

# Digital process automation: online collaboration platform for special transport permits

## PROJECT DETAILS

**Industry:** public administration

**Users:** transport and logistics companies, Swiss Federal Roads Office, canton road traffic licensing departments, enforcement authorities (police, customs)

**mimacom team:** 4-8 people: project manager, scrum master, requirements engineer, UI designer, system architect, software developer, test manager, tester

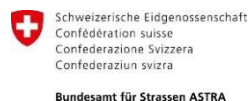
**Development period:**  
October 2018 to May 2021

## PRODUCTS / TECHNOLOGIES

BPM | CMMN | CSS | Docker |  
elasticsearch | Flowable Work | Java 8 |  
JavaScript | Kubernetes | PostgreSQL |  
React | Rest Services | Spring Batch |  
Spring Boot | Spring Security | SQL |  
Balsamiq | JIRA | Maven |  
Postman | UML



The Swiss Federal Roads Office (FEDRO) issues over 27,000 special permits for road transportation outside the legal standards every year. mimacom has developed a digital cooperation platform with business process digitalization and automation for the submission, processing and issuing procedure for the special permits.

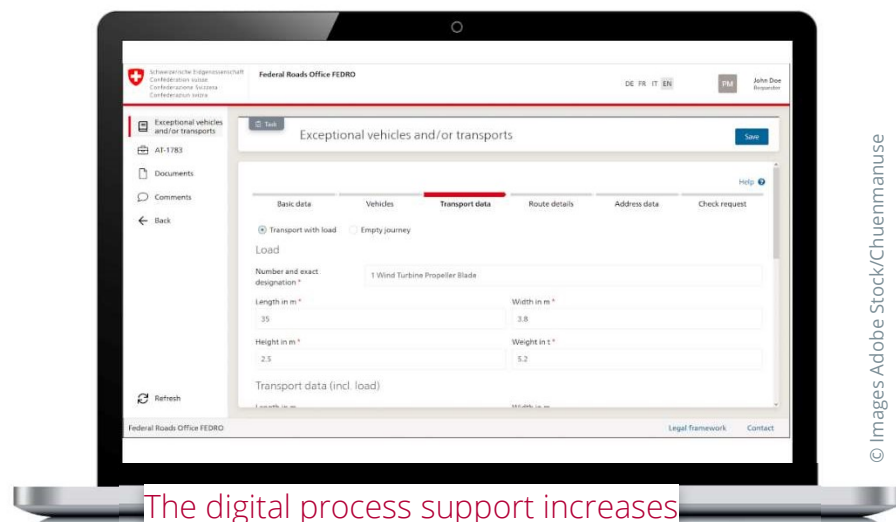


**Background →** Whether it's transport of heavy or dangerous goods, or night or weekend journeys: Special transports require a permit. A great many parties are involved in this process. The transport companies applying for a mandatory special permit for transportation, the canton police and above all, the numerous departments of the national and canton road authorities who are involved in processing the applications.



*The collaboration platform for special transport permits on Swiss roads offers our users convenience and enormously simplifies the application process. The mimacom project team mapped our requirements and processes exactly with Flowable Work.*

**Marco Piscopo**, Technical Project Manager, Swiss Federal Roads Office FEDRO



The digital process support increases efficiency and convenience for authorities and users alike.

## Digital transformation in public administration

**The starting situation →** Processes that were longstanding, but were error-prone and no longer in keeping with the times had pushed the administrators of special transport permits to their limits: The only digital tools available were a long, unintuitive online form, e-mail, text modules in Word, and PDF generators. The manual and heavily paper-dominated process was also cumbersome for the users. Data related to the vehicle and trailers, such as axles and weight, had to be manually copied or reentered again completely for every individual permit.

## Efficient digital processes thanks to Flowable Work

**The solution →** The digital collaboration platform provided FEDRO and all other parties involved with highly digitalized process support and automation. On the basis of Flowable Work and in collaboration with mimacom, FEDRO has succeeded in creating a realistic mapping of the workflows to provide digital support and automation for issuing permits along the entire process chain.



**The product →** Flowable is a digital platform for business process and case management solutions, that connects companies with their users and automates processes.

**Flowable Work** offers flexible technology that can also digitalize and automate multi-dimensional or dynamic processes and is used by many of the world's leading companies.

[www.flowable.com](http://www.flowable.com)

## User-friendliness from A to Z

The basic idea of human-centered design was the consistent focus behind the realization of the project: The platform is clearly organized and well laid out, allowing users to immediately find their way around, even when using it for the first time.

Users especially appreciate the option of storing vehicle data and addresses in their user account and adding them to new applications at the click of a mouse. The platform makes it possible to retrieve the processing status at any time, and allows changes to be made depending on how far an application has been processed. For example, this ensures that applicants know clearly which offices have already processed their application, and where they need to make enquiries if an urgently needed permit has not yet been issued.

## Key elements for the success of the collaboration platform

The comprehensive integration of the platform makes it the pivot point for all road traffic special permits. Alongside the graphical user interfaces for FEDRO employees, the collaboration platform offers a web service for connecting to all **canton road traffic offices**: A turn-key interface (API) is available to the cantons to connect up their own systems. As an option, the collaboration platform provides a graphical user interface for the cantons until their canton systems can be technically integrated.



The online collaboration platform supports the authorities at every step of the way in processing special transport permit applications.

**The SAP connection** makes it possible to transfer issued permits to the FEDRO accounting department for invoicing purposes without any mismatch in media formats.

The integration of **the traffic licensing information system** for automating requests makes it possible for FEDRO to directly validate details on motor vehicles during the application directly from the platform.

**The approach** → Project development was undertaken in accordance with HERMES, as is usual in the federal environment in Switzerland. The mimacom project team combined HERMES with agile methods based on scrum. The combination of these two approaches increases flexibility and transparency: Changed or new requirements can be taken into consideration in a flexible way during the course of the project in spite of the existing WTO catalogue of specifications and official change management. The specification approach with user stories, which also include wireframes and acceptance criteria, is, on the one hand, user-centric and, on the other hand, enables precise and role-appropriate test cases for the required official test management. Task-based end-to-end tests throughout all the roles involved in a process ensures that users are able to reach their goals intuitively.

**The outcome** → With Flowable Work, mimacom has realized a comprehensive digital solution for FEDRO, which seamlessly guides users through the sometimes very complex process of applying for special road traffic permits. The special permit platform began operation in June 2021 successfully. Employees in the cantons in particular are very satisfied. Over 6000 applications were processed within the first 10 days without any major problems. In addition to the newly created positive user experience and increased efficiency for the customers, the platform also offers FEDRO a whole host of benefits. It simplifies the prioritization of applications and automates the application review process to the greatest extent possible. The solution provides everyone involved an efficient and paperless way to complete the permit approval process. At all times, it is clear to all those involved what the next required steps are and who still has to clarify which issues before the permit can be issued. The increased transparency along the entire process simplifies communication, eliminates sources of errors and increases the efficiency of processing special transport permit applications.

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*Since the online collaboration platform went live, our office has recorded a high increase in efficiency. And we can now say we have also arrived in the digital age when it comes to special transports.*

**Marco Piscopo**, Technical Project Manager, Swiss Federal Roads Office FEDRO