

# TECHNICAL-ECONOMICAL DOCUMENTATION REGARDING THE REHABILITATION MEASURES OF THE EMBANKMENT "PRAG 09 — INTERNATIONAL AIRPORT SIBIU"

# Goal of the project

The purpose of the technical-economical evaluation was to design the necessary construction works for the embankment rehabilitation of "Prag 09 — International Airport Sibiu", including estimation and detailing of the necessary costs for execution of the construction works and the technological stages of execution.

## Short description of the project

The extension of the Airport runway, within the modernization and expansion works of the International Airport Sibiu, required achieving an embankment up to 28 m height in the western direction. On august 2010, at the western end of the Airport runway, a collapse of the embankment has occurred, manifested through the fall of the soil mass on a depth of approximately 10 m in the runway axis and approximately 3–4 m on the edges of the embankment. The dimension of the collapsed area is approximately 250 m in length and 100 m wide.

The collapse of the tall embankment from the western part of the International Sibiu Airport was a very complex phenomenon, where numerous factors concurred, including the foundation ground, embankment profile, fill material used at the execution of the embankment, faults in the collection and drainage of the surface water, implemented drainage system.

## Project implemented by

TGiven the fact, that this technical-economical evaluation is part from a judicial expertise, the project will be implemented at the end of the trial settlement agreement in which the International Airport Sibiu, designer, consultant and constructer are part of.

## Implementation period

2014-2015



## Main activities

Multidisciplinary activity domain, comprising chapters of soil mechanics, foundation engineering, geodesy, roads and engineering structures.

#### Results

By applying the solutions given by the technical-economical evaluation, the resistance and the stability of the embankment will be fulfilled, thus ensuring the integrity of the runway and normal landing and departure conditions of airplanes at the International Airport Sibiu.

## Financed through/by

International Airport Sibiu

## Research Centre

Research Centre of Infrastructures for Constructions and Transportation -ICT-

## Research team

Professor Marin Marin, PhD.
Senior Lecturer Octavian Roman, PhD.
Senior Lecturer Monica Mirea, PhD
Senior Lecturer Alexandra Ciopec, PhD
Assistant Professor Luiza Roman, PhD.

## **Contact information**

Assistant Professor Paul MARC, PhD
Department of Overland Communication Ways, Foundations and
Cadastral Survey

Address: Ioan Curea Street, No. 1, RO300224 Timisoara

Phone: (+40)256 403 972 E-mail: paul.marc@upt.ro

Web: http://www.ct.upt.ro/cctfc/index.htm