

Evolution of the INSPIRE Directive Transposition in the Czech Republic

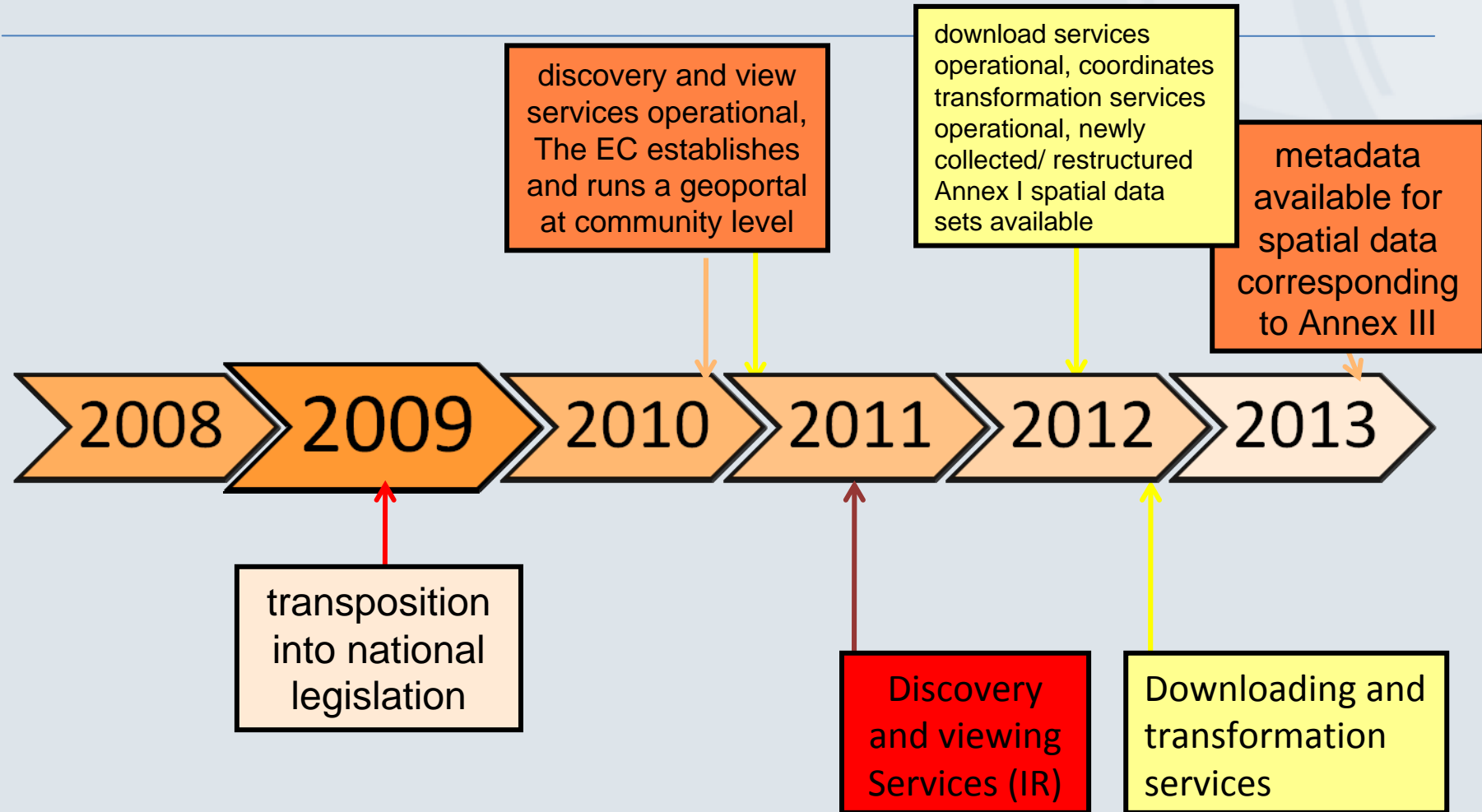
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Agenda

- Directive and its transposition to Czech legislation
- Temporal framework and content of transposition, role of the COSMC
- COSMC Activities
 - Data specification testing
 - Implementation of regulation about metadata
- Conclusions

INSPIRE Directive – where we are



Transposition Responsible Bodies

- **Head Guarantee** *The Ministry of the Environment*
 - Transposition content
 - Infrastructure management
 - The Czech Environmental Information Agency
- **Vice Guarantee** *The Ministry of the Interior*
 - Public administration implementation – eGovernment
 - Technical standardization
- **Joint working group**
 - Members from Ministries and other public administration bodies (including **COSMC** – cooperation with guarantees)

