Digital Geospatial Public Services in Latvia

CHALLENGES AND SOLUTIONS BY LATVIAN GIS ASSOCIATION AND ITS MEMBERS





Maris Kuzmins

Latvian GIS Association JSC Latvia's State Forests





Latvian GIS Association

LATGIS

Established in 2005, joined the EUROGI in 2016

The main objective of the organization is to unite Latvian GIS users and developers that develop, provide software, produce and use geospatial information



- to promote GIS technologies and it's use in Latvia
- identify geospatial information technology user needs
- develop educational programs related to geospatial information and technologies
- represent association's member and overall industry interests in Latvia and in an international level















Most active policy makers from the industry are members of the association

Availability and Accessibility of Geospatial Data

CHALLENGES

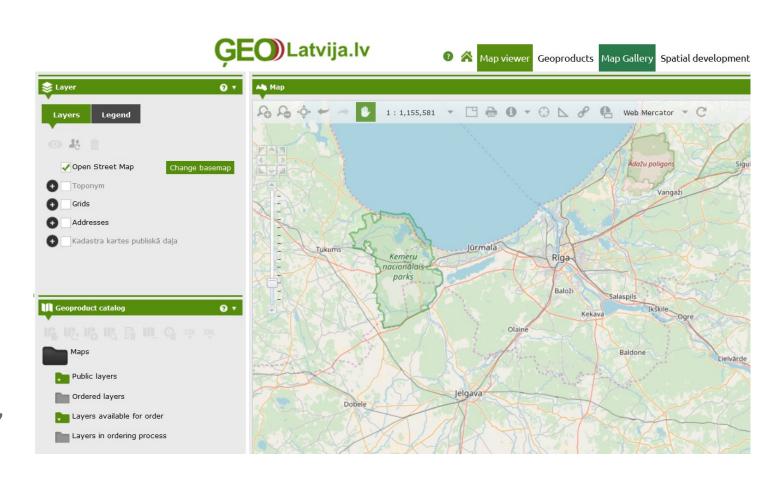
Various data providers, providing data on different terms and through different access points

Data licensing terms are not always clear, they can be interpreted

The Latvia's Geoportal is not used by all data providers

Latvia's Open Data Portal mostly contains non-spatial data

Only a few data sets are available for free, without any fee, rest are quite expensive



JSC Latvia's State Forests

NECESSITY OF GEOSPATIAL DATA

Forest owner's data

Forest compartments

Fells

Forestry works

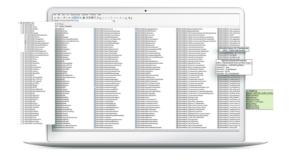
Land units

Land lease agreements

Non-forest lands

Hunting lease territories

etc.



LVM GEO Database



LVM GEO Mobile Sync

MS Windows application
Interface adapted for tablets
Data viewing, editing and collecting offline
Data synchronization
Inventory forms



LVM GEO Web

Web browser application
Geospatial and tabular data editing
Various backgournd services
User friendly interface
Unlimited number of users



State Forest Service

State Land Service

Nature Conservation Agency

Latvian Geospatial Information Agency

Drainage Cadaster

Rural Support Service

Other forest owner data

etc.



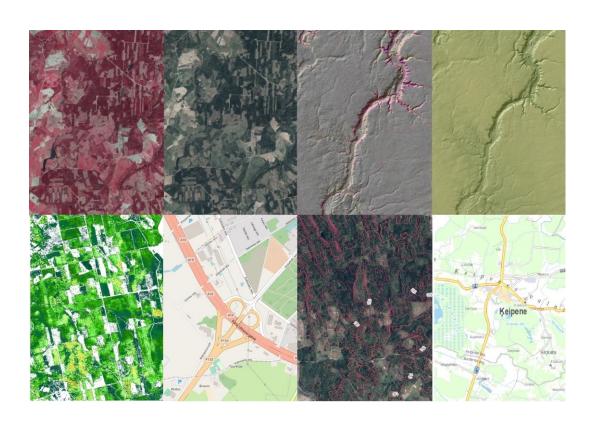
LVM GEO Mobile

Android and iOS application Mobile work orders Online and offline maps Navigation



Open and Accessible

DATA AND SERVICES



Services

- Background maps (OpenStreetMap, Baltic maps, Forest
- Ortophoto un infrared specter orthophotos
- LIDAR digita eleveation model, slope models
- LIDAR vegetation height and density models
- Topographic maps

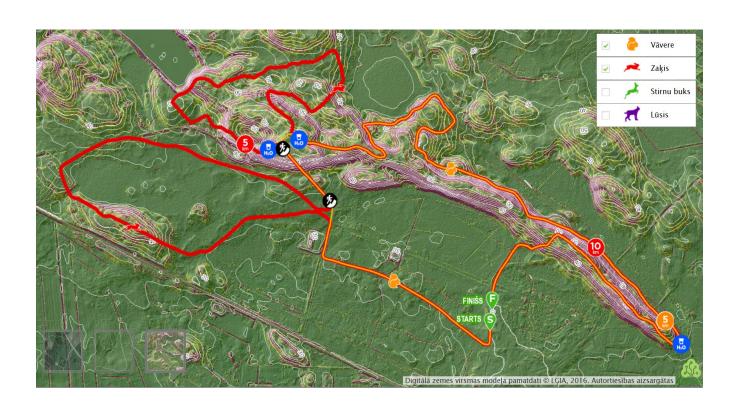
Data

- Forest owner data (covering more ¼ of Latvia)
- Izolines
- Forest roads, bridges, forest damage risk territories, etc.
- ...



