# ORLEN Unipetrol – module for visualising work permits

The motivation for the PKP Visualization project was to ensure the monitoring of suppliers and subcontractors performing maintenance and verification of their presence at the sites in Litvínov and Kralupy nad Vltavou. The aim of the project was to **replace the outdated registration process (until now, magnen/pin was used, which was placed in a given control room on a paper map), by connecting the GIS and the AMI platform to the system for work permits (PKP). After implementation of new PKP system, the foreman places the task/work to a given location on a digital map**.

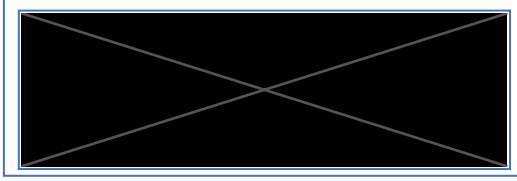
It was necessary for the information to be visible not only to the people responsible for the work of these teams, but also to their line superiors or, in the event of unexpected events, to firefighters and other rescue services.

Based on ORLEN Unipetrol's requirements for visualization of permitted planned and ongoing work in the production plants in the Litvínov and Kralupy nad Vltavou areas, in close and agile cooperation with the client's team, Unicorn (HSI, s.r.o.) managed to design and deliver a new AMI/PKP module to production in a short time of 3 months 2022. In the 2022 version, the solution was integrated batch-on to primary source systems to enable PKP and SAP. It effectively uses the combination of the advantages of the AMI platform, customer development of the module with a dashboard with an operational report, map data (GeoServer) and UC / dialogs for placing and editing placed permits. It runs on the existing server infrastructure supplemented by surveillance displays in the control rooms. It is currently used in 24x7 mode by more than 600 workgroup chiefs on their devices. In addition, there are dozens of unmanned operation supervisors at 22 operating control rooms and other users at Orlen Unipetrol.

**Statement of the representative of ORLEN Unipetrol**

*"This digitization project is only a small part of the changes that are taking place in our company. Digital transformation is an important element of ORLEN Unipetrol's strategic development plan. The use of modern technologies improves planning and use of resources, increases flexibility in the use of production capacities and contributes to a safer working environment."*

Prague, 7.6.2024

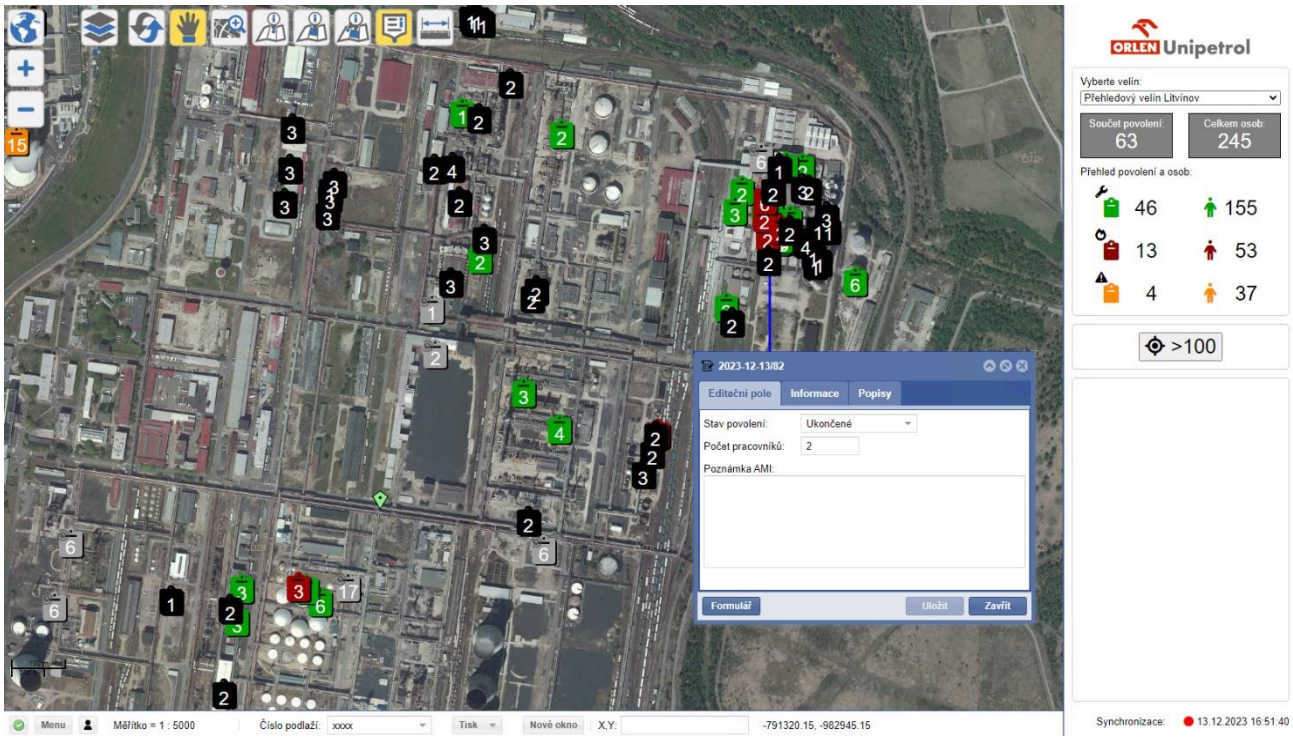


After a short production stabilization and minor development in 2022, the gradual transition of the source permit systems to the management of the new ORLEN Unipetrol "INFOR" core system took place again in a short time of 3 months, in 2023. Here, it was already possible to bring the integration into the on-line synchronous mode and deepen the integration of all systems, which improves the user experience primarily for foremen issuing permits.

## Main benefits of the solution

The overall solution enables ORLEN Unipetrol to reduce operational risks arising from work collisions and the risk of accidents, which has also had a positive impact on the commercial conditions of operating activities.

The system can also generate control statistics, monitor work statuses (issued, completed, interrupted), and check the number of contractors' employees. Each user can find out in greater detail about the goal of the work activity, when the work was issued and when it was terminated, who is responsible, etc.




In the future, we are preparing the complete elimination of all paper activities (start and end of work as opposed to signature) and thus complete digitization of the entire process. The goal will be to have a 100% overview of all our maintenance work activities. High-quality maps with the necessary information are a very important factor in meeting this goal. Integration with GIS and support for mobile devices in the field will play a key role here.

### Confirmation of reference

Ing. Karel Kamenář
Senior IT Project Manager
Prague, 7.6.2024