

# **Digitalization of the construction process in Lithuania. Possibilities for innovations.**

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# State enterprise Center of Registers (SECR)

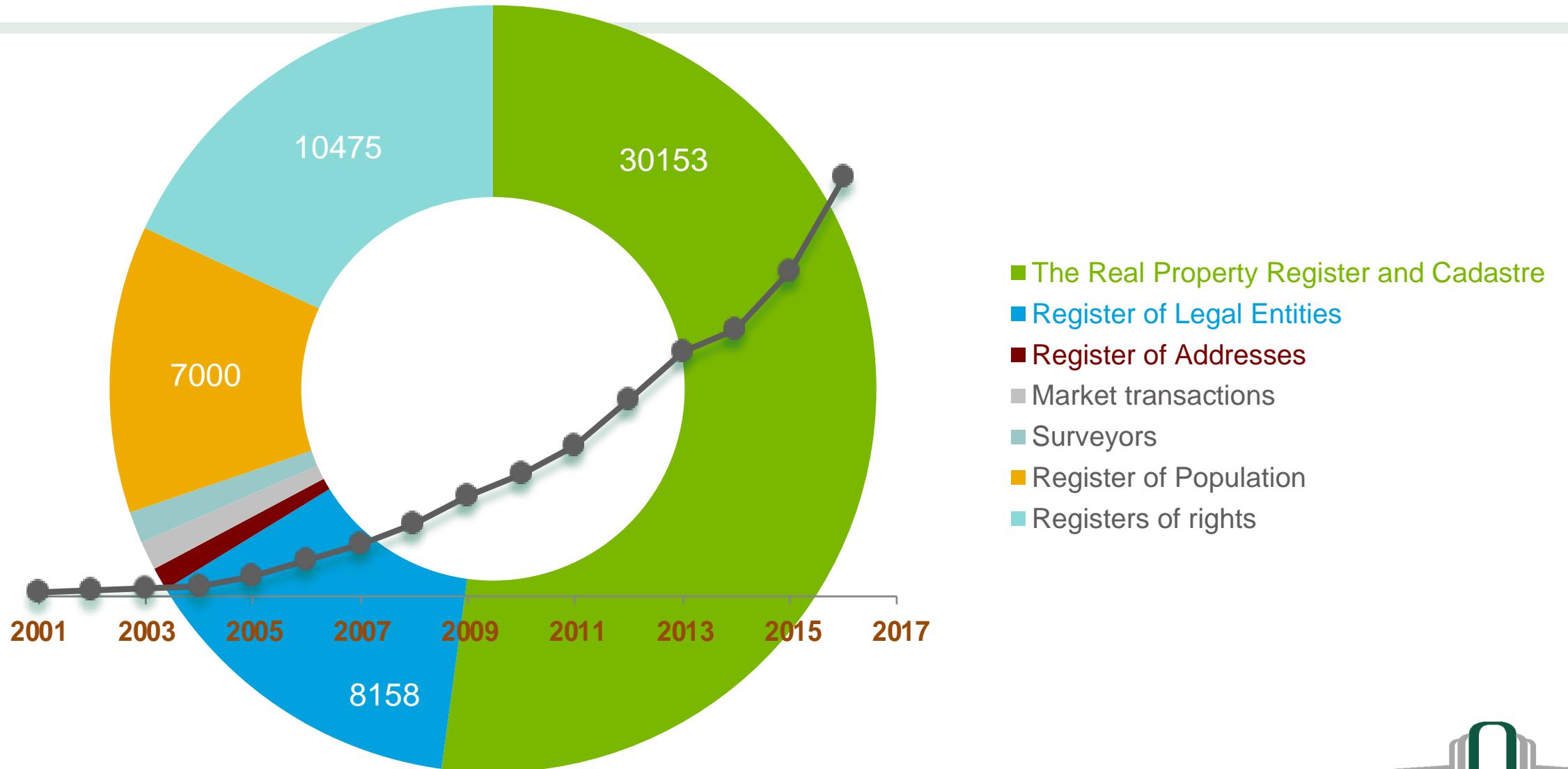
The Centre of Registers is a **keeper of base state registers of the Republic of Lithuania** providing services related to the data thereof.

Enterprise operates as **IT excellence centre of public sector**.

It **develop information systems and e-services** for other state and municipality institutions.