Directive Transposition in the CR

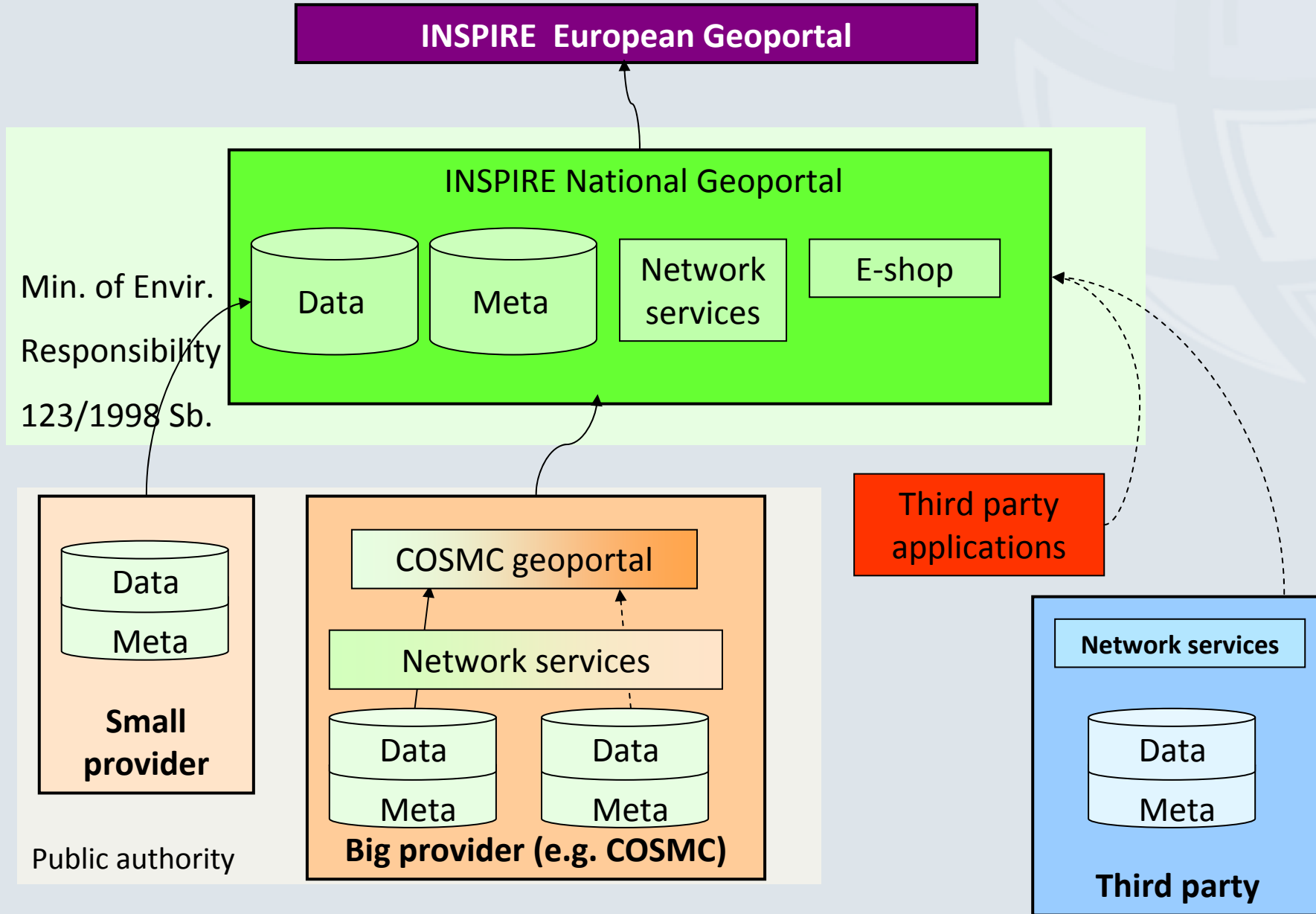
- 2007 – Preparation of the Bill
 - Government refused preparation of partial laws – case of INSPIRE
- 2008 – Amendment of existing law 123/1998 on the access to environmental information:
 - Extension of current law with amendment of conditions for data set creation and provision
 - Coordination with current rules was obliged (COSMC - Act on surveying and mapping)

Amendment of the Law 123/1998 Sb.

