Digital Technical Maps – our new project

PCC 2022

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Basic information about the project

- The DTMs project is a part of bigger project called Digitization of building proceedings in the Czech Republic
- 85% of the project costs are financed from the European funds.
- DTMs are being built and will be operated by regional authorities

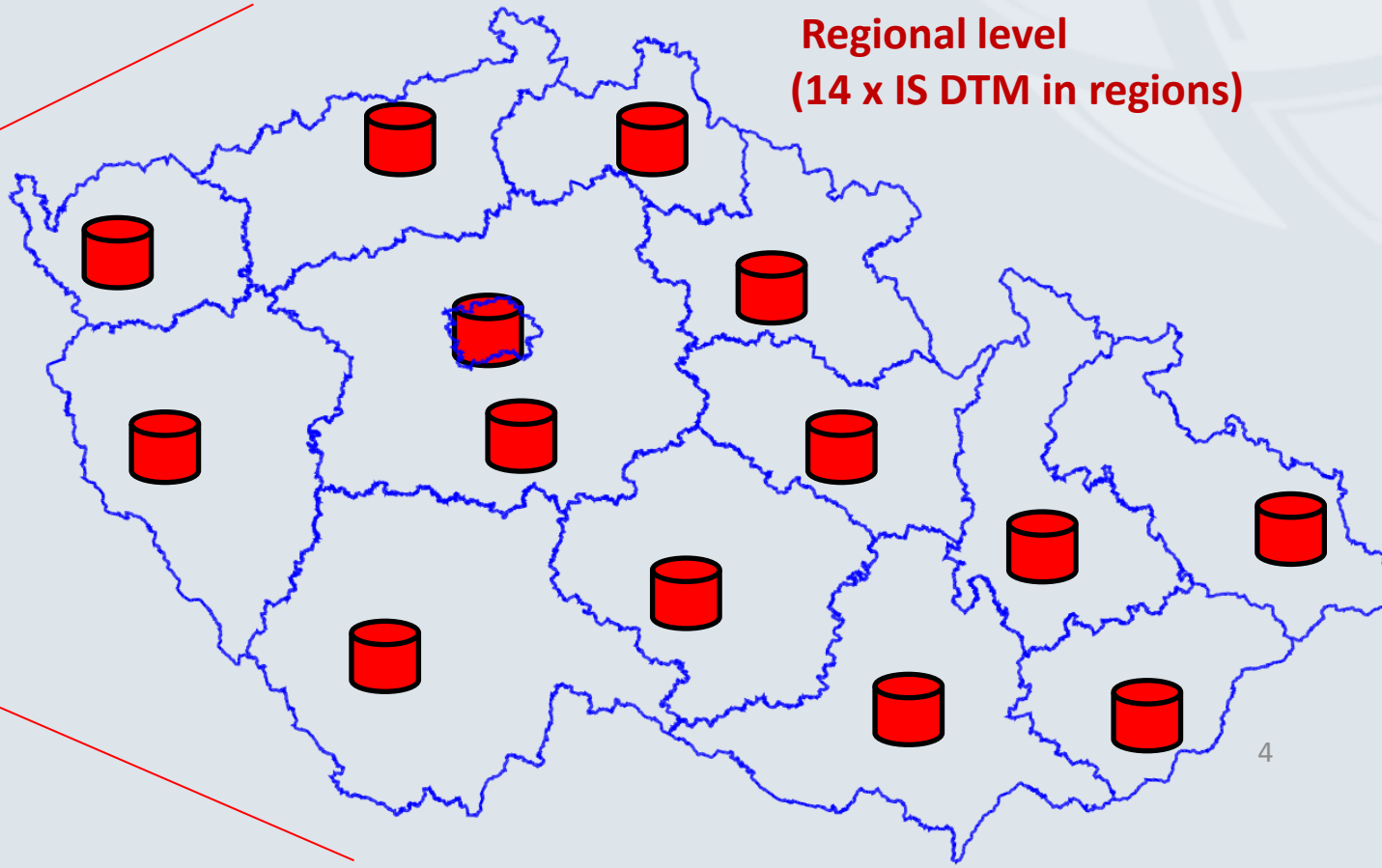
Basic information about the project

- Our office is responsible for
  - the creation and operation of an information system that will function as an umbrella for the regional systems of DTMs and will provide central services for the users,
  - the coordination of the entire project.
- Full operation is planned for July 2024.