**Openness is a strategic goal:** open data, data availability, integrations, data re-use and cooperation.

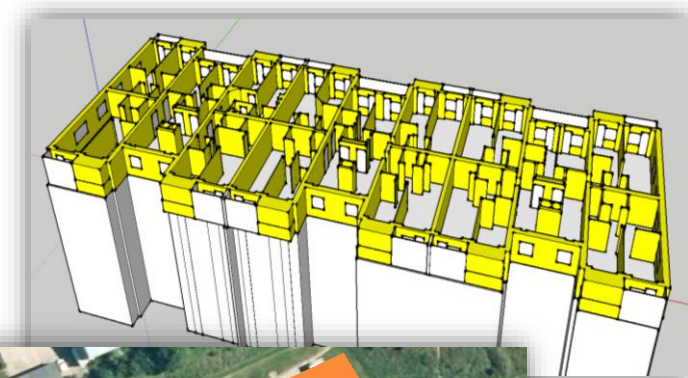
# TREND OF E-SERVICES USAGE



# FUTURE PLANS

Alvydas Janulevičius, 15-11-2017, PCC conference in Tallinn

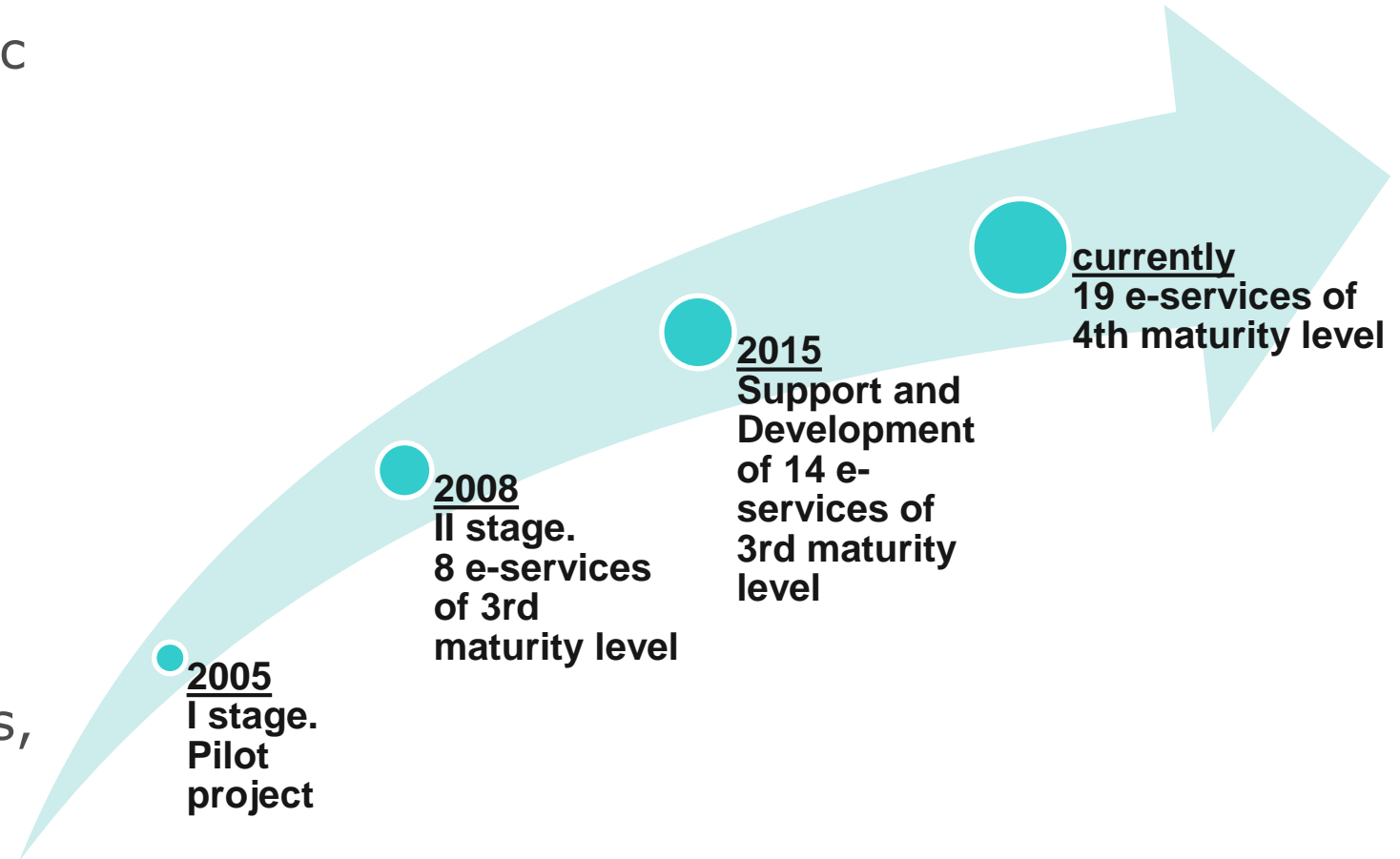
1. SECR data interfaces with IS „Infostatyba“ (e-files of buildings are delivered and decisions to form buildings as well applications to register buildings are returned using interface).
2. Transition from 2D to 3D cadaster.
3. One e-file of cadastral data of land parcels and buildings (gradual merge of the Real Property Register sub-systems Surveyor and GeoSurveyor).