Trail Run Series «Roebuck»

PUBLIC SPORTING EVENT



Largest trail running event in Latvia

Series of 7 trail runs throughout the summer

More than 4000 runners in each race

Distances available in Web and Mobile apps:

- Orthophotos
- LIDAR elevation models
- Slopes
- Isolines
- Background maps



Drainage Cadaster

REAL ESTATE PROPERTIES OF MINISTRY OF AGRICULTURE



Manages and maintains drainage cadaster of Latvia

Active development of geospatial database of drainage data

Approximately 55% of country has been covered

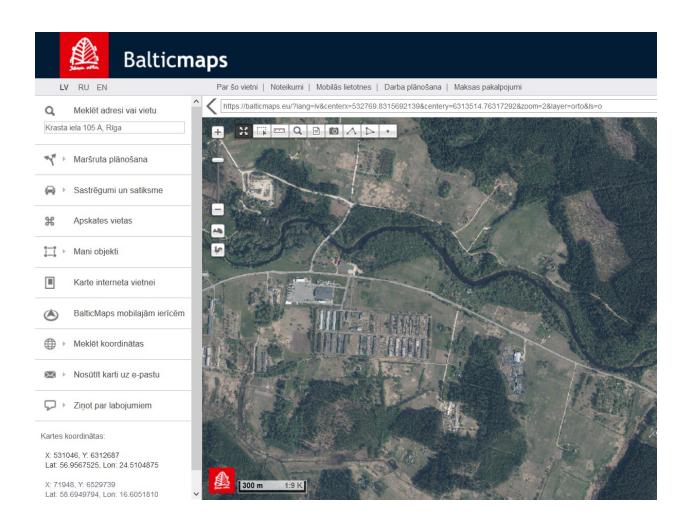
Didn't have resources to provide the DEM model for creating and maintaing the drainage cadaster database

Availablity of LIDAR DEM with 1m resolution has significantly improved the process and quality of the data input



Private Cartography Company

KARSU IZDEVNIECIBA JANA SETA LTD



The leading map makers and publishers in the Baltics

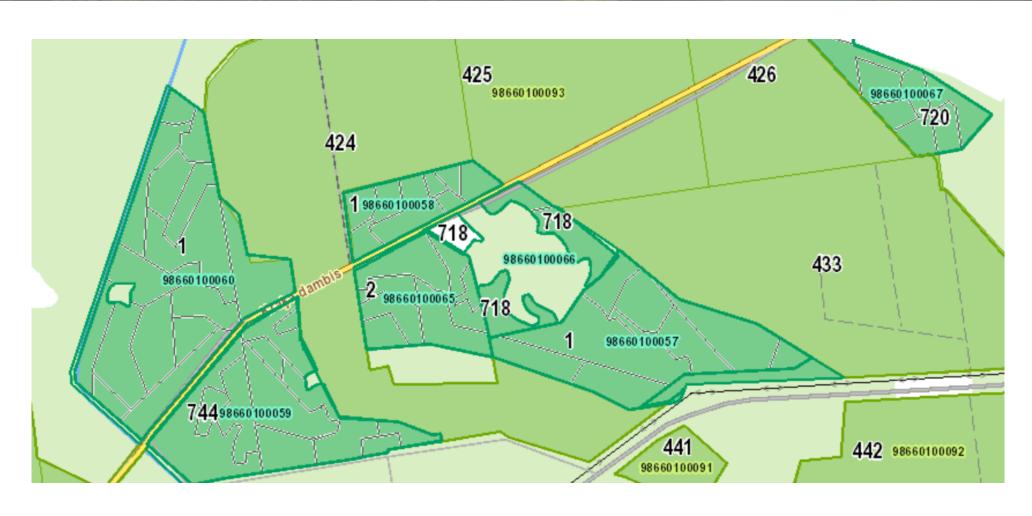
Provides the most detailed base map services in the country

Used to buy orthophoto maps, now use the open data service, provided by Latvia's State Forests



Forest Owner Data

COMMUNICATION AND PLANNING







Latvian GIT Conference

7th of December 2018

Largest event dedicated to geospatial information technologies in the Baltics

The goal is to introduce professionals and policy makers with the latest trends in the industry, geospatial data access and usage, international and interdisciplinary projects

The number of attendees up to 400

Keynote speech by the Google's Geospatial Technologist Ed Parsons











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