TOWARDS A SUSTAINABLE BUILT ENVIRONMENT
& A LIVING CULTURAL HERITAGE

ATHENS
21
MAY 2007

NATIONAL HELLINIC RESEARCH FOUNDATION, AMPH. "LEONIDAS ZERVAS"
46, VAS. KONSTANTINOU AVE.
Coordinating Committee of the Hellenic Construction Technology Platform

A. Moropoulou, National Technical University of Athens Prof., President
K. Syrmakzes, National Technical University of Athens Prof., Vice President
Ch. Aktiteles, Deputy Mayor of Athens, President of the Hellenic Association of Rural & Surveying Engineers
D. Blikas, Aristotle University of Thessaloniki Prof.
V. Chandakas, Responsible of the Permanent Committee of Culture & Cultural Heritage Issues of Technical Chamber of Greece
E. Choniotakis, Research & Quality Director of TITAN Cement Company S.A.
M. Founti, National Technical University of Athens As. Prof.
M. Grossou Valta, Director of Mineral processing Dept. of the Greek Institute of Geology & Mineral Exploration
E. Kanitaki, President of the Hellenic Department of Concrete
A. Liolios, Democritus University of Thrace Prof., Vice President of Egnatia Odos S.A.
I. Marinos, Quality & Production Procedure Director of ACET
I. Papaioannou, ex. President of the Pan-hellenic Association of Engineers Contractors of Public Works
I. Paspalarlis, National Technical University of Athens Prof.
G. Syranas, President of the Association of the Technical Companies of the Highest Classes
P. Zannis, General Secretary of the Hellenic Association of Consulting Firms

Organisation

Department of Scientific and Development Work of TEE - Culture & Cultural Heritage Office Tel.: +30-210-3291306
E-mail: pothimos@central.tee.gr

Office of Research & Technology
E-mail: akonsta@central.ittw.gr
8:00 9:00  Registration
9:00 10:30  OPENING SESSION
  Opening Speech
  A. Moropoulou, President of the Coordinating Committee of
  the Hellenic Construction Technology Platform, NTUA Prof.
  Opening
  D. Skoulas, Minister of Development
  Addresses
  J. Alavanos, President of Technical Chamber of Greece
  K. Moutzouris, Rector of National Technical University
  of Athens, NTUA Prof.
  Ch. Euthyvoulos, President of the Cyprus Scientific
  & Technical Chamber
  Keynote Speakers
  J. Rodriguez, Chairman of European Construction Technology
  Platform Support Group & Chairman of EurekaBuild
  R. Zanic, Leader of the Focus Area “Cultural Heritage” of the
  European Construction Technology Platform
10:30 13:00  Presentation of EurekaBuild proposal ideas
13:00 14:00  Lunch
14:00 16:00  Brokerage Meetings
  Exchange of ideas among the interested partners (companies
  industrial partners, academic, research and technological
  partners) and expression of interest for participation in proposals
  or development of common EurekaBuild proposals
16:00 17:00  CONCLUDING SESSION
  Round Table Discussion
  Conclusions
17:00  End of the Meeting

22 May 2007
EurekaBuild Steering Committee Meeting
National Hellenic Research Foundation - Conference Hall
Opening Speech

A. Moropoulou

President of the Coordinating Committee of the Hellenic Construction Technology Platform, NTUA Prof.
The Construction Sector in Greece

Leading role in the main infrastructure projects

- “Olympic Games” projects
- Rio – Antirio Bridge
- Highway projects (Egnatia Odos, Attiki Odos)
- Underground projects (Attiko Metro etc)
- Harbor Infrastructure
- Construction
- Protection of traditional and historic buildings - Cultural Heritage - Museums

Supports the development of basic sectors of construction materials (cement, steel, aluminum, bricks and ceramics)
The contribution of Greek Engineers in the Construction Sector

The construction sector involves

(2003)
-310,000 direct employees

-32,500 Engineers plus 15,000 Study Engineers
The contribution of Research & Technology on development is decisive in the Construction Sector

The promotion of Research & Technology should:

- Contribute to the creation of added value and to the modernization of development such that it corresponds to the needs of society

- Enhance applied research which is the connection between basic research and development
The contribution of Greek Engineers in Research and Technological Development

According to a Technical Chamber of Greece Study (2003), from a total number of 85,000 members, more than 8,500 engineers (~10%) are employed in Research

at Academic Institutions
at Research Centers
at Research & Development Companies
At the public sector
at companies of the private sector (industry, services)
The contribution of Greek Engineers in Research and Technological Development