# DIGITALIZATION OF THE CONSTRUCTION PROCESS

IS „Infostatyba“

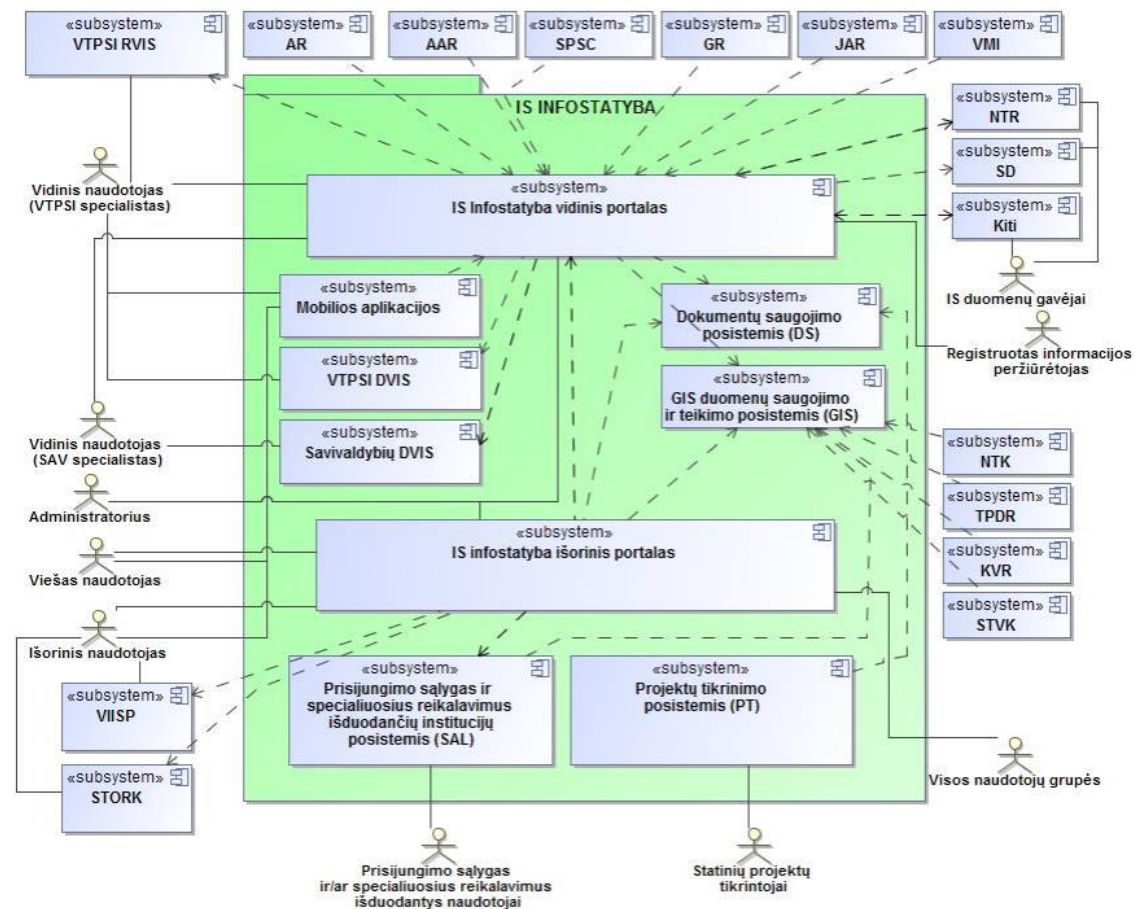
- provide e-services to the public
- collect, store and process data on the state of construction in Lithuania
- Provide data to state institutions to fulfill statutory functions
- Provide data to state information systems, registries, legal persons and residents



# DIGITALIZATION OF THE CONSTRUCTION PROCESS

IS „Infostatyba“. The aims of the current project.