- 9/07 Joint working group
- 9/08 Comments within Ministries
- 11/08 Ministries comments
- 3/09 Passed in the government
- 5/09 Discussion in the Parliament

Current situation can be influenced by new elections into the Czech Parliament (4Q/09) – national assent to the Bill exists

- ? Passed in the Parliament, in the Senate, Signature of the president



Czech Office for Surveying, Mapping and Cadastre

COSMC is central administrative body both for

- Cadastre of Real Estates (incorporates also rights to real estates)
- Surveying and Mapping

Cadastral Offices – update responsibility

Land Survey Office - countrywide competence

- Geodetic control, State map series,
- ZABAGED – basic GIS data set
- administration and surveying of state borders, network of permanent GPS stations - CZEPOS, ...

COSMC National Role in INSPIRE

- COSMC provided **fundamental data** – basic spatial framework, e.g. administrative units, cadastral parcels, geographical names ...
- Legislation:
 - COSMC has to update the Act on surveying and mapping and other rules according to INSPIRE implementation
 - RUIAN – new law that COSMC has to fulfil (addresses, administrative units in common public administration registry framework)

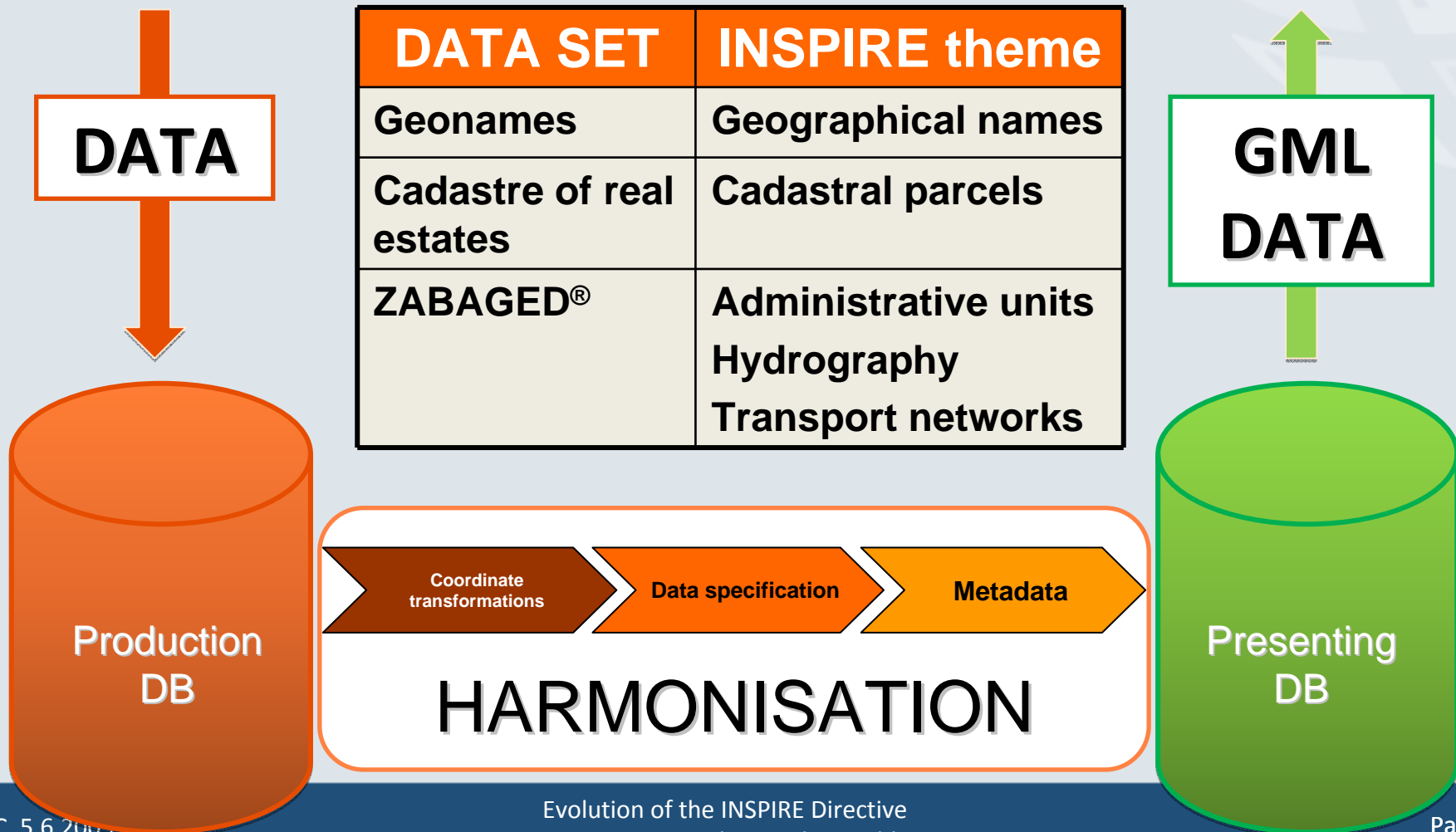
COSMC's Data according to INSPIRE Directive

