



Managing technical data and documents for mega-scale projects

Case study: VIA Rail Canada

Baseline situation

In 2018, VIA Rail Canada, Canada's state-owned railroad company, placed an order valued at some EUR 650 million with its supplier Siemens Mobility for the delivery of 32 next-gen push-pull trains. The trains are scheduled for delivery in the third quarter of 2021 and will be operating passenger services between Quebec and Windsor starting in the end of 2022. Such mega-scale projects involve not only the delivery of the trains in their physical form but also the compilation of a detailed "contract data requirements list" (CDRL). The list contains all the contractual obligations together with the extensive required documentation, often comprising several thousand documents.

"By using Approve, we have optimized the review and approval processes for technical and contractual documents with our supplier Siemens Mobility. The synergy effects have taken project management at VIA Rail to a new level."

Arnaud Lacaze
Project Director
VIA Rail Canada

The task: Transparent correspondence management

Via Rail Canada sought a cloud-based solution that would enable the company to manage the technical data and documents in major projects, such as orders for trains, professionally and efficiently. One of the primary objectives was to move the unwieldy correspondence that had previously been handled by e-mail to a cloud environment that would serve as a secure communication platform for formal project correspondence between customer and supplier. The solution needed to number every incoming document and its attachments sequentially and automatically and also comply with specific formal criteria. Ultimately, these requirements are designed to ensure that project correspondence is traceable as well as transparent and serves as a central information hub in a highly heterogeneous project organization.

Another special priority that VIA Rail placed on the system was the ability to classify, categorize, and structure all information that the company shares with partners such as Siemens Mobility, allowing project teams like the design, production, and project management units to edit and review the information in line with their access privileges. These kinds of editing, review, and approval processes are extremely voluminous and, given their complexity, entail a great deal of manual effort, making them very time-consuming. The objective was to digitalize these processes and render them more efficient with the help of automated processes. To avoid expensive project delays, a scheduling and deadline management system was needed to ensure that all the associated tasks were carried out on time.

Metadata analysis

The sheer number of documents involved in mega-scale projects, often spanning several years, together with their innumerable amendments, generates massive amounts of data. Without software support, VIA Rail found it impossible to maintain an overview over such a lengthy period of time. That prompted the company's demand for clearly identifiable document status indicators, extractable metadata for generating key performance indicators, and the ability to monitor and manage all correspondence, every piece of documentation, as well as the list of contract data requirements (CDRL). VIA Rail Canada also required clear and well structured project status reporting along with a broad range of analysis options for the existing data.

Technical data and document management

These are exactly the requirements that Approve on Fabasoft PROCECO, the company's standard product for technical data management, is perfectly suited to meet. Document monitoring and metadata maintenance are now supported by automated processes and performed continuously. "We aren't receiving any more documents by e-mail that could be inadvertently deleted by one of the project members. Official project correspondence is now handled securely and traceably, a feature that is essential for mega-scale projects that span several years," explains Arnaud Lacaze, Project Director, VIA Rail Canada.

On top of that, an integrated schedule management feature and a shared list of "Action Items" deliver the required overview of the tasks that need to be completed as part of the project. For the multi-stage review and approval processes, which are required separately for every document and every comment, there are standardized processes that run automatically.

Speedy, straightforward implementation

The rollout for Approve as well as the migration of project-specific documents and data from Microsoft SharePoint was accomplished in just two months. Customized adaptation to VIA Rail's specific requirements was achieved rapidly thanks to the standard product's high level of flexibility and the large number of standardized interfaces. All metadata, key figures, and documents were migrated from the various data sources and all of the processes were consolidated.

"The Fabasoft Approve Team delivered an impressive performance and showed us just how uncomplicated it can be to replace a DMS," Lacaze affirmed.

Since the beginning of 2020, several hundred project team members from VIA Rail and Siemens Mobility have been working with Approve to manage the entire process of exchanging data, including the correspondence for the commissioned project.

About VIA Rail Canada

VIA Rail operates Canada's national passenger rail service on behalf of the Canadian government. With over 3,000 employees and a network covering 12,500 km, VIA Rail transports more than five million passengers every year. www.viarail.ca/en