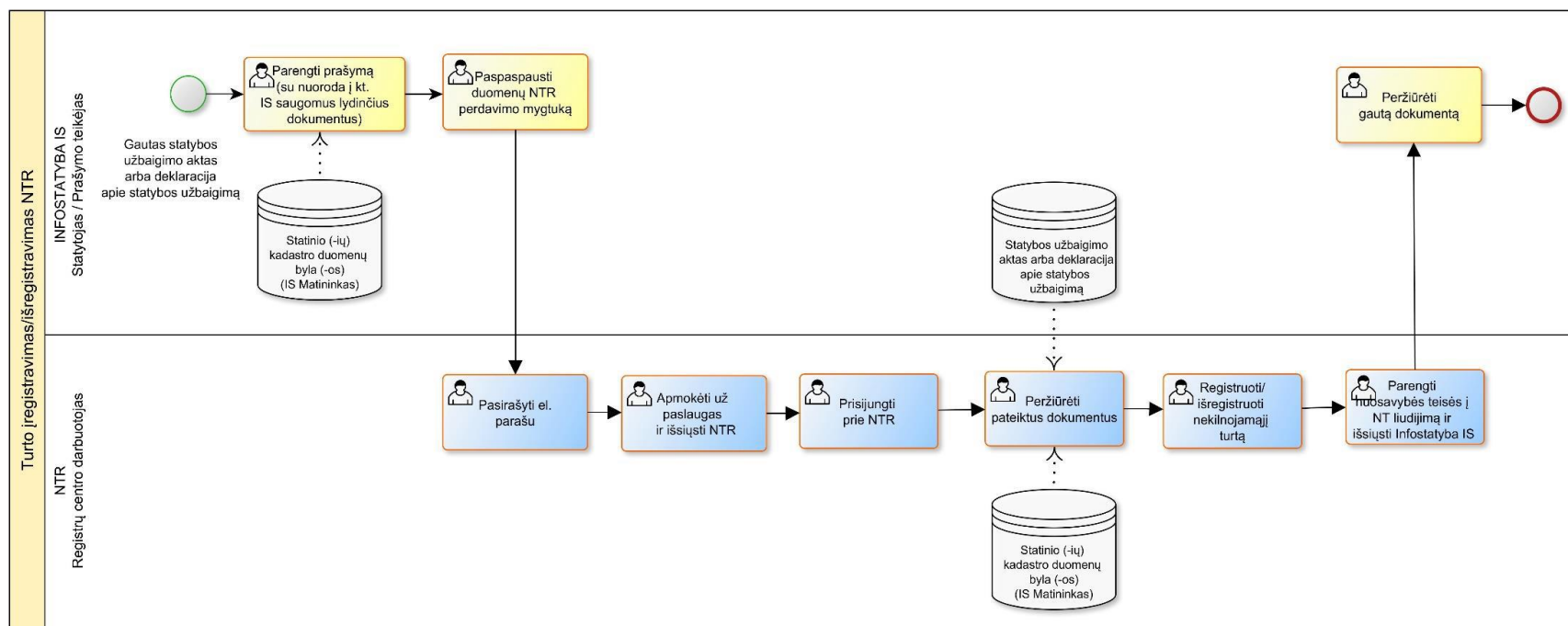
- Fully electronic services and processes
- Use of innovative technologies
- „One portal“ for all construction related e-services
- A wizard that guides the user through the process
- Cross-institutional cooperation:
  - State Inspectorate for Territorial Planning and Construction
  - State service for protected areas
  - Department of cultural heritage
  - Municipalities
  - Utility companies
  - Centre of Registers
  - And many more...



