RITE GEOSYSTEMS

ENCARDIO RITE METASENSING FOR MEGA STRUCTURES

Project dossier

PROJECT DOSSIER

Joseph Blanc Bridge Project, Belarus

PROJECT OVERVIEW

Joseph Blanc Bridge is an existing old bridge in Le Bouchet Mont-Charvin, France, dating from 1937. The bridge required repair works following slow landslides that modified the load-bearing conditions of the span on the right bank of the bridge and detached the deck from its support.

In August 2021, the Department of Haute-Savoie undertook repair works. The repair works consisted of replacing the weak span with a 9.6 m long temporary metal deck, in a scheduled time frame of 13 weeks. The objective was to restore the structural stability of the bridge within short period of time such that it was open for traffic soon.

Project	Joseph Blanc Bridge Rehabilitation Project
Location	Le Bouchet Mont-Charvin, France
Duration	2021 - 2023

SCOPE OF WORKS

Encardio-Rite scope of works included:

- Supply of instrumentation through our local distributer in the region
- Technical support for the sensors installation, datalogger commissioning and configuration for automatic monitoring at desired frequency
- Setting up an online web-based data management system (WDMS) with instant alerts via SMS/emails.

INSTRUMENTS USED

- Tilt meter

  Model EAN-92M-B digital tilt meters were used to monitor tilt of the structure.

- Crack meter

  Model EDJ-40V vibrating wire type surface mounting uniaxial crack meter was used to monitor the change in width of the existing cracks on the bridge.

- Datalogger

  The digital tilt meters and the vw crack meter with suitable interface were connected to model ESDL-30 digital datalogger. The datalogger has plug-and-play feature.

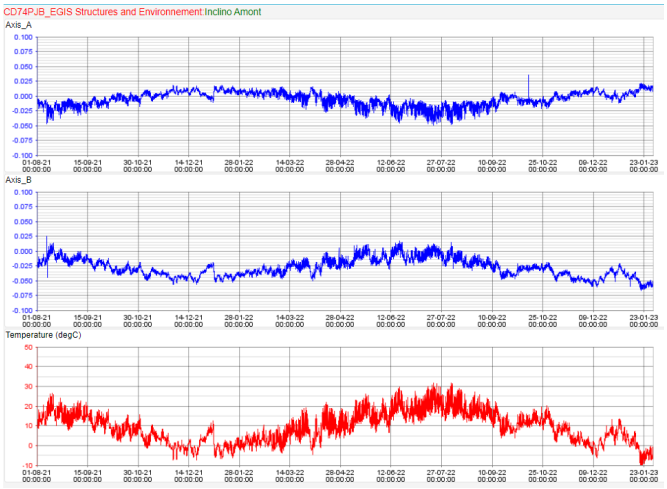
  The data was collected at desired intervals (every 1 hour) and transmitted wirelessly via cellular network to the cloud server with our web based data management software.

RESULTS

The remote data collection system and online data management platform displayed the structural health of the bridge. The data management software processed, analyzed and presented the collected data with threshold limit alerts.

The data was available in near real time to all the stakeholders on their laptops/mobiles, with instant alerts via SMS/emails.

Model EDJ-40V Crack meter installed



Tilt meter data - collected at every hour

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