DB Engineering and Consulting takes railway signaling planning from 2D to a 3D model

The largest planning office working for Germany's Deutsche Bahn transformed their planning, collaboration, and data processing with Autodesk BIM 360 and a new automation tool.

In an ongoing project with Deutsche Bahn, DB Engineering and Consulting GmbH (DBE&C) set up a new interlocking electronic railway signaling system using building information modeling (BIM), which the German Ministry of Transportation has mandated for all new projects.

This was the first time BIM was applied to this process, and DBE&C had to transfer all their objects and elements from the classic 2D format they'd always used into a 3D model.

DBE&C quickly realized they would need assistance to complete this process.
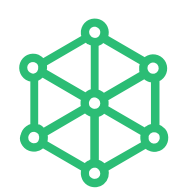
The results

- Saved time and effort with new tool that automates the transfer process
- Proved that signaling technology can create 3D models that follow and align with the BIM method
- Benefited from better collaboration with client, who could add comments without having to install the software

> " This is when we decided relatively quickly to seek the support from Autodesk. Especially with regard to the automation process, because they have a lot more experience in that area than we had in our company. "
>
> Marcel Kinzel, Planning Engineer, DB Engineering and Consulting GmbH

How they did it

DBE&C created a new tool, which can be used for all surface applications. They hope it will become an industry standard in the future.

By introducing BIM 360 to the project, they could easily handle the vast amounts of data produced by drone surveys.

The platform also gives Deutsche Bahn permanent access to all planning data, so that they can easily comment on project progress without having to install the software themselves.
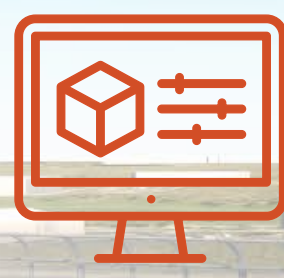
> " Having this new platform and tool is a huge advantage for all. "
>
> Marcel Kinzel

The bottom line

- Increased efficiency and better collaboration
- New 3D planning tool that can be used for multiple projects
- Easy compliance with government BIM rules for new projects

Watch the video ›