# DIGITALIZATION OF THE CONSTRUCTION PROCESS

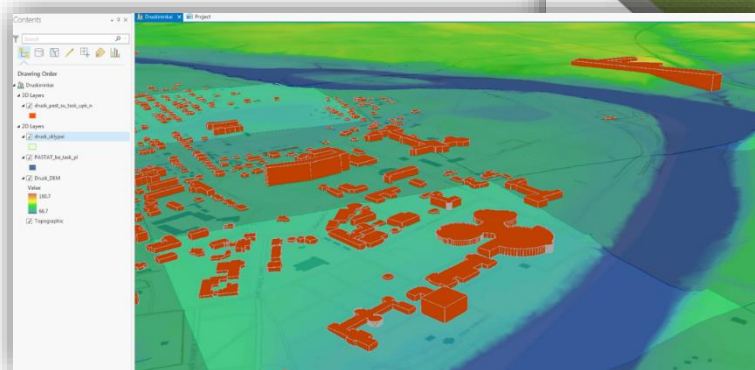
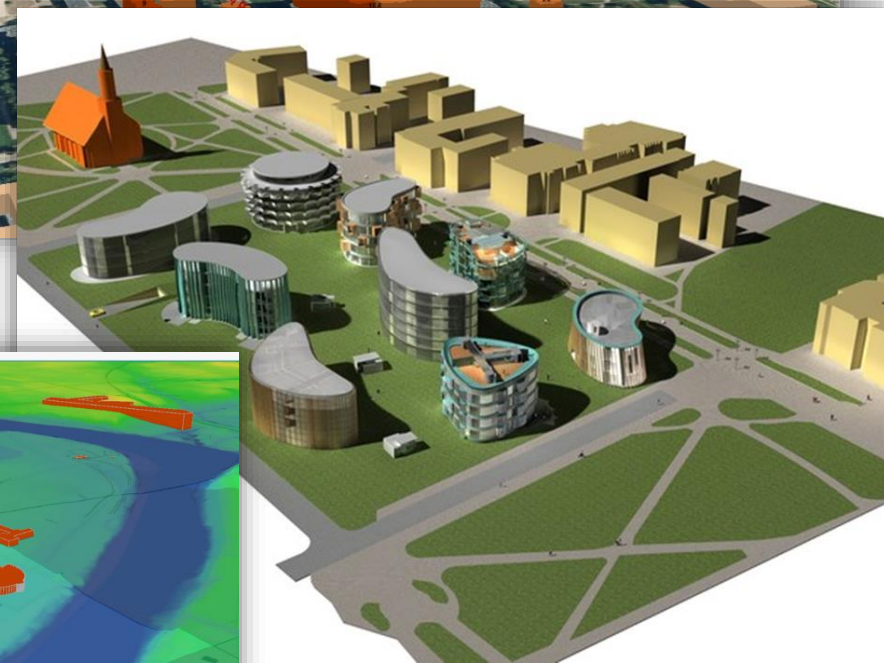
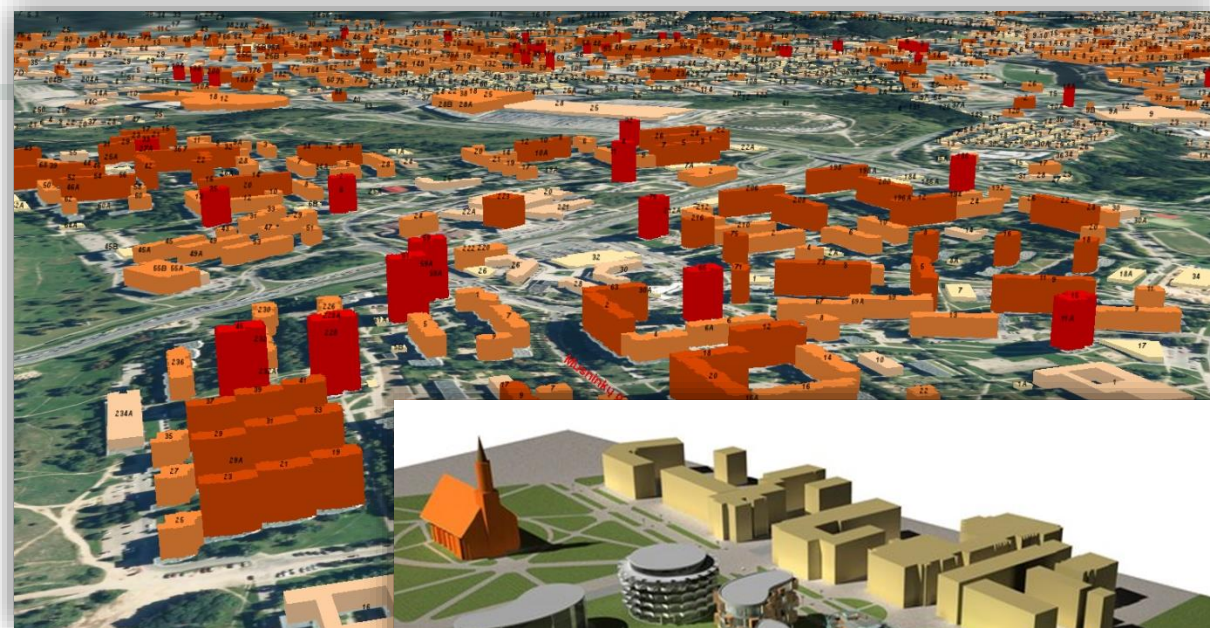