Solution of Architecture of Digital Technical Maps

National level (COSMC)

Regional level (14 x IS DTM in regions)

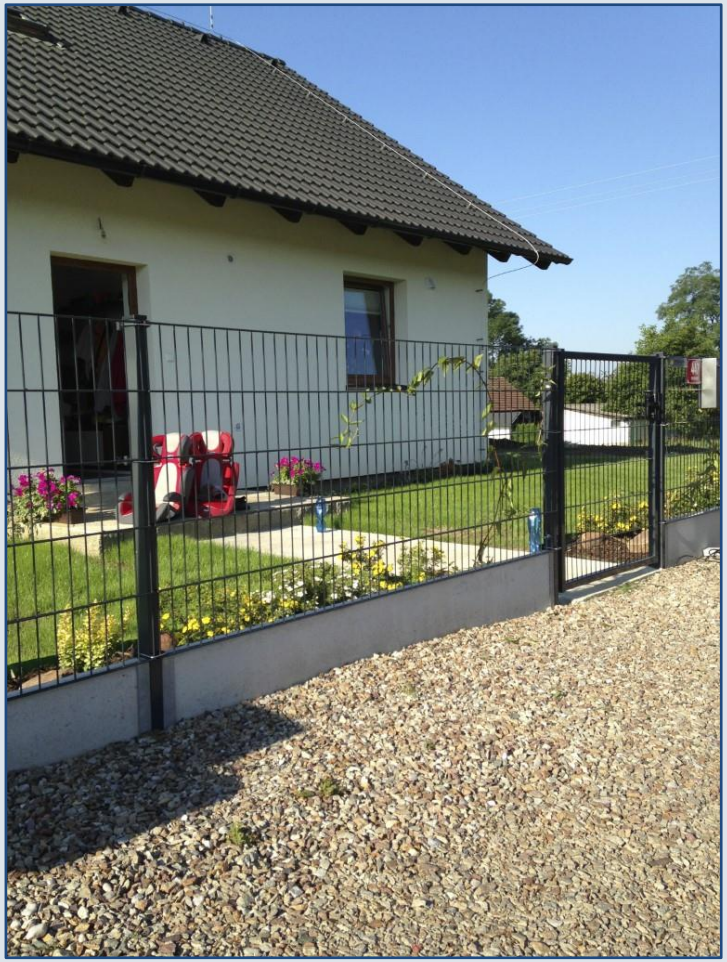


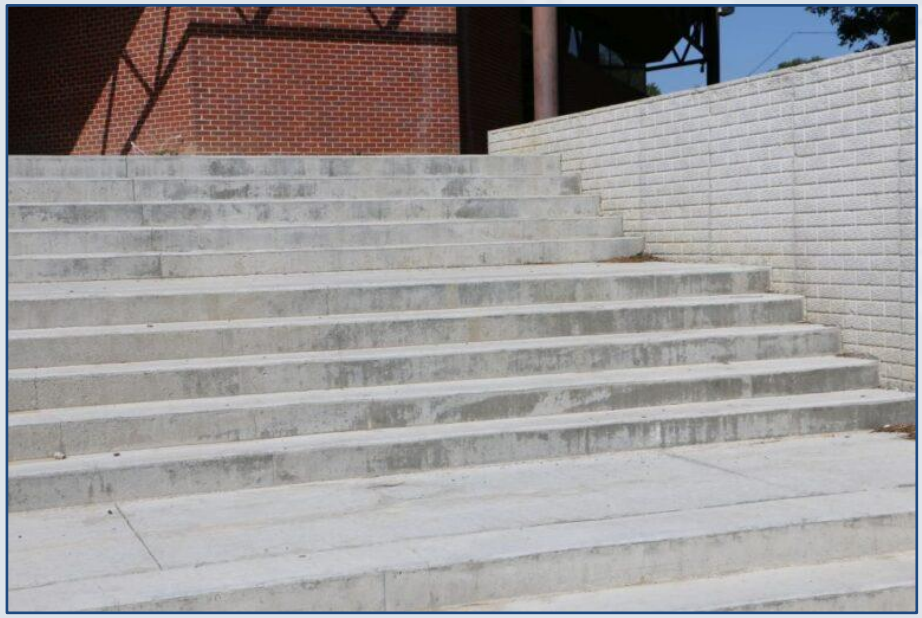
Content of digital technical maps

- Firstly, data about infrastructure, by which I mean transport and technical networks, including
  - localisation
  - technical specifications
  - data about owners / administrators / operators
  - associated zones of protection
  - plans for further development
- The second part of the content are non-infrastructure structures, such as:
  - Buildings, fences, curbs, outdoor stairs, paved surfaces, etc.

