The New Storstrøm Bridge – From Tender Requirements to Reality.

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Abstract

A 4 km long sea-crossing structure is rising out of Storstrømmen in Denmark.

The paper will present the overall status of the project New Storstrøm Bridge, which is currently under construction. The New Storstrøm Bridge will be the third largest bridge in Denmark. The bridge comprises a 4 km long combined rail and road bridge and will be an important part of the Trans-European Network infrastructure. The new structure will be one of the few bridges, in the world, carrying a two-track high speed railway, a two-lane road, as well as a combined footway and cycle path, on one single cross section. The new bridge will be comprising 44 viaduct spans and 2 navigational spans, where the main bridge will be a cable stay structure with a 100m tall pylon.

The paper will present opportunities and constrains in the preliminary design and thoughts of the Bridge and the requirements in the Tender material, as well as the Tender process in general. The paper will further present how a competitive dialogue in the Tender process impacted the tender documents will be presented. The paper will furthermore show some of the challenges when a Design and Build contract moves from the Tender process into the Construction phase – seen from the Employers perspective.

The Design and Build Contract was awarded in February 2018, the Detailed Design is now well on the way, with construction also in progress.

The New Storstrøm Bridge will be an outstanding landmark, replacing what was once, and for 30 years, Europe's longest combined road and railway bridge.

Keywords: Bridges; New and innovative structural solutions; New Innovative structural designs and applications, Off-shore Structures and Robustness.