| Annex I | Annex II |
|------------------------------|------------------|
| Coordinate reference systems | Elevations |
| Geographical grid systems | Orthoimagery |
| Geographical names | |
| Administrative units | Annex III |
| Addresses | Buildings |
| Cadastral parcels | Land use |
| Hydrography | |
| Transportation | |

Data Specification Testing

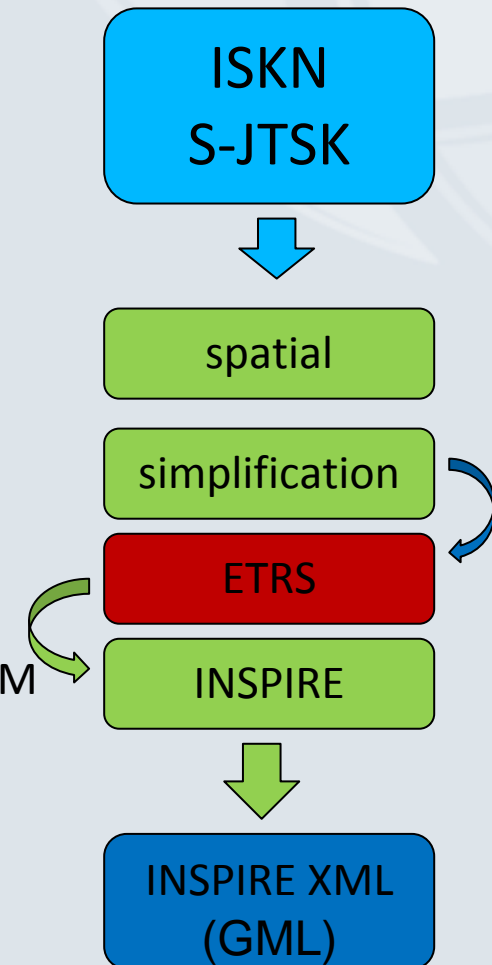
- Transformation testing of conformance with data specification
- The main goals:
 - **To identify** INSPIRE data structures and its equivalents in COSMC data sets
 - **To test** transformation „COSMC ” data sets to INSPIRE data model within transformation to ETRS
 - **To describe** results of transformation

