Methods Of Treatment

Start date: 01-Jul-2007
Duration: 36 months
Total cost: 1.8 M€
End date: 01-Jun-2010
Summary
To Develop The Stabilisation/Solidification Method So That Those Responsible For Harbours & Other Areas With Contaminated Sediments & Other Impacted Materials Can Analyse & Apply The S/S Method As Alternative To The Current Methods Of Treatment.
ECTP HLG 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, implement and optimise building and district concepts that have the technical, economic and societal potential to drastically cut the energy consumption and reduce CO2 emissions due to existing and new buildings at the overall scale of the European Union. The E2B JTI will speed up research on key technologies and develop a competitive industry in the fields of energy efficient products and services, with the main purpose of reaching the goals set forth for 2020 and 2050 to address climate change issues and contribute to improve EU energy independence thereby transforming these challenges into a business opportunity."
3. Promote a JTI on Energy Efficient Buildings

Energy Efficient Building Joint Technology Initiative
4 Levels of Fees
- Large-size companies: 6000 €
- Large-size ROR: 3000 €
- Small-size companies & ROR: 1500 €
- Associations and Universities: 750 €
The provisional new ECTP Membership
A new approach for the construction sector

The European Construction Technology Platform (ECTP) will raise the sector to a higher world-beating level of performance and competitiveness. This will be achieved by analysing the major challenges that the sector faces in terms of society, sustainability and technological development. Research and innovation strategies will be developed to meet these challenges engaging with and mobilising the wide range of leading skills, expertise and talent available to us within our industry over the coming decades, in order to meet the needs of the Society.

The platform is open to all who wish to participate and indeed a broad active involvement is encouraged.

Latest news:

- (5 March 2008) CALL FOR MEMBERSHIP: REGISTER NOW! (download the "Letter of Intent") During its 6th meeting in Paris on January 22, 2008, the High Level Group has agreed on a new organisational structure of ECTP (download the document...)
- (28 February 2008) The first Plenary Meeting of the JTI on Energy Efficient Buildings took place in Brussels. --> more...
- (12 December 2007) EurekaBuild events - "How to commercialize a good idea? ICT solutions as a source of development in the construction sector" - 22 January 2008, Poznan, Poland. --> more...
- (22 November 2007) The ECTP Newsletter Nº1 has been published. --> download...
- (19 November 2007) The presentations made during the 3rd ECTP Conference held in Amsterdam are available on line. --> more...
This website gives the reader selective, centralized and regularly updated information on R&D programmes of the European Commission, together with the published calls for proposals, which may be interest for the Construction sector. More

### Recently published calls for proposals

<table>
<thead>
<tr>
<th>Programme</th>
<th>Title</th>
<th>Date Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERREG IV B ENO</td>
<td>2nd IVB NWB Call for Proposals</td>
<td>07/04/2008</td>
</tr>
<tr>
<td>FP7-PEOPLE-ITN-2008</td>
<td>Call for proposals Marie Curie Initial Training Networks</td>
<td>04/04/2008</td>
</tr>
<tr>
<td>ACTION ENT/IMA/1.1.6.2.</td>
<td>Call of proposals Testing of reactions to fire in the area of construction products</td>
<td>01/04/2008</td>
</tr>
<tr>
<td>ECONTENTPLUS2008</td>
<td>Call for proposals for indirect actions under the multiannual Community Programme to make digital content in Europe more accessible, usable and exploitable (The eContentplus Programme)</td>
<td>20/03/2008</td>
</tr>
<tr>
<td>FP7-PEOPLE-IEF-2008</td>
<td>Call for proposals Marie Curie Intra-European Fellowships for career development</td>
<td>20/03/2008</td>
</tr>
</tbody>
</table>

### Imminent deadlines

- **24/04/2008**  

- **24/04/2008**  
  FP7-NMP-2008-EU-India-2 Call for proposals FP7 Cooperation Work Programme: Theme 4 — Nanosciences, Nanotechnologies, Materials and New Production Technologies — Identifier: FP7-NMP-2008-EU-India-2

- **30/04/2008**  
  Appel à projets pour la constitution de RT — Identifier: ALCOTRA FRANCE-ITALIE

- **01/05/2008**  
  Call of proposals Testing of reactions to fire in the area of construction products — Identifier: ACTION ENT/IMA/1.1.6.2.

- **02/05/2008**  
  Call for proposals for the MED area for transnational cooperation — Identifier: INTERREG IV B MED
Dear Mr Luc Bourdeau

Please find below some latest news linked to European RTD and Construction and selected by ECTP (Issue 03 - 28 March 2008).

**SECOND ENERGY GENERAL CALL (FP7-ENERGY-2008-TREN-1) SHOULD BE PUBLISHED ON 29 APRIL 2008**

**Source: ECTP Secretariat**

The second general call (FP7-ENERGY-2008-TREN-1) should be published on 29 April 2008 and will address different technologies at research areas and topic level, in most cases asking for a predominant demonstration component. The main objective is shortening the time to market for promising technologies and systems, and the proposed solutions should go significantly beyond existing state of the art. The call will use the available budget for 2008 (around 147M€). A substantial part will be dedicated to the topic 8.4: Innovative Integration of Renewable Energy Supply and Energy Efficiency in Large Communities: Concerto.

**IEEE CALL OF PROPOSALS PUBLISHED ON 12 MARCH 2008**

**Source: DG TREN**

The call for proposals 2008 is now published, opening this year’s application period for IEE funding. A series of National Info Days is currently being organised up and down the EU.

[http://ec.europa.eu/energy/intelligent/events/infodays_en.htm](http://ec.europa.eu/energy/intelligent/events/infodays_en.htm)
Thank You

secretariat.ectp@cstb.fr

www.ectp.org