Assessment and rehabilitation of Central European highway structures

Fact Sheet

Project Information

ARCHES
Grant agreement ID: 31272

Funded under
FP6-SUSTDEV

Overall budget
€ 2 942 413

Project website

EU contribution
€ 1 799 930

Start date
1 September 2006

End date
31 August 2009

Coordinated by
INSTYTUT BADAWCZY DRÓG I MOSTÓW, ROAD AND BRIDGE RESEARCH INSTITUTE
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Objective

The increasing volume of European transport urgently requires an effective road and rail system in Central and Eastern countries. To bring this transport infrastructure up to modern European standards will require an immense investment - estimated by the European Commission to be about 100 billion euros, and a long term vision. New motorways will be required with many new bridges. Numerous existing bridges will need to be assessed, and a large portion of them improved or replaced. The overall goal of the proposed project is to develop ways to raise the standard of the highway structures of NMS and CEEC to the level necessary for their full economic integration into the EU and for the future development of the Union. The works will focus on the development of technologies and procedures for optimised servation of highway structures, taking into account issues particular to the NMS. This will be achieved by a global conceptual approach which can be summarised as Avoid, Prevent and Harden. Rehabilitation and replacement will be as far as possible avoided by developing
better safety assessment methods. Corrosion of reinforcement in crete structures will be prevented with new cepts of localised cathodic protection, and the application of new, cheaper, low alloy steel reinforcement. Advanced materials with very low permeability and high ductility will be used to replace deteriorated crete and waterproofing membranes, harden structures in critical zones and provide long-term durability. A strong emphasis will be put on pilot applications to demonstrate on real structures, in several countries of the sortium, the applicability of the cepts and techniques set forth. The ARCHES project is part of a cluster of three complementary STREPs which will be coordinated by the CERTAIN coordination action. The purpose of this is to guarantee that Engineers in the field will be informed, trained and will implement the results immediately on completion of the research.

Programme(s)

Topic(s)

Call for proposal

FP6-2005-TRANSPORT-4

Funding Scheme

STREP - Specific Targeted Research Project

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