PERFORMANCE OF INNOVATIVE MECHANICAL CONNECTIONS IN PRECAST BUILDINGS STRUCTURES UNDER SEISMIC CONDITIONS

Fact Sheet

Project Information

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<tr>
<th>SAFECAST</th>
<th>Funded under FP7-SME</th>
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<tr>
<td>Grant agreement ID: 218417</td>
<td>Overall budget € 3 962 776,22</td>
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<td>Project website [🔗]</td>
<td>EU contribution € 3 040 906</td>
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Status

Closed project

Start date 1 March 2009
End date 29 February 2012

Coordinated by ASSOBETON - ASSOCIAZIONE NAZIONALE INDUSTRIE MANUFATTI CEMENTIZI Italy

Objective

The seismic behaviour of connections in precast construction systems has been largely recognized as a crucial matter to be addressed both by the industry sector and by the related research community. In spite of this situation, the complexity of the problem and the variety of inherent issues to be harmonizedly dealt with in proposing design procedures for connections and precast structures as a whole, have made it difficult so far to conceive self-sufficient solutions and approaches of general validity. Scope of SAFECAST is to give effective answers to this need of self-sufficient, harmonized solution of the problems of correct seismic design of joints and connections in precast structures. The innovative aspect of the project is the unified performance based perspective in which the problem of the characterization of the seismic behaviour of connections will be addressed.
seismic behaviour of connections will be dealt with. Such complex problem, in fact, needs to be dealt with in a unified performance based framework, since when dimensioning and designing the system for an optimum performance under earthquake loading, all the other basic performance requirements, i.e. durability, deformability limits, energy dissipation..., are also to be taken into account and complied with. The proposed consortium represents a unique combination of countries joined by two peculiar characteristics: for all of them seismic loads play a fundamental role in the construction sector. Secondly, all partners are “concrete counties”, nations for which concrete is the main construction material. For these reasons, the immediate expected consequence of the proposed project is to improve competitiveness of precasting, as a sector, to promote a general increase in the quality and safety of constructions offered to the market and end-users in general, to enhance the contents of precast building solutions in terms of quality guarantee, performance optimization, reliability, safety in the event of an earthquake.

Field of science
/social sciences/economics and business/business and management/commerce

Programme(s)

Topic(s)

Call for proposal
FP7-SME-2007-2

Funding Scheme
BSG-SME-AG - Research for SME associations/groupings

Coordinator

ASSOBETON - ASSOCIAZIONE NAZIONALE INDUSTRIE MANUFATTI CEMENTIZI

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<td>Italy</td>
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</table>

Website  
Contact the organisation
Participants (16)

ASOCIACION NACIONAL DE PREFABRICADOS Y DERIVADOS DEL CEMENTO - ANDECE
Spain
EU contribution
€ 451 534
Address
Paseo De La Castellana 226
28046 Madrid
Activity type
Other
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Administrative Contact
Antonella Colombo (Dr.)

ASSOCIACAO NACIONAL DOS INDUSTRIAISDE PREFABRICACAO EM BETAO
Portugal
EU contribution
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2 Dt
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Administrative Contact
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SYNDESMOS ELLINIKON VIOMICCHANION PROKATASKEVIS SKIRODEMATOS
Greece
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Other
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### TURKIYE PREFABRIK BIRLIGI DERNEGI - TURKISH PRECAST CONCRETE ASSOCIATION TPCA

**Turkey**

**EU contribution**

€ 451 534

**Address**

Farabi Sokak - Cankaya 39/10
06690 Ankara

**Activity type**

Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Website**

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**Administrative Contact**

Spyros Tsoukantas (Prof.)

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### JRC - JOINT RESEARCH CENTRE - EUROPEAN COMMISSION

**Belgium**

**EU contribution**

€ 10 622

**Address**

Rue De La Loi 200
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**Activity type**

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**Administrative Contact**

Bulent Tokman (Mr.)

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**Italy**

**EU contribution**

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20133 Milano

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Giandomenico Toniolo (Prof.)
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José António Costa (Dr.)

UNIVERZA V LJUBLJANI

Slovenia
EU contribution
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<td>Via Della Scrofa 117 00186 Roma</td>
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<td>DLC SRL</td>
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<td>PRELOSAR SL - PREFABRICADOS DE LOSAS RIOJANAS SL</td>
<td>Spain</td>
<td>€ 67,861</td>
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</tbody>
</table>
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26008 Logrono (La Rioja)

José Antonio Alba Irurzun  
(Mr.)

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