

## Reference projects

**Project:** Federal Motorway A 20 crossing the River Elbe at Glückstadt in the course of the North-West bypass Hamburg

**Project duration:** 2006 - 2008

**Order volume:** 2.2m Euros (*elbe-link* Ingenieurgesellschaft)

**Construction costs:** approx. 600m Euros

**Client:** State Cooperation for Road Construction and Transport, Schleswig-Holstein, Itzehoe Branch, Project Group A 20 - West

**Short description:** Commissioned is the *elbe-link* Ingenieurgesellschaft (association of engineers) consisting of:

- IMS Ingenieurgesellschaft mbH, Hamburg (share: 41 %)
- Böger+Jäckle Gesellschaft  
Beratender Ingenieure mbH & Co. KG, Henstedt-Ulzburg
- SPIEKERMANN Consulting Engineers GmbH, Hamburg
- BABENDERERDE INGENIEURE GmbH, Bad Schwartau.

IMS acts as leading technical manager.

Within the scope of the first planning stage "Feasibility study", the complete preliminary design for the basically possible solution alternatives:

high bridge – immersed tunnel – bored tunnel

will be drawn up with diverse sub-options.

These include amongst other things:

The cost assessment of the total cash value from the construction, maintenance, renewal and operating costs, an evaluation as well as a recommendation with regard to the preferred solution.

Period: From the beginning of March to the end of August 2006

Further design steps are: The preparation of the building layout, the preparation of the plan approval documents and the participation in the plan approval procedure.



Possible construction alternatives - Examples:



Immersed tunnel (Ems Tunnel)



Bored tunnel (Weser Tunnel)



High bridge (Öresund Bridge)