European Commission

SEVENTH FRAMEWORK PROGRAMME

Advanced Infrastructure for Knowledge Based Services for Buildings Restoring

Results in Brief

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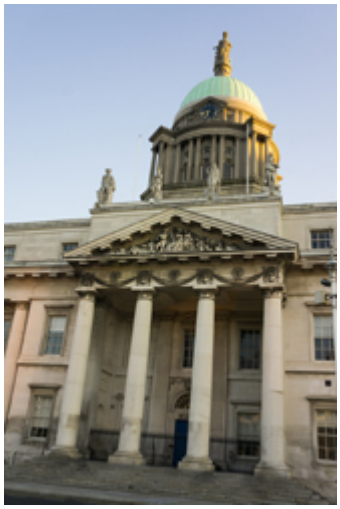
New techniques for restoring old buildings

Cultural heritage (CH) sites are an important part of European identity. Scientists developed a collaborative platform uniting the research and construction communities for cutting-edge restoration and maintenance.

INDUSTRIAL TECHNOLOGIES



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Information and communication technology (ICT) tools are indispensable for streamlining construction projects and maintaining a competitive position. While these tools are an important component of the design repertoire of large firms, small and medium-sized enterprises (SMEs) often do not have access to them. Many SMEs cannot afford expensive commercial software, and they also may not have in-house personnel who can develop custom-made solutions.

The position of SMEs working on the restoration, retrofitting and maintenance of older buildings is even more isolated. Specific requirements and protective legislation apply to historic buildings, many of which may be CH sites. Construction that complies presupposes a wealth of specialised knowledge to

which SMEs may not have easy access.

An effective partnership between research and technology development (RTD) institutions and SMEs would fill this critical gap. This was the impetus behind the EU-funded project 'Advanced infrastructure for knowledge based services for buildings restoring' (H-KNOW). The H-KNOW project developed a software solution for collaborative knowledge management (KM) and e-learning services to support the competitiveness of construction-related SMEs in particular in relation to old buildings and CH sites.

The service-oriented architecture (SOA)-based H-KNOW platform consists of a number of core services. These are network set-up (NSS), collaboration (Management of Social Interactions (MSI)), e-learning (Technology Enhanced Learning (TEL)), KM and ontology. H-KNOW is thus a private collaborative space empowering members to share knowledge gained from specific construction projects and to train engineers accordingly.

SMEs make up most of the European construction industry and inventoried European CH objects are quite numerous. H-KNOW addressed the urgent need for access to up-to-date information regarding techniques and legislation affecting reconstruction, retrofitting and maintenance of historic buildings. Results will contribute to the preservation of European culture and identity while enhancing the competitiveness of European SMEs in the construction and restoration sector.

Project Information

H-KNOW

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Closed project

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Coordinated by
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