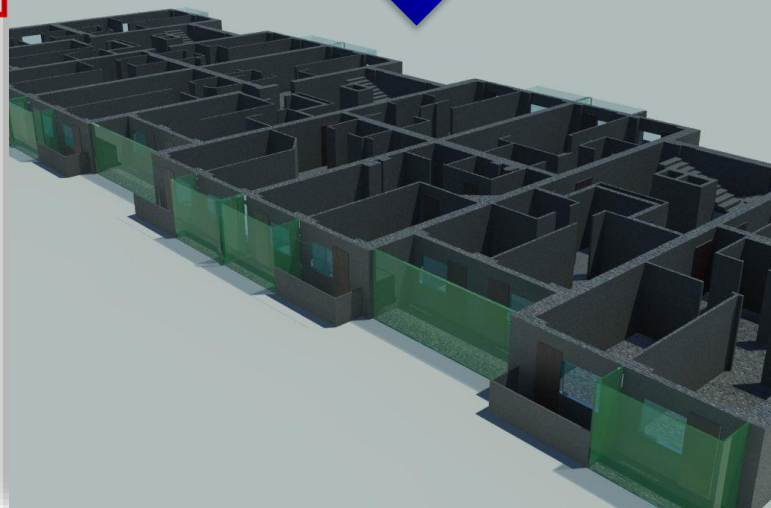
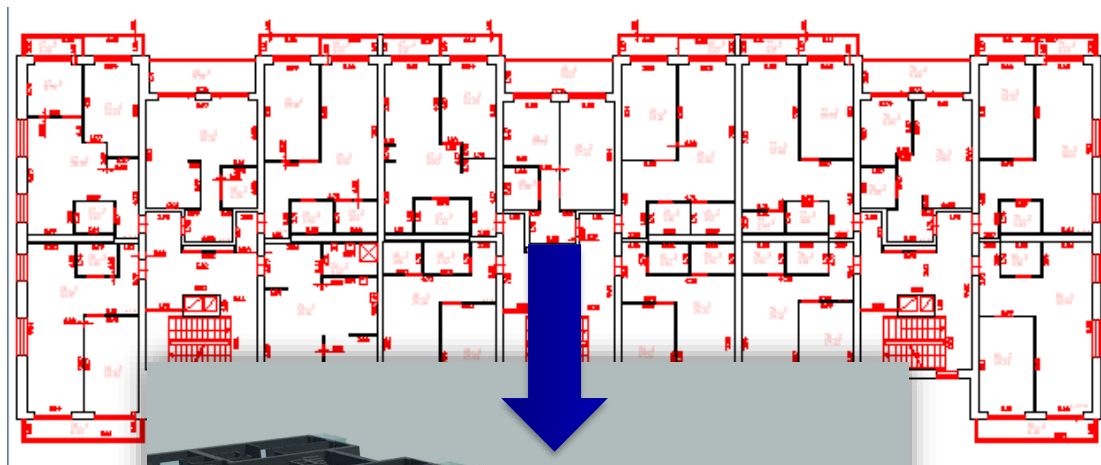
## IS „Infostatyba“ and SECR data and IS integrations