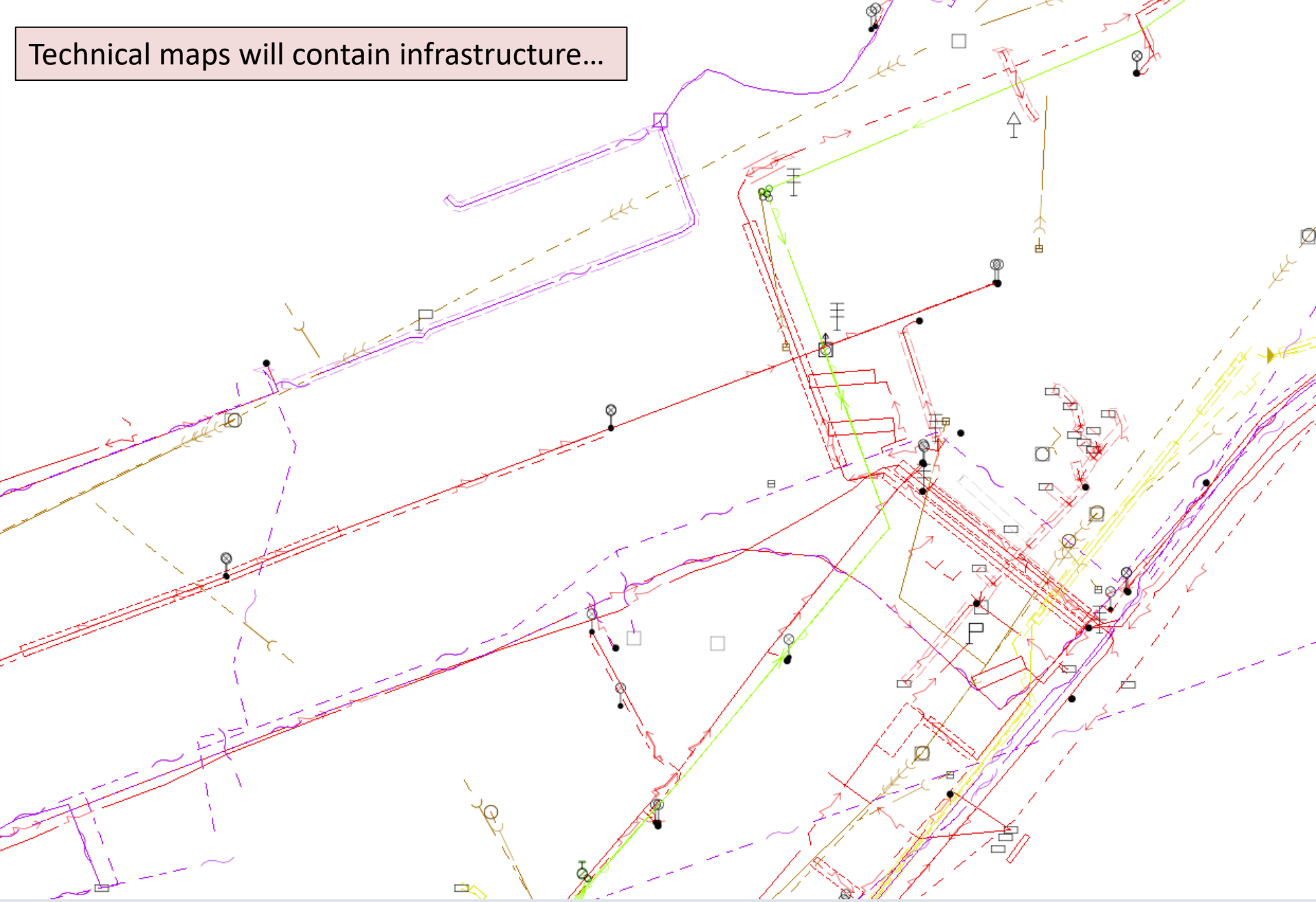
Infrastructure content

Non-infrastructure content

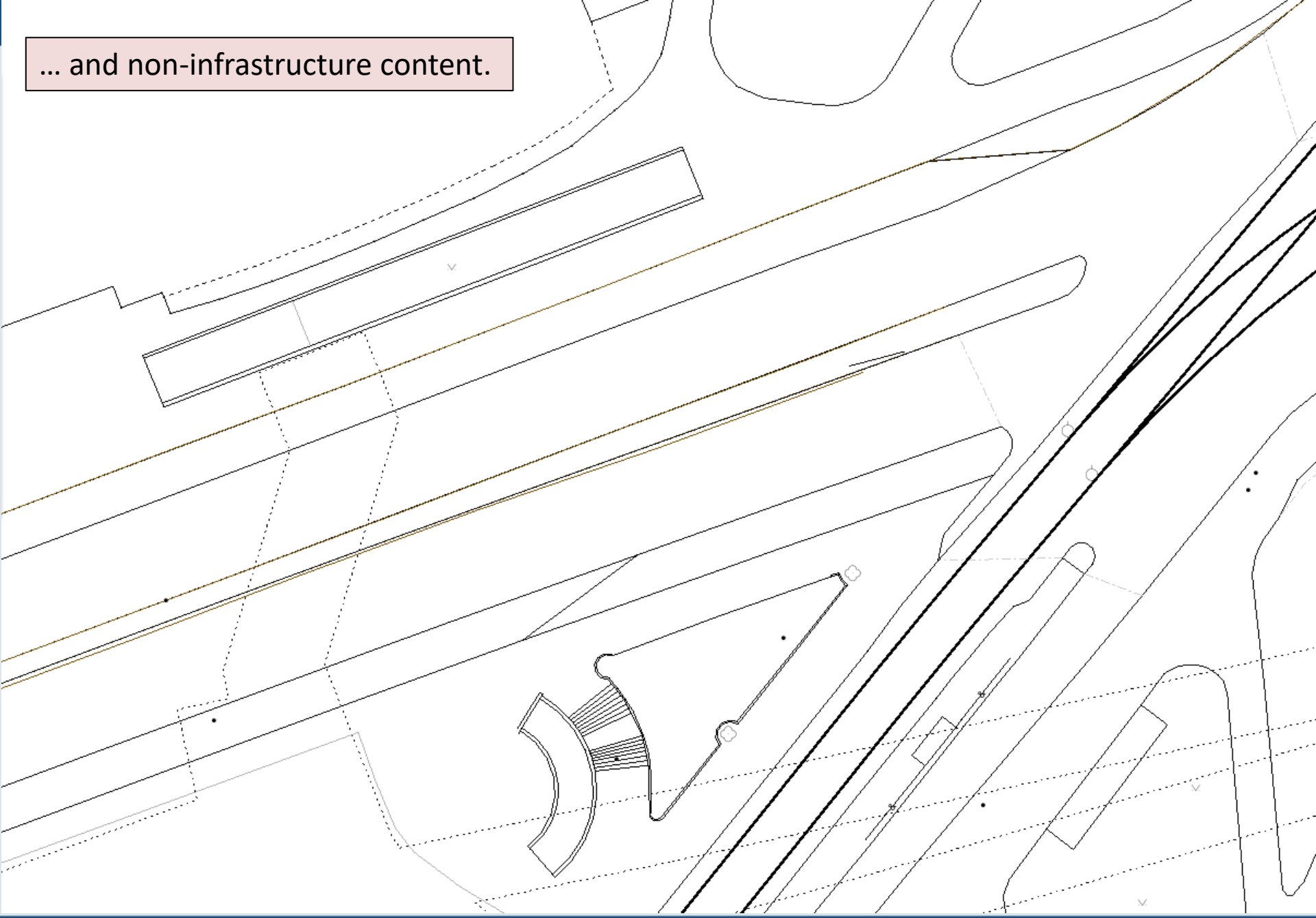




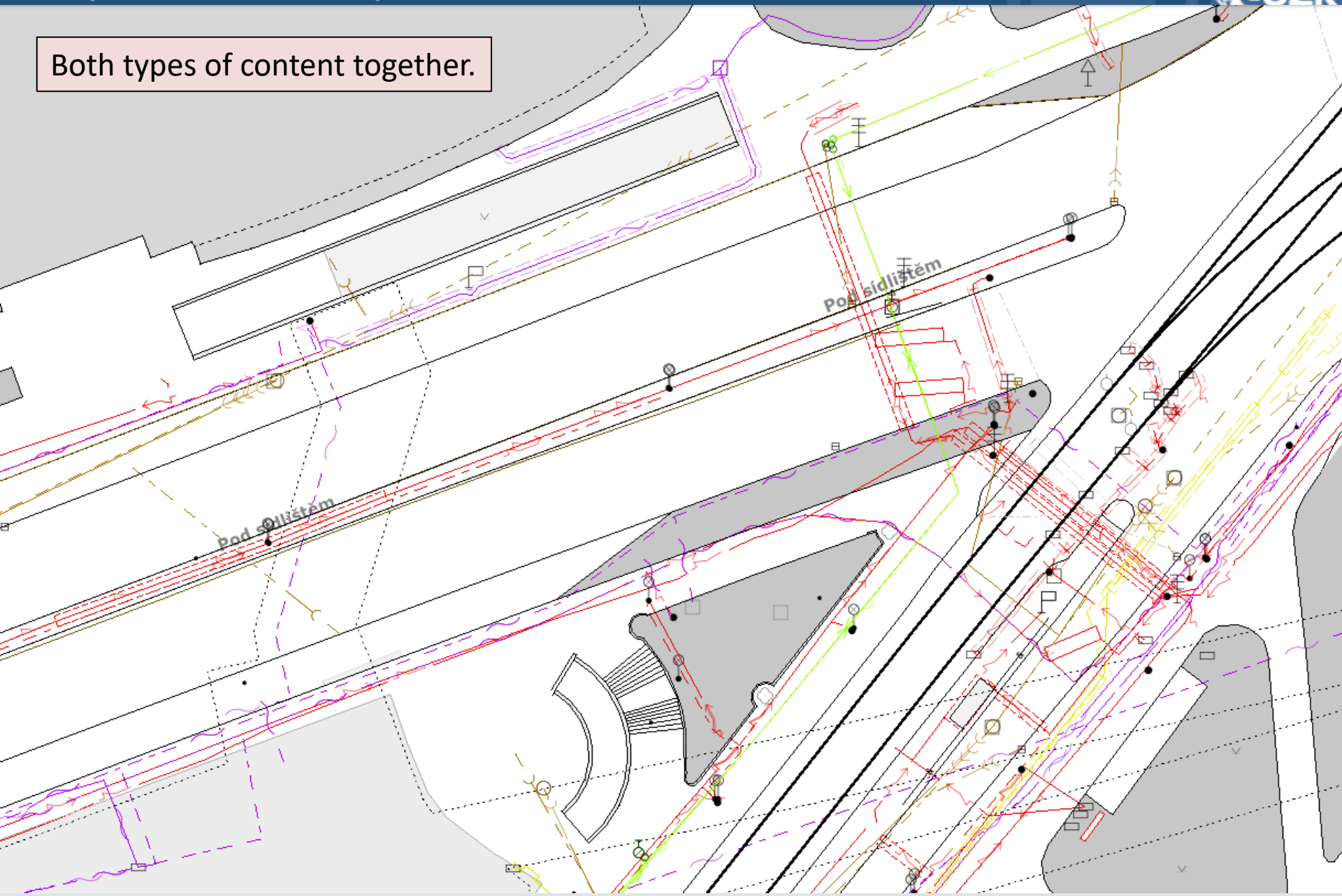
Technical maps will contain infrastructure…



… and non-infrastructure content.



Both types of content together.



Content of digital technical maps

- The content will be different from the PLRs cadastres.
- This is also our goal, but firstly we need to find, map and register the utility networks.

The most important public law restrictions

Switzerland

At the federal level, the 17 most important public law restrictions on landownership (PLRs) from eight sectors had been incorporated into the PLR Cadastre by 2020. Six more PLRs will be added by 2023.

Use of DTM

- Construction proceedings and spatial planning
- Design and investment preparation of buildings
- Property management
- Infrastructure development including high-speed networks

DTM can be useful in many more areas in the future.

Regional DTMs – principles of updating

- There is a different updating regime for the two types of data groups mentioned above.
  1. Infrastructure content
     – directly updated by infrastructure owners
  2. Non-infrastructure content
     – updated by regional authorities according to documents obtained from builders
- Editors will be responsible for the quality of data recorded into DTMs.
- Technologies for the transfer of data will be web services and a specially defined exchange format of data files.

COSMC´s umbrella system

- Functions of the umbrella information system are
  a) to be a central point for updating services,
  b) to be a central geoportal,
  c) to manage a central list of infrastructure owners and editors.

Conclusion

- By July 2024, we have to put into operation digital technical maps in Czechia.
- Initiatives underway are geodetic surveying of the infrastructure and putting information systems into operation.
- In following years, owners of infrastructure will update and improve the data content.
- DTMs will be used as an important source for the digitization process of other agendas.

MOBILNÍ
MAPOVÁNÍ
GEOVAP

Thank you for your attention.