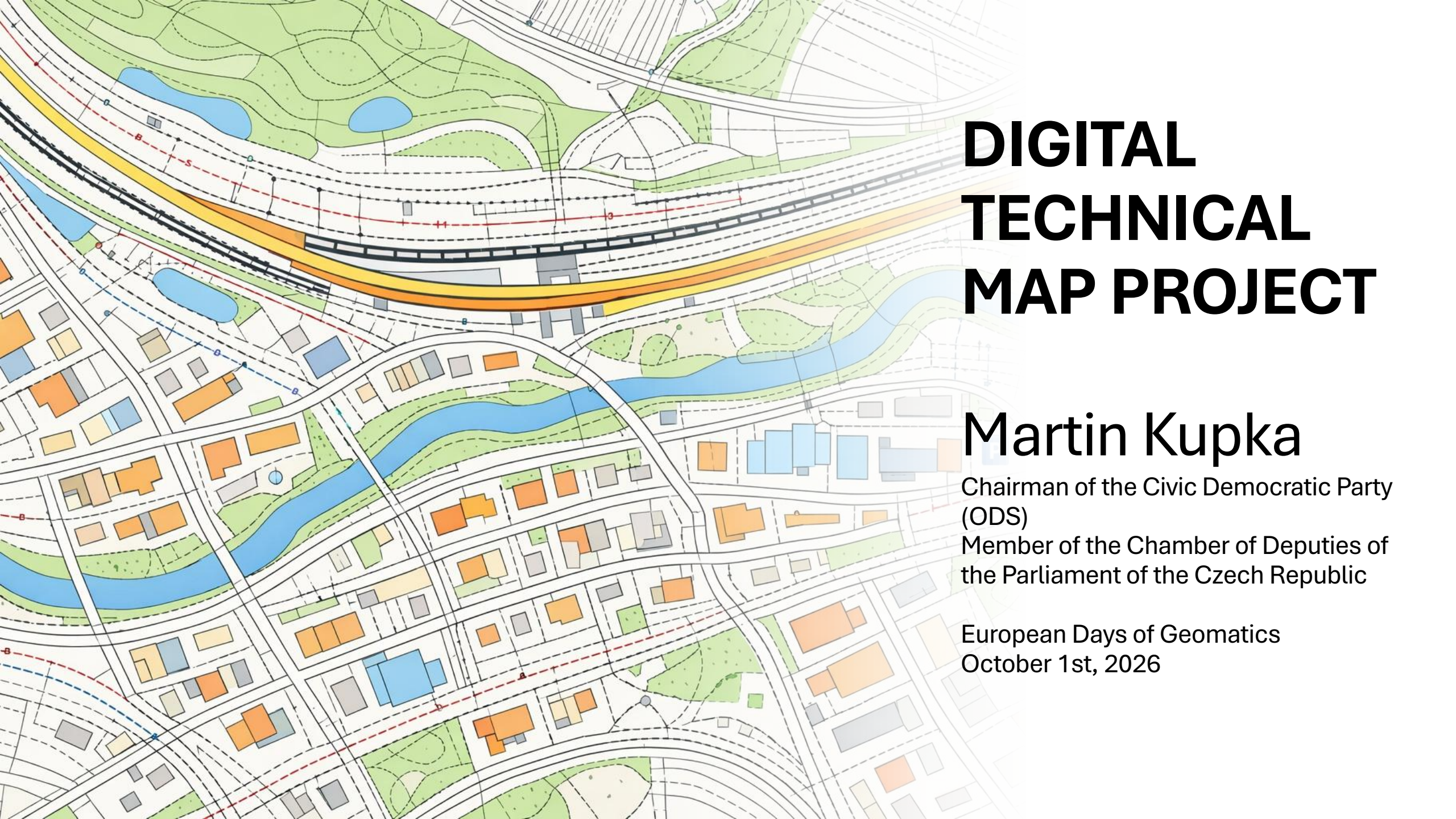




DIGITAL TECHNICAL MAP PROJECT

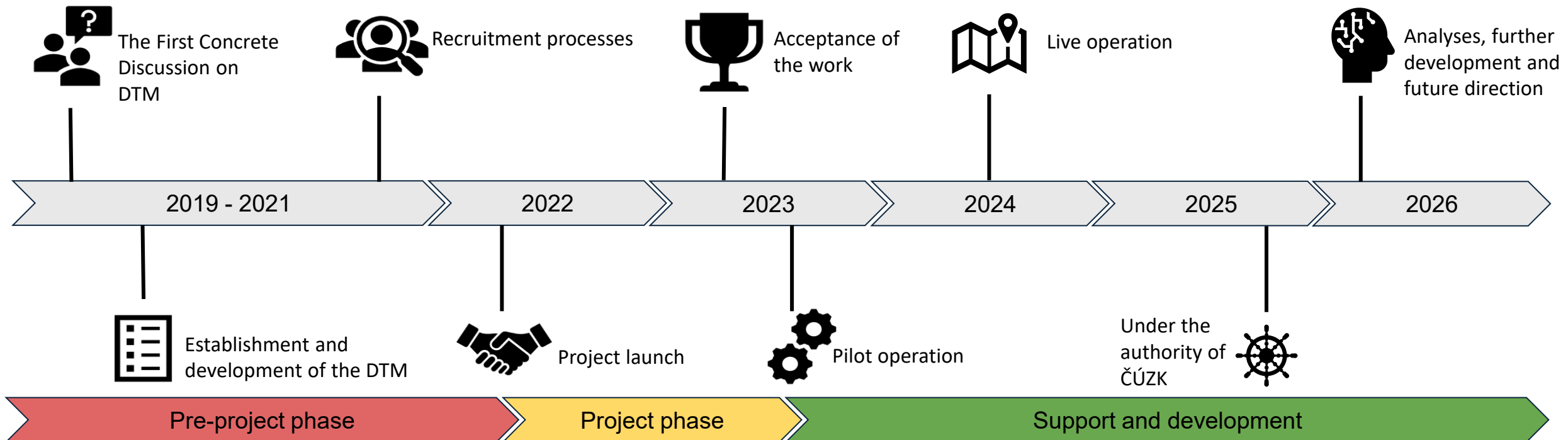
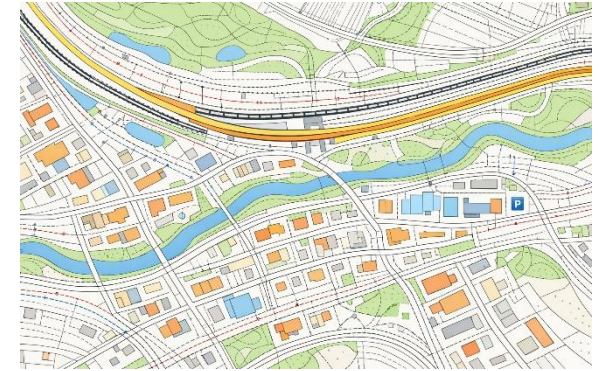
Martin Kupka

Chairman of the Civic Democratic Party
(ODS)

Member of the Chamber of Deputies of
the Parliament of the Czech Republic

European Days of Geomatics
October 1st, 2026

IS DTM Timeline



Future direction of the DTM

- As of October 1, 2025, the DTM Project has a new owner– ČÚZK
- The main goal is to continue the effective development of the entire DTM project and to increase its practical value for both the private sector and public administration.
- The Position of DTM in the New DSŘ Solution Architecture
- Medium-term development requirements
 - Critical infrastructure
 - Classified section
 - Built environment/BIM
 - Document storage/archiving
 - Use of AI
- Significant system
 - The role of DTM in the overall concept of Government Digitalization
 - Critical IS ?