eFiles of buildings are delivered to IS „InfoStatyba“ and decisions to form buildings as well applications to register buildings are returned to SECR using interface.



# TRANSITION FROM 2D TO 3D CADASTER

3D initiatives started in 2013





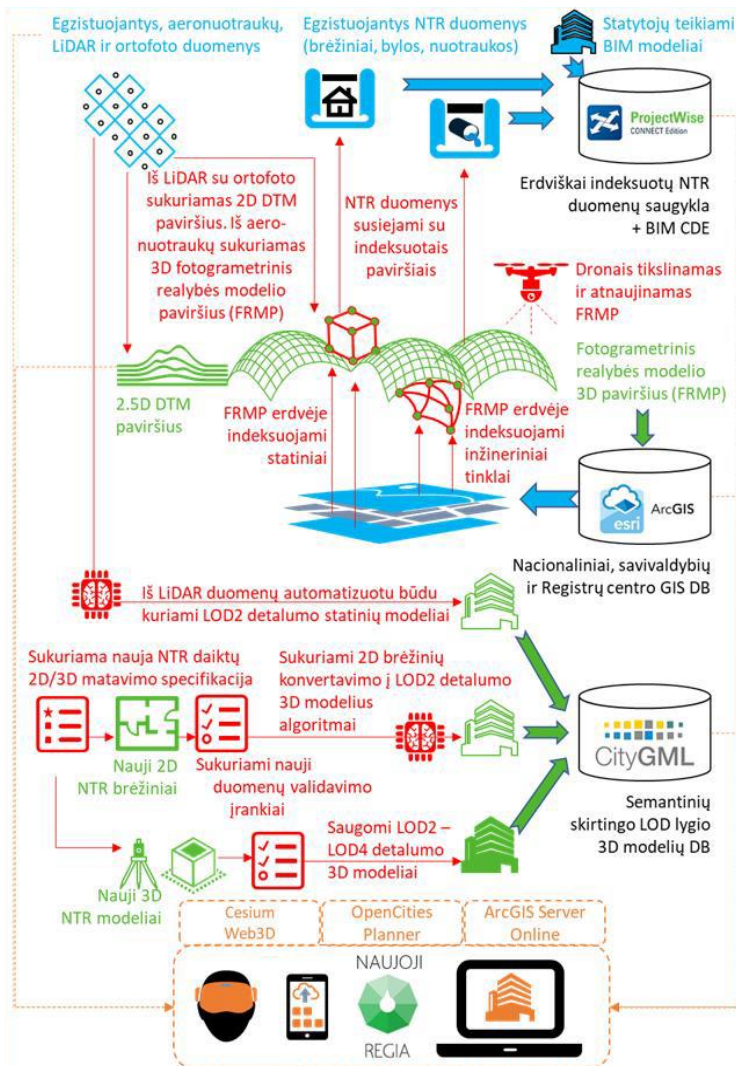
# TRANSITION FROM 2D TO 3D CADASTER

## Pre-sales procurement

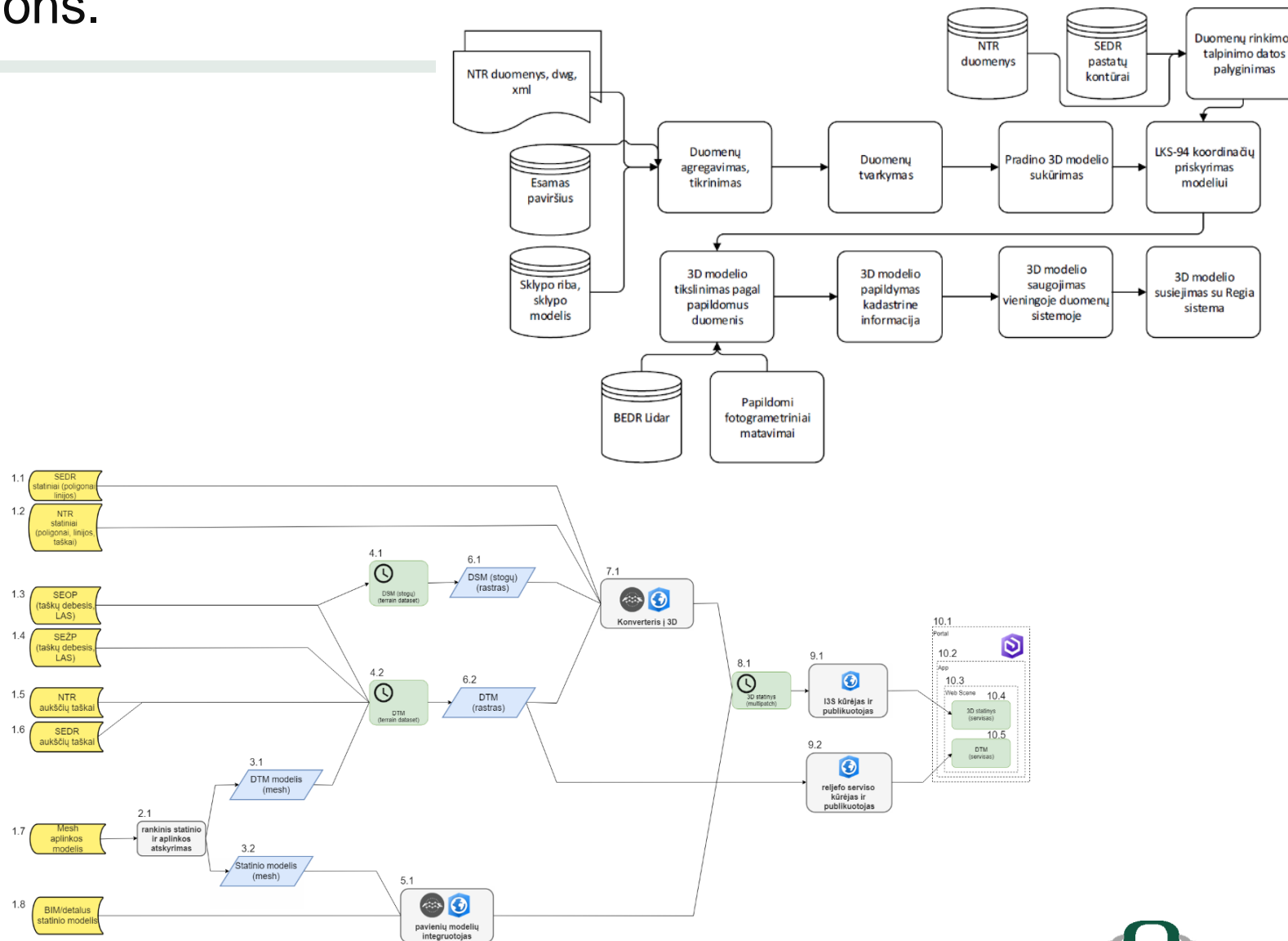
- Evaluation of possibilities to **transform available 2D data managed by SECR to 3D models**
- Identification of **third-party data, relevant to 3D model development** and evaluation of possibilities to use it
- 3D terrain, surface and underground infrastructure data **integration into a single 3D model**
