



SEMINAR

ITALIAN STRUCTURAL DEVICES IN WORLD'S RECORD BRIDGES

Italian structural devices have been used since 1993 in very large bridges, suspended or cable stayed. From Second Severn Crossing in U.K. and Storebaelt Bridge in Denmark in the 1990s, where the main dynamic input is wind, to the recent bridges in Turkey (Izmit Bay Bridge and 1915 Çanakkale Bridge), where the main concern is the high seismicity. Together with different types of bearings, the structural device system designed to ensure functionality under service condition and guarantee safety under strong dynamic actions include hydraulic devices, i.e. shock transmission units and/or fluid viscous dampers. After an introduction to the characteristics of said hydraulic devices, examples of their application in large bridges are given. In particular, the seismic protection system of Rion Antirion Bridge in Greece will be described, with special attention to its fully satisfactory behaviour under the 2008 earthquake. Then, the seismic protection system of the recently opened 1915 Çanakkale Bridge in Turkey will be described, including some information on the laboratory tests on the special fluid viscous dampers.

29/06/22

10:00-12:00am
Aula Multimediale
Laboratorio L2

SPEAKER



Maria Gabriella Castellano
Civil Engineer, PhD in Structural Engineering

Fipmec Academy
Fipmec s.r.l.