

CASE STUDY

# Deutsche Bahn & DeepL: Connecting the World

How Deutsche Bahn's DeepL-powered internal translation platform connects a massive, multilingual workforce

# Key takeaways

- <u>Deutsche Bahn</u>, the largest railway operator in Europe, has built a DeepL API-powered internal translation platform for its 320,000 employees worldwide.
- Along with <u>best-in-class translation quality</u> and <u>data security</u>, DeepL provides DB with customizability via its <u>glossary</u> <u>feature</u>—a critical capability that ensures DB's translations use accurate corporate and industry-specific terms.
- DB has integrated more than 30,000 glossary entries from its central terminology database with the DeepL API, allowing DB employees to communicate consistently across the organization.

Deutsche Bahn's scale is massive. As Germany's national railway company and the largest railway operator and infrastructure owner in Europe, Deutsche Bahn (DB) transported more than 4 billion passengers and 232 million tons of rail freight in 2019.

DB relies on more than 320,000 full-time employees, only 64% of whom are based in Germany. A multinational workforce means collaboration across languages is key to Deutsche Bahn's success.



**Industry** Transportation

### **Key Markets** Europe

#### Key Languages

English, German, Polish, French, Czech

### **DeepL Products** API

It's an ideal use case for machine translation. There's one major challenge, though:

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The railway industry is rife with technical terminology, and Deutsche Bahn needed a way for employees speaking many different native languages and working in hundreds of different professions—from engineers and conductors to customer service representatives—to communicate clearly with each other while accounting for industry-specific jargon, dialects, and idioms.

Annette Kraus Head of Language Department at Deutsche Bahn AG

A generic machine translation engine wouldn't cut it. DB needed to be able to customize.

# DB Corporate Translate: powered by the DeepL API

DB Corporate Translate is Deutsche Bahn's internal translation platform. It offers text and document translation to all employees of the DB Group and can integrate into DB applications via an API.

The platform is available to all DB employees via the company intranet, with hundreds of users every day. Key languages include American and British English, French, Polish, and Czech.

DB built DB Corporate Translate on top of the DeepL Translate API, which provides programmatic access to DeepL's machine translation technology and allows software developers to build applications with translation capabilities.

The DeepL API ensures that DB gets:



Importantly, it also offers customizability via its glossary feature. **DeepL glossaries** give users the power to specify their own translations for words and phrases, ensuring the use of industry- and company-specific vocabulary.

# How DB Customizes with glossaries

DB maintains a central <u>"terminology database"</u> with vocabulary that requires specific (sometimes unintuitive) translations to handle industryspecific terms. The database contains nearly 30,000 entries in up to 16 different languages.

> The DB Language Management Department manages the terminology database. They update the corresponding glossaries in the DeepL API every few weeks to ensure that DB Corporate Translate is as current as possible.

DeepL glossaries go beyond a simple "find and replace" and rely on morphosyntactic terminology integration—a fancy way of saying that DeepL will adapt the formulation of translations based on glossaries and account for factors such as grammatical gender and plurals.

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Along with data protection and data security, the ability to adapt the engine to DB's corporate language via glossaries is a main advantage of DeepL compared to other machine translation systems. The correct use of our corporate language is very important for consistent communication throughout the whole Group. And with DeepL, it can be done very easily as long as you have a wellorganized terminology database.

Tom Winter Data Scientist & Computational Linguist at Deutsche Bahn AG

DB has added several related features to its platform, such as a terminology recognition function, which displays corporate-specific vocabulary upon mouseover.



## **Glossary best practices**

DB has spent a significant amount of time working with glossaries and understanding how to get the most out of them.

#### Their main piece of advice to other glossary

**users?** To map all unambiguous terms of an entry —that is, all clear synonyms—to one preferred target term, and only include unambiguous terms to avoid mistranslation.

### What's up next at DB?

The company recently started offering DB Corporate Translate as an internal service via API in January 2022. Just one month later, there are already 8 internal applications relying on the service, a number that DB expects to grow steadily.

In addition, DB is exploring use cases where machine translation might be able to assist with railway operations, such as communications for border traffic.

# Get in touch

If your team is looking for top-quality machine translation that'll help you cut back on operating costs and grow your business.

Contact us to learn more