- Development of data model and **process to be able to refine the model in parts**
- Collection and display of **3D historical data**
- **Evaluation of the User Interface** for 3D information usage
- Case studies, tools for **spatial analysis and modeling**
- **Technology assessment** for LiDAR, BIM, etc.
- **Evaluation of the legal environment**

# 3D CADASTER

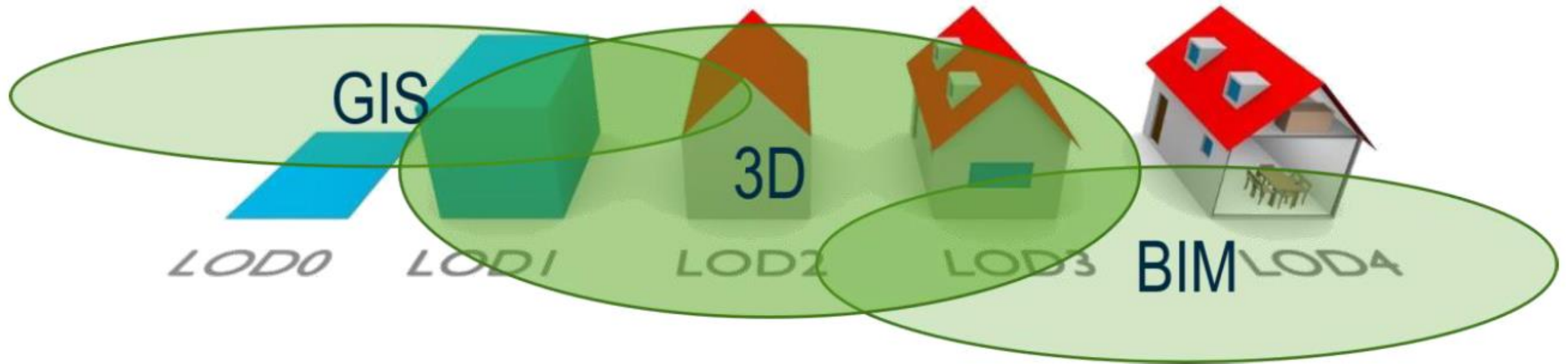
## 1st. stage results. Conceptions.



Pastato modelio kūrimo, saugojimo, valdymo proceso schema pateikiama 12 pav.:



# BUILDING INFORMATION MODELING (BIM)





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