COSMC Testing



Cadastral Parcels

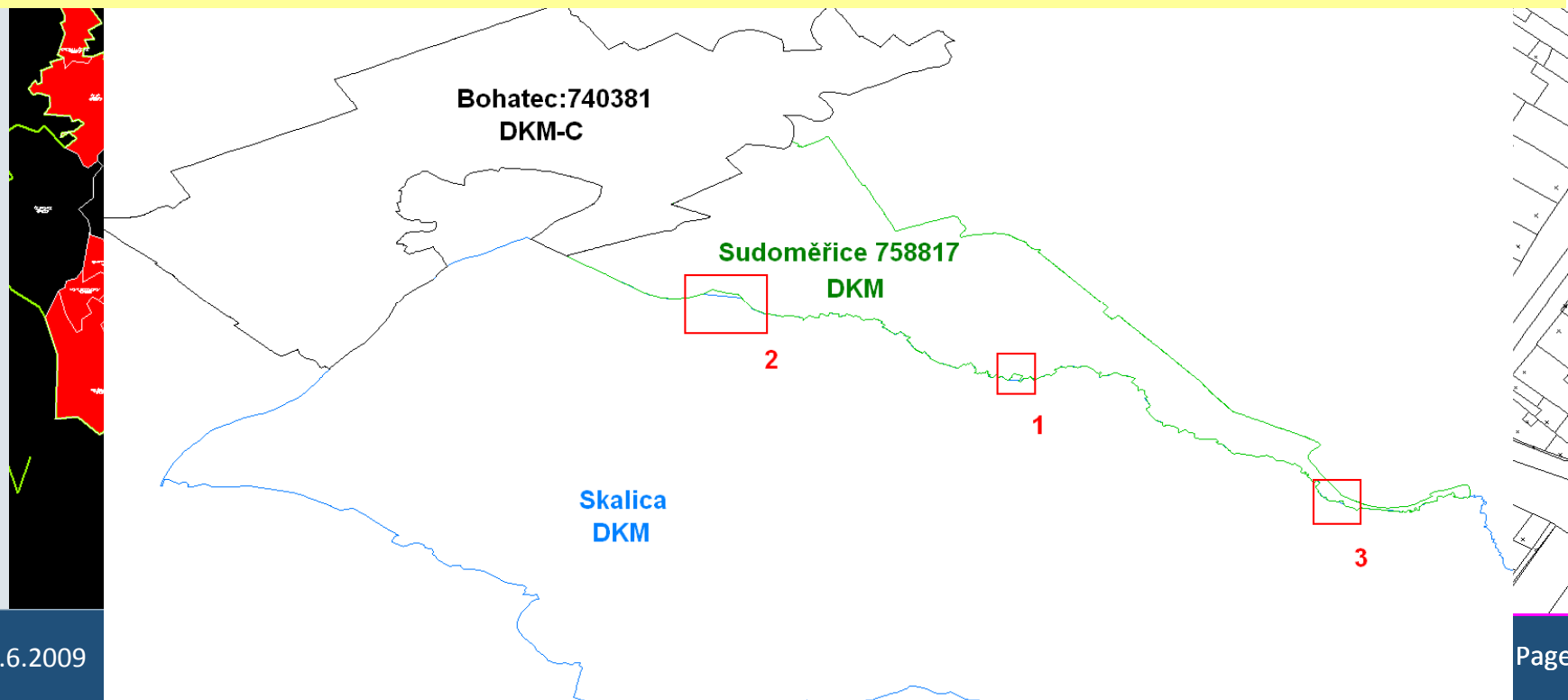
- Data model
 - Boundary as a geometry (lines)
 - Other features have links to boundary **geometry** – representation of features as polygons
- Quality elements (e.g. accuracy) could be presented with all features TM
- Required metadata are fulfilled



Cadastral Territory Tested

- Size: 65MB represents 0.03% of INSPIRE interest data.
- Area: 9km² represents 0.01% of whole territory

Comparison of borders in cooperation with Slovak partner (ÚGKK) was done here



Testing Results

- COSMC data structures identification was completed (new data model was verified - from lines of parcel boundaries to polygons-parcels)
- Data set sample is INSPIRE compliant – data are published in IR conformance
- Corrections in COSMC spatial data suggested
- Results were committed to INSPIRE JRC web page

COSMC Review

- COSMC provides view services for all data sets, most of which are free of charge
- COSMC strives to reach technical parameters of services prescribed by IR – Geoportal ETL, monitoring etc.
- For paid e-commerce services are available – „Business module“ - COSMC has to revise licensing policy for cadastral data (specify customers, outputs, possible use of GeoRM or own principles)

Geoportal COSMC

- COSMC has own geoportal that is compatible with INSPIRE and everyone can use its services (*via thin or thick web clients or web XML services*)
- Need to present COSMC data sets and services (WMS, WFS, CSW), metadata portal and discovery service on <http://geoportal.cuzk.cz>
- COSMC metadata profile, thin client, business module, links to data sets access

COSMC Experience

- COSMC has to provide many data sets (more than other stakeholders)
- COSMC has its own metadata profile
- Tested and confirmed ability to provide data in data specification conformance
- Outputs:
 - Compatibility of INSPIRE, ISO, OGC ?
 - Metadata XSD does not exist
 - Transformation problems (accuracy -> ETRS)
 - COSMC has to convert arcs of a circle and circles

General Conclusions

- The Directive will be transposed as an Amendment with right to information about environment – The Ministry of the Environment – unsuitable approach to INSPIRE transposition and implementation in the Czech Republic
- Positive role of The Ministry of the Interior – practical view on current situation, optimal access to transposition of the Directive
- There is no National metadata profile

Thank you for your attention

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