



Condition of Vidyasagar Setu - Cable-Stayed Bridge in Kolkata

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Summary

Long span bridges such as the landmark Vidyasagar Setu require regular maintenance during the life of the structure. This requires thorough understanding of the behaviour of cable stayed bridge and periodic detailed investigation by experts in this field. On nearing silver jubilee year of its commissioning, a team of professional experts from the industry, institute and foreign experts were appointed to carry out inspections to the main bridge, approach viaducts and interchanges so as to assess the condition of the bridge and recommend repair and maintenance guideline. The scope of investigation was limited to visual inspections and spot check the structural state of the bridge. This paper presents an overview of the structural components of the main bridge that were inspected and further plan of measure to be instituted for developing a detailed repair and maintenance procedure.

During this inspection only spot checks could be done. It highlighted the areas that need further measures. The vital parts of the cable stayed bridge need special emphasis in the maintenance and repair approach to the main bridge in order to maintain and extend the lifetime of the bridge and ensure its safety. A detailed and thoroughly designed refurbishing concept has to be adopted. It is also important that the execution of maintenance and repair be carried out by qualified workmen and supervised by professional bridge engineers having expertise in this field.

Depending on the nature and duration of repair works the usability of the bridge may be reduced, involving partial closure of the bridge for certain periods.