I3Con Conference
Loughborough University
May 15-16, 2008

Opening session

Jesús Rodríguez
R&D Director
DRAGADOS

DRAGADOS (ACS Group)

• DRAGADOS:
  • Construction company active on civil works and buildings
  • Annual turnover ~ 7,000 M€

• ACS GROUP:
  • Group of companies dealing with construction, concessions, services, industrial plants, energy, ...
  • Annual turnover ~ 22,000 M€
Research priorities in DRAGADOS

- Structural Behaviour and Durability
- New Materials and Processes
- New Designs and Software Development
- Construction Sustainability
- New Emerging Technologies
- Transport Innovations
- ...

R&D&I DIRECTORATE
R&D DIRECTORATE

- Representation at technical bodies as:
  - Technology Platforms
  - ENCORD
  - R&D Committees (SEOPAN, CICCP, COTEC, ..)

- Link with Universities and Research Centres to cooperate on R&D initiatives

- Coordinating strategic actions with DRAGADOS companies on research
Implementation of Research Results Workshop

• 20th - 21st of October, 2008
• Place: Institution of Civil Engineers, Madrid
• Organizers:
  – DRAGADOS
  – ENCORD
  – CICCP
  – SEOPAN
  – TECNIBERIA

Steps in building process

• Planning
• Design
• Construction (new or existing buildings)
• Operation and maintenance
• Demolition / Deconstruction

..... life cycle approach
Users demand

• **Comfort:**
  – Indoor quality
  – Energy efficiency
  – Services .....  

• **Delivery** (new or rehabilitated buildings):
  – In due time
  – Good quality (finishing, ...)
  – Targeted cost

• **Flexible** distribution adaptable to the needs along the time, ...

---

Some needs

• New **materials**
• Multifunctional **components**
• **Integration** of the different components in the building (structure, facades and partitions, services, ...)
• New **services**
• Massive application of **ICTs** during the construction and use of the buildings
  • ...

Some R&D projects on Buildings in DRAGADOS

- **European projects:**
  - Manubuild
  - I3Con

- **Spanish projects:**
  - Inviso
  - Arfrisol
  - Domótica
ARFRISOL
Bioclimatic architecture and solar cooling

Coordinator: CIEMAT
Partners: 12 organizations
Budget: 25 million Euros
Duration: 2005-2008

European research initiatives on buildings

• Energy efficiency in buildings (1st call, NMP, )
• ICTs in buildings (ICT calls)
• Concerto, ... (DG TREN)
• JTI E2B promoted by ECTP
• ....
JTI E2B
Energy Efficiency Buildings

- More efficient building envelope
- Better equipment and systems
- Larger integration of renewable energies
- Change collective and individual behaviour

Leaders: Acciona, Bouygues

Speakers for the opening session

- **Miguel Segarra**
  - Head of Department at R&D Directorate (DRAGADOS)
  - Coordinator of I3Con

- **Brice Lepape**
  - EU officer in several ICT projects (European Commission, DG ISM):
    - Representative of EC at ECTP