

Integrated Data and Project Management (IDPM) for road construction



The aim of the new IDPM platform is to optimize data processing during all phases of road-construction projects. Working on behalf of the Zurich Office of Civil Engineering (OCE), EBP helps to draft a project feasibility study, develop an initial project plan, prepare all project-approval documents and draft the project-specifications document. Following the project's approval, EBP stays on to act as a consultant throughout the project-execution phase.

Numerous participants are involved in the planning, construction and maintenance of roadway infrastructure in the canton of Zurich. The Zurich Transportation Office (TO), for instance, is responsible for strategic planning relating to roadway infrastructure and the Zurich OCE is responsible for overseeing project planning and realization, as well as the operation of roadway infrastructure.

Prior to the project's completion, the Zurich OCE had made use of various IT tools to manage its road-construction projects and related data (e.g. orders, project invoices, etc.). Working with those tools was inefficient and error-prone, however.

Substantive, temporal and spatial coordination of road projects

The new "Integrated Data and Project Management (IDPM)" platform equips the Zurich OCE with a data management and reporting system that provides critical support in the area of project planning, construction and infrastructure operation. In addition to enabling the substantive, temporal and spatial coordination of all construction measures, the platform offers

Client

Canton of Zurich, Office of Civil Engineering

Facts

Period	2016 - 2019
Project Country	Switzerland
Anticipated number of users	250
Number of documented	more than 500
specifications	

Contact persons

Dr. Ivo Leiss ivo.leiss@ebp.ch

the following functions:

- tendering of construction services and goods
- finance and resource planning
- document management
- project controlling
- approval-process management

In addition, it was also necessary to integrate the accompanying systems: SAP, Logo road information system and Active Directory / LeuNET.

Working on behalf of the Zurich OCE, EBP provided the following services relating to the phase "feasibility study and initial project plan":

- user interviews
- documentation of the business processes (business analysis) using Business Process Modelling Notation (BPMN)
- ascertainment and documentation of software requirements (requirements engineering)
- drafting of the feasibility study
- drafting of solutions / approaches
- drafting of an initial project plan
- drafting of the functional specifications document for the procurement of the new IT system

EBP completed the following assignments to assist in the phase "project specification":

- specification of an interface to the cantonal road information system (GIS)
- elaboration of a system introduction concept
- writing a testing concept

EBP also provided consulting services during the "project-realization" phase, including application testing. We completed the project in accordance with the project-management methods PosatZH and HERMES.

Dr. Christoph Graf christoph.graf@ebp.ch