





Monitoring of Six Bridges for Twenty Movements of 427 tonne Superloads

Date: Tuesday 19th February 2019

Time: 18:30 (Tea/Coffee from 18:00)

Venue: TU Dublin (DIT), Bolton Street

Speaker: Dr. Colin Caprani, Senior Lecturer, Monash University

Synopsis: With just two weeks' notice, Monash was tasked with instrumenting and monitoring six bridges for multiple superload movements of U-trough bridge beams intended for a Level Crossing Removal Project in Melbourne to take place over 4 weeks. This project entailed multiple aspects atypical of even usual superload movements, most particularly the short time frame, the need to maintain traffic flows under the bridges, and the consideration of vandalism. In this talk, Dr. Caprani will outline the background to the project, the extraordinarily compressed timeframe, and the structural health monitoring solutions for each bridge adopted. The technical aspects of the theory and the instrumentation will be introduced.

Speaker Bio: Dr Colin Caprani is a Chartered Professional Engineer (CPEng MIEAust) and Chartered Structural Engineer (CEng MIEI, MIStructE) with considerable industrial and academic experience. He has worked as a design structural engineer on a wide range of projects in industry. His research specializations involve highway bridge traffic loading for short- and long-span bridges; vibration serviceability of footbridges; structural reliability and statistics of extremes; and the assessment of existing bridge infrastructure. He is an Associate Editor of the journals Structural Safety, and the ASCE Journal of Bridge Engineering. He has published almost 150 scientific works including nearly 50 journal papers. He was a Lecturer in DIT for 13 years (2001-13) and moved to Monash University, Melbourne in 2013.

Admission FREE Booking Not Necessary Non-Members Welcome

Further Information:

Kieran Ruane, Chartered Engineer Daniel Coleman, Chartered Engineer **☎** (021) 4326595 **☎** (01) 2940800 ⊠ kieran.ruane@cit.ie

☑ daniel.coleman@rod.ie