However, the Greek Study Engineers are not certified in our country although they are certified abroad. The bureaucracy and development mechanisms in research - innovation as well as the institutional acceptance of the role of the study engineers and especially the young ones, are key issues in the development of the Greek economy and the augmentation of its competitiveness on European and International level.
The Technical Chamber of Greece as coordinator of HCTP

Assumes its responsibilities in the National strive to improve the competitiveness of the construction “industry”

Realizes its significant role for:

- Innovation
- Outgoing character
- Unification of European Market with support to the leading role of the Greek construction “industry”
Η Ελληνική Πλατφόρμα Έρευνας & Τεχνολογίας για την Κατασκευή (ΕΠΕΤΚ)

Αρχική

Στόχοι - Προσδοκήματα Αποτελέσματα ΕΠΕΤΚ

Ειδικότητες - Συναυλίες

Προγράμματα ECTP - HCTP

Χρήσεις Αισθημάτων

Εννοιαία στοιχεία της Επιτροπής

Λογαριασμοί της ΕΠΕΤΚ

To Tεχνικό Επιμελητήριο της Ελλάδας αναλαμβάνει τις ευθύνες του στην Ελληνική Πλατφόρμα Έρευνας & Τεχνολογίας για την Κατασκευή.

Ευρωπαϊκή Επικοινωνία Η ΕΠΕΤΚ συνεργάζεται με την Ευρωπαϊκή Πλατφόρμα Έρευνας και Τεχνολογίας για την Κατασκευή.
HCTP Roadmap

1st Meeting for the launching of the Hellenic Construction Technology Platform [5 February 2005 during Helleco 2005] and acceptance of the Organizing Committee as Coordinating Committee

Acceptance of the decision and enlargement of the coordinating committee with an act by the Administration Committee of TCG

2nd Meeting “Hellenic Construction Technology Platform with an emphasis on sustainable construction and cultural heritage protection [19 October 2005] Recognition by the Greek Government - Ministry of Development - of the HCTP

National Strategy: Research Priorities

3rd National Meeting of HCTP “The construction sector companies take the lead” [22-23 June 2006] with the aim to actively participate in the national strategy for the promotion of research priorities in the construction sector in the framework of the exhibition “Days of Research & Technology”
HCTP STRUCTURE

National Chamber of Greece
(Act of the Administration Committee TCG)

Organizational Committee
National Forum

Platform Coordinating
Committee

Support Team
Working Groups per Thematic Areas

Consortium “Industry”
- Study Sector
- Construction Sector
- Materials and Technology Production Industry

End Users / Social Carriers
- Design / Management / Operations / Development Carriers
  - Cultural Heritage Cities
  - Civil Infrastructure Works, Highways, Underground works, Transportation

Research & Technology Carriers
- Academic Institutions, R & D Centers, Depts of Industrial / Construction sector

Secretariat
P. C. Offices & W.G. TCG
180 Participating Organizations

1. Construction Industry (38%)
   • Study Sector
   • Construction Sector
   • Materials & Technology Production Industry

2. Research & Technology Organizations (22%)
   • Academic Institutions
   • Research Centers
   • Research Department of Industrial / Construction Sector

3. End Users - Social Carriers (40%)
   • Planning / Management / Operations / Development Carriers
   • Cultural Heritage Cities
   • Infrastructure Works
Creation of HCTP website

• Targets – Desired Results of HCTP [National European Vision, National Strategy, Activation of the contribution – support of the outgoing character and competitiveness of the construction sector]

• Meetings [1st, 2nd 3rd]

• ECTO – HCTP Programs [JTI– Energy Efficient Buildings. JTI– Large Tunnels]


• Membership form [http://www.hctp.tee.gr/eggrafi.html]

• Contact info [amoropul@central.tee.gr]

• Launching of HCTP [5th February 2005]

• National Strategy

• HCTP Structure

• Priorities and handicapped persons access

• Euro Impact Survey [www.mbs.ac.uk/EuroImpactSurvey]
HCTP is a network, its basis is the TCG and functions through:

- **National meetings** (at least 2 per year)
- **Organisation Committee (OC) meetings** (at least 1 per 2 months)
- **OC Secretariat meetings** (at least 1 per 15 days)
- **HCTP representation in the ECTP meetings** (President or Vice-President)
- **HCTP representation in the ECTP-WGs meetings**
## ECTP / HCTP Focus Areas