Analyses

➤ Analyses planned for 2026

- Built environment/BIM
- Analysis of backup and archiving
- Analysis of AI use
- Cooperation in the analysis of classified activities
- Cooperation on analyzing the future direction of the DTM

➤ Assumption:

- Involvement and active participation of the property manager
- Cooperation of 2 – 3 regions on a specific analysis
- These are extensive and comprehensive analyses that will determine the future direction of DTM



DTM Analysis/BIM Built Environment

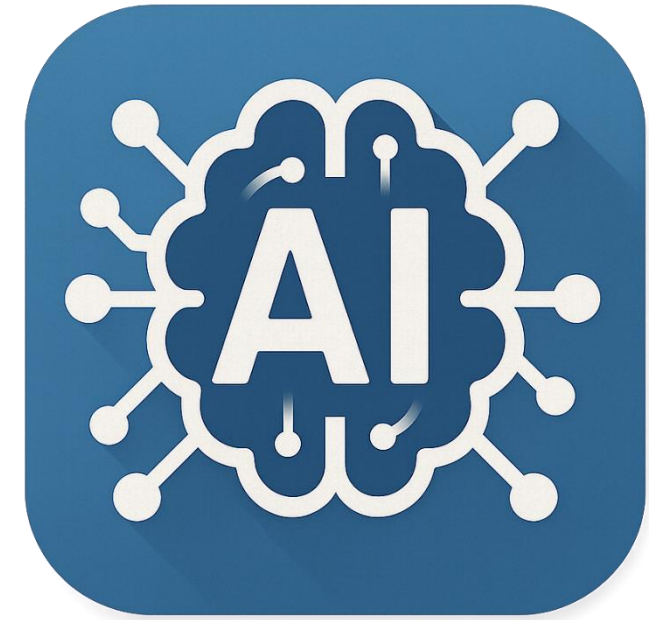
- **Act No. 330/2025 Coll., on the Management of Information on Construction and the Built Environment (the „BIM Act“)**
 - „A built environment information model shall mean a digital representation of the physical and functional characteristics of the built environment and other purpose-grouped information on the territory, structures, and relationships concerning the built environment“.
- **Impact Analysis of Act No. 330/2025 on DTM.**
 - Including implementing regulations, ČAS methodologies and recommendations.
- **The search for the optimal integration of DTM and BIM, or the built environment.**
- **Phase 1- Adding the “envelopes” of buildings/structures as an additional layer of the IS DTM.**
 - Utilizing the potential of precise building floor plans (accuracy class 3).
 - Proposal for establishing a link between the DTM and the base model of the built environment.



Analysis of AI usage

The analysis will examine the effective use of AI in DTM management:

- Semantic search for an object of interest
 - Searching with an understanding of the context and intent of the user's query
- Chatbot / expert assistant for transferring data to the IS DTM
 - Replacement of the knowledge base
- Classification and evaluation of Point Clouds
 - Ways to simplify the classification of point clouds and the analysis of DTM features
- Analysis of historical changes to the territory
 - Monitoring infrastructure development
- Automation of administrative processes
 - Automation of data completeness checks, assistance with workflow management
- Support with construction planning and coordination
 - Assessment of risks and conflicts with existing infrastructure



Finding a technical solution

- Use of an on – premises or cloud – based solution
- Finding a suitable language model

Collaboration on analysing the future of the DTM/DMVS under the leadership of ČÚZK

- Cooperation between regions on analysing the future direction of the DTM/DMVS
- Analysis of the operation of the IS DTM/DMVS following the end of the projects' sustainability period
- The role of DTM/DMVS in the new DSŘ solution architecture
- The role of DTM/DMVS in the



DTM/DMVS/BIM extensions

Utilizing the potencial of DTM objects
(Accuracy class 3 = single source of truth)

- Coordination of construction
 - Construction identification number
 - Built environment
 - BIM/IMS (Occupancy approval container)
 - Spatial plans
- Documentation repository for individual DTM layers
- **Digital Twin**
 - The extended DTM will allow for simulating construction in a digital model of the real environment

