

Research Support Fund

1. European cultural heritage

1.1 Protection of historical immovables, focused on industrial and folk architecture

A/CZ0046/2/0013 ASSESSMENT OF HISTORICAL IMMOVABLES

1 April 2009 – 31 December 2010

End Recipient: Czech Technical University in Prague (CTU), Klokner Institute

Partner: UMB, Institute for Mathematics and Technology, Aas

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Information on the sub-project

Grant support

- The Research Support Fund (RSF) - specific support (block grant) financed by the Financial mechanisms of European Economic Area (EEA) and Norway (FMs EEA/Norway) and the Czech state budget
www.eea-researchfund.cz

→ the aim is to reduce social and economic disparities within EEA

- Priority of the grant project 0046: 1. European cultural heritage; 1.1 protection of historical immovables, focused on industrial and folk architecture
- Sub-projects support cooperation of research institutions from the Czech Republic and donor states (Norway, Iceland, Lichtenstein)



Coking plant Karolina, Moravská Ostrava

Main goals, target group

- Main goals:
 - * development of the general methodology for the complex assessment of heritage structures (particularly industrial buildings and bridges)
 - * operational tools and background information for decisions concerning the protection, conservation, renewal and extended use of historical immovables
- Target group: researchers, designers, practicing engineers, cultural heritage management, other specialists involved in preservation of cultural heritage



Coal separating plant, Záhoryany



County brewery, Kaplice

Methodology

- The innovative methods based on probabilistic approaches and optimisation techniques applicable to heritage structures made of different materials (concrete, steel and masonry + timber – stave churches)
- Quantitative assessment:
 - users' safety
 - protection of a cultural and heritage value
 - consequence analysis
 - actual conditions including unfavourable environmental effects
- relevant input data including information on material properties and environmental influences
- visual inspections and testing, rarely monitoring
- fuzzy and vague information

- Each activity - scientific paper in a journal indexed at the Web of Science or Scopus or in selected Czech journals (at least accepted for publication) – 4 papers
- 6 contributions to “prestigious” international conferences
- Seminar (CZ), lectures (NOR) and handbook
- background materials for Annex I to ISO 13822 on the assessment of heritage structures
- 5 simple software tools
- project web sites

Target group: researchers, designers, practicing engineers, cultural heritage management, other specialists



Ice factory, Prague



Transfer area, harbour, Prague



Steel mill, Kladno



Train station, Pilsen



Coal separating plant, Záhoryany



Brewery, Kaplice

Assessment of historical immovables



Brick factory, Pilsen



Coking plant Karolina, Moravská Ostrava

Thank you for your attention.