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<tr>
<th>Cities &amp; Buildings</th>
<th>Underground Works</th>
<th>Networks</th>
<th>Cultural Heritage</th>
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<tr>
<td><strong>Quality of Life</strong></td>
<td><strong>Education and Training</strong></td>
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<td><strong>Materials</strong></td>
<td><strong>Directives, Standards, Technical Specifications</strong></td>
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<td><strong>Social - Economic Dimension</strong></td>
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**SUSTAINABLE CONSTRUCTION**
HCTP coordinates with ECTP on the following basic areas

- Reformation of the construction “industry” into a knowledge based one so that it serves:
  - The public interest and the needs of the end users and society
  - The sustainable development of the environment through the implementation of sustainable construction

AND ADDS THE PROTECTION OF CULTURAL HERITAGE AND ITS INTRODUCTION TO CONTEMPORARY LIFE
RESEARCH PRIORITIES FOR SUSTAINABLE BUILT ENVIRONMENT

- Reduction of energy, water and raw material resources
- Minimization of detrimental influence of materials, construction and production technology of built environment over the entire environment
- Minimization of environment impact to the built environment constructions, leading to cost reduction and lifetime increase
- Sustainable management of buildings and civil infrastructures in their entire life cycle
RESEARCH PRIORITIES FOR A LIVING CULTURAL HERITAGE

- Utilization of know-how that is created from studying historic buildings (FACH WG2. Materials, WG3. Interventions and Techniques)

- Advanced diagnosis for the identification of decay mechanisms and pathology, environmental impact assessment - structural analysis. Use of non-destructive techniques and verification with instrumental analyses (FACH WG1. Assessment, Monitoring and Diagnosis)

- Planning, application, assessment and monitoring over time of compatible materials and restoration / protection interventions, based on historic materials’ properties and the behavior of historic structures, aiming to improve the behavior of the structure under environmental and seismic loads (FACH WG1. Assessment, Monitoring and Diagnosis)
RESEARCH PRIORITIES FOR A LIVING CULTURAL HERITAGE

✓ Strategic planning of restoration / protection interventions through integrated management of geographical information (in respect to materials, structures, architectural design) and use of scientific decision making tools in order to ensure sustainable protection of cultural heritage (FACH WG5. Management, Exploitation and Maintenance)

✓ Integrated environmental management and energy planning for the protection of cultural heritage (FACH WG4. Energy and Environment, WG5. Management, Exploitation and maintenance)

✓ Conservation, utilization, management - city planning - historic cities (FACH WG5. Management, Exploitation and maintenance, WG6. City and Territorial Aspects)
Announcement of National Projects

Implementation of Research Priorities

EUROCare Programs

EUREKABUILD

European Programs in FP7
Initiatives for the participation of Greece to EUREKABUILD -
The role of HCTP & TCG

The HCTP & TCG promptly disclaimed their dissatisfaction for the exemption of Greece from EUREKABUILD

On the occasion of the ECTP & FACH proposal to hold EUREKABUILD '07 on May 21st in Athens, we demanded (February 2007) from the Ministry of Development:

- National Funding for EUREKA approximately €10 m
- Adoption of the research priorities for sustainable construction and living cultural heritage

The Ministry of Development responded immediately
(request to the Ministry of Economy)
Objectives of the EUREKABUILD Meeting

Briefing
Actions
Exchange of Ideas

Industrial partners
Construction sector
Research & Technology
Carriers
End users

Ideas - suggestions
Indication of interest
Participation to proposals
Eurekabuild consortiums
How a EUREKA-EUREKABUILD is created

**STEP 1**
YOU HAVE AN IDEA FOR A RESEARCH PROGRAM

- 10 Proposals for Sustainable Construction
- 17 Proposals for Cultural Heritage Protection

**STEP 2**
Develop the idea-program and the consortium of participating members (national European level)

10:30-13:00 Presentation of Ideas - Programs
14:00-16:00 Brokerage meetings

**Objective:** Consortia development
All carriers prepare and sign Consortium Agreement

Submission of program application form, signed by all participants, to EUREKA, through ESP the program contractor, the program

If all EUREKA criteria are met the program is supported

The program obtains the EUREKA title and funded

Ensure funding for each participating carriers

National Program Self-liquidation

STEP 3

STEP 4

STEP 5

STEP 6

STEP 7

The program starts!!

