

# Deutsche Bahn Ushers in 5D BIM Era



The Deutsche Bahn Group is an international provider of mobility and logistics services and operates worldwide in over 130 countries. More than 300,000 employees work every day to ensure efficient mobility and the associated transport networks for more than 12 million customers daily in rail passenger transport. The DB Group has been adopting new environmental technologies and increasingly offering green products to meet the even more demanding targets of energy efficiency

**Headquarters**  
Berlin, Germany

**Founded**  
1835

**Industry**  
Infrastructure

**Products & Services**  
Transportation & Logistics

**Employees**  
300,000

**Revenue**  
40.6 Billion Euro (2016)

**Website**  
<http://www.deutschebahn.com/en/start>

## Target

- In 2014, DB was looking for a new enterprise project management solution to replace their previous system that could no longer fit the needs of the market.
- DB aimed to implement BIM as a planning standard for the shared goals of:
  - Altering planning quality
  - Adherence to schedules, costs, and quality
  - Increasing efficiency
  - Supporting public participation
  - Integrated and sustainable life cycle management

## Partnership with RIB

DB issued a European-wide tender in 2014 and launched a partnership with RIB iTWO.

## Projects



### First 5D Project: Bahnhof Horrem

The first project planned utilizing iTWO 5D technology was Bahnhof Horrem. Horrem is a cabin-free "Green" station. It's also the very first cabin-free operated station in Europe. State-of-the-art ecological standards are being implemented in this directional project. This barrier-free Green Station combines architectural transparency with ecological consistency, intermodal function, and digital comfort details.



### Second 5D Project: ICE Plant Köln Nippes

DB's second project utilizing iTWO 5D technology was the ICE plant in Köln, the new ICE 4. ICE 4 is the newest generation of fast trains in Germany. It is also cabin-free and will be completed in 2017.

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## Projects



### Rastatter Tunnel

The largest tunnel in terms of cross-section to be built on the high-speed line



### Filstalbridge

A 485 meter long bridge with an investment of 50 million Euros



### Reconstruction of Munich Central Station

One of the largest train stations in Germany

## Outcomes

- DB has identified 63 projects for 5D planning, with 33 projects already in progress.
- Through iTWO 5D technology, the company was able to achieve cost security before tender, enhance planning quality, and transfer the defined data in operation and maintenance.

*"In the end, what we see is all of our goals were met: we met the cost, we got the quality that we wanted and we got the support of public participation."*

*"I think 5D works, 5D works for Deutsche Bahn and we don't want to stop at 5D."*

*-----Mr. Mathias Pott-Stahmeyer*

*Program Manager Expansion Digitization in Plant Management  
Deutsche Bahn AG*