



Latvian Geospatial
Information Agency

The Latvian experience in light of the opening of data to all users

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Motivation

Events

- 2012 - The first services for web mapping have been published since 2012 for historical data sets older than 15 years (Copyright law)
- 2013 - Decision of the Cabinet of Ministers that geospatial information reference data for local governments and state institutions is free of charge
- 2017 – The Latvian open data portal data.gov.lv is launched
- 2018 - After the decision of the Cabinet of Ministers and receipt of the necessary budget, the LGIA data are opened

Motivation

- Reduces administrative costs, no need to prepare and administer license agreements.
- Data reusability, the more free data, the wider the range of knowledgeable users. **Transition from "Geospatial data for professionals" to "Geospatial data for the public";**
- Open data promotes economic growth: more and more small businesses are developing, obtaining useful information from the open data;
- Open data help to do more precise conclusions and make better decisions, as more stakeholders have the opportunity to verify the facts;





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Technological and security challenges (1)

Data opening

Problems encountered while opening data:

- Volumes of geospatial data and possibilities of their storage for publication on the State Geoportal:
 - Allowed user upload amount for data - 100Mb;
 - With data delivery to the geoportal holder 1 Gb
- but the amount of open data to be published by LGIA is > 25 Tb;

Solution - data placement in the Data Center of the Latvian State Radio and Television Center;





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**Data
Quality**

Technological and security challenges (2) Open data

Risks:

- Potential privacy threat.
- After opening the data, situations may arise where they no longer reflect the real situation.
- ...Thereby, data quality issues;
- Relatively small circle of specialists who are able to work with open data;
- Currently, no one does not speak about the dangers to society and the National security that can cause unevaluated and hastily opening data.



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Technological and security challenges (3) IT security



- Providing secure, fast, high-quality data transmission channels between geospatial data holders and data publishing portals (VPN or other protection);
- As there are no nationally agreed quality requirements for data transmission channels, the quality requirements set out in the regulations accompanying the INSPIRE Directive should be used as a basis. At present, there are no reports on the results of the performance testing of the State Unified Geoportal, nor is there any information or such tests have been performed;
- Data storage and providing access security and protection against possible cyber attacks;
- Must be ensured that the data transmitted or received are the same that have not been modified or otherwise affected by the source of the information and the transmission;
- Need to have confidence in what software you are using. We must be very careful about programs created in Russia, China and some other countries!





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Conclusions (1)



When publishing open data, as well as taking into account the current geopolitical situation, the information holder must assess:

- The impact of data disclosure on society;
- The impact of data disclosure on individual, public and national security;
- Integrity of personal data and life;
- The use of data as opportunities in the commission of potential crimes;

Based on the evaluation, a decision is made to open the data in one of the following ways:

- Publication on open data portals or geoportals as free;
- Publishing on geolativija.lv with a license for the end user and 0EUR data fee;
- Publication in the data holder's unit, with registration of the user and the purposes for which the data are used.

Recommendations for data protection can be provided by National Security Authorities



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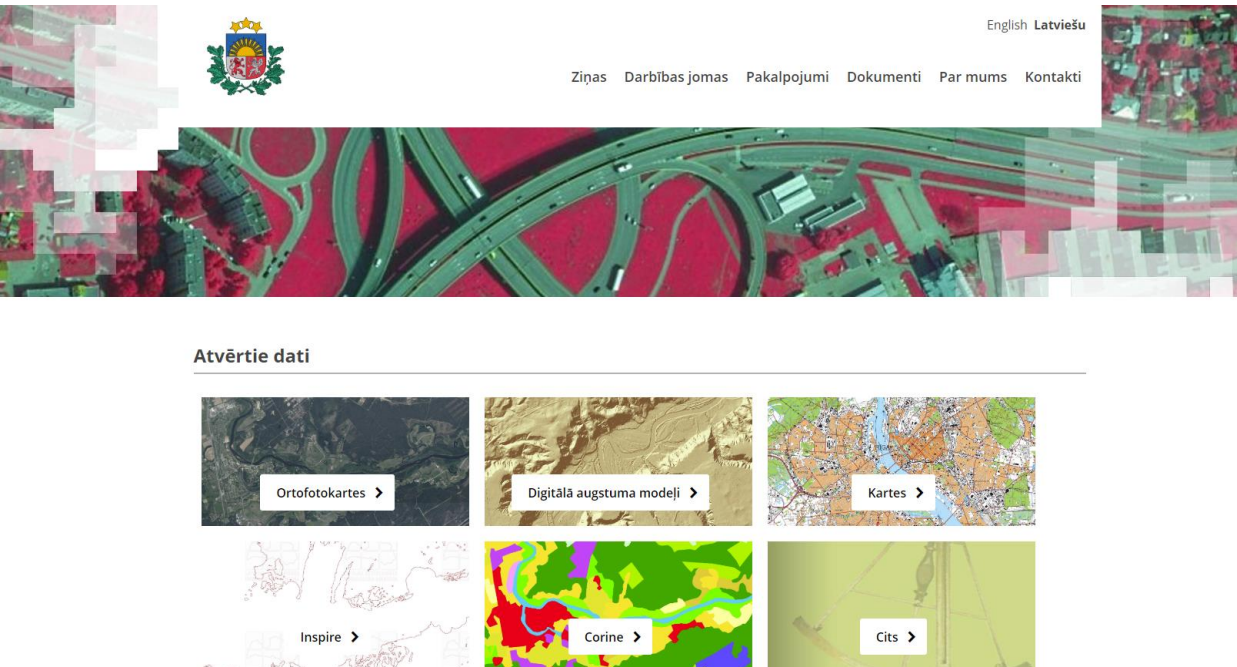
Conclusions (2)

- If we chose to use an open data be shure that:
 - The data source is secure;
 - **A data source is authoritative;**
- The exchange of data between different systems must take place in formats that do not lead to different interpretations of the data, do not lose their original meaning, content and are not distorted.
Data formats:
 - The Ministry of Environmental Protection and Regional Development (MEPRD) Open Data Portal and Open Data Community (IT) only talks about machine-readable data in the following formats CSV, JSON, XML ...;
 - Geospatial data popular with the GIS community are not mentioned anywhere in Latvian regulatory enactments and technical guidelines, therefore the ones adopted in the INSPIRE Directive and defined by the OGC standards must be taken as a basis;

Definition. A data source is authoritative if it is a source that everyone else relies on as official data.



Open data



Geographics names

Geodetic network data

Digital elevation models:

- LIDAR data;
- Digital terrain model 20m GRID;

Orthophotos:

- 1994 – 1999 (1 cycle);
- 2003 – 2005 (2 cycle);
- 2016 – 2018 (6 cycle);
- 1997 – 2002 city
orthophotos

Maps:

- Overview map 1:250 000;
- Topographics map 1:50000;
- Satellite map 1:50000;

<https://www.lgia.gov.lv/lv/atvertie-dati>

State geoportal: <https://geolatvija.lv/geo/#/>

State open data portal: <https://data.gov.lv/lv>



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Thank you for your attention!