National funding schemes

Eureka program application form
Eureka-Eurekabuild Programs

Acceptable programs for EUREKABUILD are those that:

• **At least 2 European countries participate**, and as long as there is one "**industrial participation**" in each country, which can be either a large or medium-sized company

• **A large company** is one that employs at least 250 employees or has an annual turnover of more than € 50 m
Funding Scheme of Ideas–Proposals for Greece

Funding at National Level

~200,000 Euro

50% Public Funding

50% European Funding

Total Program Cost

Large Company

~400,000 Euro

(50% own funds)

SME

~445,000 Euro

(55% Own Funds)
Own Funds:

- Personnel Expenditure
- Instrument, equipment Cost
- Additional general costs
  - ✔ Travel Expenses
  - ✔ Promotion of Program Achievements
  - ✔ Miscellaneous costs
The European Meeting on 21 May 2007 EUREKABUILD

Has identity

Indicated interest:

✓ 105 Carriers’ representatives
✓ 38 Representatives from European Carriers’
✓ 67 Representatives from Greek Carriers’
The European Meeting on 21 May 2007
EUREKABUILD

Has critical participation mass

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<thead>
<tr>
<th>Research &amp; Technology Carriers</th>
<th>56</th>
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<tr>
<td>Universities</td>
<td>33</td>
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<tr>
<td>Research Institutes</td>
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<td>Technological Institutes</td>
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<tr>
<td>Technology Transfer</td>
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<tr>
<th>&quot;Construction Industry&quot;</th>
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<tbody>
<tr>
<td>Construction sector</td>
<td>11</td>
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<tr>
<td>Study Sector</td>
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<tr>
<td>Building materials industry</td>
<td>7</td>
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<th>End Users - Social Carriers</th>
<th>20</th>
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<tr>
<td>Ministries - Public sector</td>
<td>7</td>
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<tr>
<td>Individual companies</td>
<td>3</td>
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<tr>
<td>Associations / Chambers etc.</td>
<td>10</td>
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</table>
EUREKABUILD Meeting on 21 May 2007

EurekaBuild Participants

- Research & Technology Carriers: 55%
- Construction Industry: 28%
- End users - Social carriers: 19%
EUREKABUILD Meeting on 21 May 2007

Research & Technology Carriers

- Universities: 59%
- Research Institutes: 18%
- Technological Institutes: 14%
- Technology Transfer: 9%
Construction Industry

Materials & technology production sector 24%

Study sector 38%

Construction sector 38%
End users - Social carriers

- Ministries - Public authorities: 35%
- Associations / Federations / Chambers etc.: 50%
- Individuals: 15%
Suggestions of HCTP to Ministry of Development / General Secretariat of Research & Technology

- It is obvious that such a participation will lead to consortiums creation that will submit proposals for funding.
- The request to Min. Develop./ GSRT for funding policies of research priorities is:
  - Since the role of EUREKA is supplemental to the FP7 it should be funded with priority and with higher weight factors those proposals that are not sufficiently covered by FP7 and are crucial to our country such as:
    - Sustainable construction
    - Cultural Heritage protection
Towards Min. Development and GSRT the HCTP promotes the request of general institutional support, as indeed has been announced by:

- **Minister of Development Mr. D. Sioufas**
- **Gen. Secr. Research & Technology, Prof. J. Tsoukalas**

On October 2005 in the Technical Chamber of Greece the HCTP has been recognized as a National Platform:

- **Presentation on GSRT website** (as in the case of clothing, food and biofuels platforms)
- **Continuous information for the representative of HCTP in European meetings of ECT and NCTPs**
- **Representation of HCTP by the National Representative (Brussels) in the Mirror Group**, in coordination with the platform committee
- **Support of its function by the “competitiveness’ Program through funding of a technical support program to TCG (WG and multidisciplinary actions)**
The HCTP creates synergies planning meetings in cooperation with TCG

- «Greece – Cyprus Days”, October, Athens, Mirroring of Greek Cypriot platform

- «Greece as the centre of Research, Technology and Innovation in South east Europe - Engineers in the foreground», June, Athens, in cooperation with Ministry of Development - GSRT

- «Sustainable Constructions and Protection of Cultural Heritage», 2008 in the framework of HELECO

- «Standards and quality control as means of promoting and implementing of sustainable construction», before the end of 2007, TCG, Athens
22 May, EurekaBuild Steering Committee Meeting, Athens

Welcome to Greece
The meeting will be open to the public