

# COWI Bridges Projects in India

## Western Freeway Sea Link

3.3 km 8 lane sea bridge with two connectors of about 1km. The superstructure precast segmental, substructures large-diameter cast-in-drilled-hole piles. Connectors I-girder concrete decks.

Value engineering and advising in bid design. Review and check of design made by other consultants.

**Country** Indien  
**Period** 2008 - 2008  
**Client** Samsung C&T Coporation

## Naini Bridge Operation and Maintenance

8 year contract for the National Highway Authorities of India for the operation and maintenance of the Naini cable-stayed bridge.

Provision of expert staff for the management of the project, inspection of the bridge and supervision of the maintenance work.

**Country** India  
**Period** 2006 - 2014

## Hoogly River Bridge at Haldia

Conceptual design, tender design and detailed design of 3,500 m long bridge across Hoogly River near Calcutta. The bridge will include a cable stayed bridge with a planned main span of 475m. The bridge will carry four lanes of traffic and two side walks.

COWI has been responsible for the management of the project and has carried out conceptual, tender and detailed design of the cable stayed bridge.

**Country** India  
**Period** 2006 -  
**Client** New Kolkata International Development Pvt. Ltd

## Chambal Bridge Design Check

Design check of cable stayed bridge with 350m main span. The girder is a closed concrete box type with central stay arrangement  
Design Check

**Country** India  
**Period** 2006 -  
**Client** The Louis Berger Group, Inc.

## Naini Bridge - Construction Supervision

A 1.5 km long bridge across the Yamuna River at Naini/Allahabad. The bridge carries a 4-lane road, and is constructed as a cable-stayed bridge with a main span of 260 m.

Preparation of updated feasibility study and detailed design and construction supervision.

The services, which were funded by a loan from the Overseas Economic Corporation Fund, Japan, (OECF), were carried out in joint venture with SPAN Consultants Pvt. Ltd., New Delhi.

**Country** India  
**Period** 2000 - 2004  
**Client** National Highway Authority of India  
**Recipient** National Highway Authority of India

# COWI Bridges Projects in India

## Widening of 193 km Highway between Varanasi and Aurangabad

The project comprised field surveys, pavement option study, feasibility study and design of widening from 2 to 4 lanes of 193 km of National Highway 2 from Varanasi to Aurangabad in India. The widening included design of more than 60 bridges and a second 3 km road bridges across River Sone. Field investigations comprised topographical surveys using GPS and total stations, traffic surveys and soil and materials investigations and boring for bridges. Also EIA and socio-economic surveys were done to assess environmental impacts, resettlements and land acquisitions.

The design work was fully computerised and a network of 10 computers was established in the design office using a combination of Windows NT Server, Windows NT Workstation and Windows 95/98 based computers. Microsoft Office software was used together with AutoCAD and MicroStation CAD software. The road design was made using InRoads from Intergraph/Bentley.

Planning

Studies and Evaluations

Surveys and Investigations

Design

Tendering and Contracting

<b>Country</b>	India
<b>Period</b>	1998 - 2001
<b>Client</b>	National Highways Authority of India
<b>Recipient</b>	National Highways Authority of India

## Yamuna Bridge at Niana/Allahabad

Preparation of updated feasibility study and detailed design of a 1.5 km long bridge across the Yamuna River at Niani/Allahabad. The bridge will carry a 4 lane road and will be constructed as a cable stayed bridge with main span of 260 m. The services, which are funded by a loan from the Overseas Economic Corporation Fund, Japan, (OECF), are carried out in joint venture with SPAN Consultants Pvt. Ltd., New Delhi.

<b>Country</b>	India
<b>Period</b>	1995 - 2000
<b>Recipient</b>	Ministry of Surface Transport

## Bhagalpur Bridge

Proof consultants for the 4.4 km long bridge across River Ganga near Bhagalpur, Bihar, India and technical assistance to the Client's supervision staff for the bridges as well as for the 10.6 km approach roads to the bridge. The main river crossing consists of 8 spans in cantilever construction, each 120 m long. The remaining approach-bridges consist of approximately 60 spans ranging from 29 to 63 long all formed as box girders. Foundation on deep circular wells. The project is financed by the World Bank.

<b>Country</b>	India
<b>Period</b>	1993 - 2000
<b>Recipient</b>	Government of Bihar, Road Construction Department

# COWI Bridges Projects in India

## Bombay Main Link

Feasibility study and tender design of a 15 km long bridge and/or tunnel crossing, Bombay Main Link Project - BMLP.

**Country** India  
**Period** 1982 - 1983  
**Client** Government of  
Maharashtra, Public Works  
Department