European Construction Technology Platform

Focus Area "Materials"

ECTP Support Group Meeting Maastricht, October 14, 2004

ECTP - Focus Area "Materials"

Rationale for "Materials" Focus Area

Sustainable construction requires sustainable and attractive building materials

- Energy and raw material efficiency in production and use
- Easy application in construction process
- New functionalities (self-cleaning, heat storing, sensors, ...)
- Improved durability

=> Knowledge-based, multi-functional materials available for all construction purposes – manufactured and used with minimum environmental impact

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Links to other FAs: some examples

Cities & Buildings

- Self-cleaning surfaces / surface aesthetics
- Self-healing / insulation
- Productivity

<u>Underground construction</u>

- Workers health & safety
- Productivity
- Durability

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Links to other FAs (cont.)

Networks

- Durability
- Thermal conductivity (self de-icing roads)
- Productivity

Quality of Life

- Minimizing raw material and energy use
- Extending durability
- Controlling emissions, leaching

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Scope

- Focus Area "Materials" should comprise as many building materials sectors as possible
- So far response from ceramics, composite materials and cement/concrete (= initial working groups)
- Close cooperation with other Focus Areas:
 - to consolidate challenges and research needs arising in vertical FAs
 - supplemented by own challenges/initiatives
 - avoid redundancies

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Objectives

- Inclusion of broad spectrum of building materials
- Develop document on challenges & Vision 2030 in 2004
- Refinement of vision and development of Strategic Research Agenda in 2005

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Action Plan

- Nov 11, 2004 first meeting in Heidelberg
 - scope, membership
 - initiate working groups
 - set up working plan
 - link to other FAs / contact persons
- Dec 02, 2004 Lausanne
 - reports on status other FAs
 - consolidate challenges
 - elaborate Vision 2030
- 2005
 - refine Vision
 - develop Strategic Research Agenda