



Ministry of Environmental
Protection and Regional
Development
Republic of Latvia



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Protection and Regional
Development
Republic of Latvia

Implementation of the INSPIRE Directive in Latvia

Bilateral meeting, DG Enviro, 20th September 2019, Brussels

Deklasificēšanas pamatojums: KEM 13.01.2025. vēstule Nr.1-13/91



1. The *status quo* of priority data set

Answers to question «What is the latest status and the planning to implement the obligations of the INSPIRE Directive (metadata, services and availability through the EU geoportal) per priority data set? Please complete the enclosed template.»



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National User-System Interface

VISS – Valsts informācijas sistēmu savietotājs

The screenshot shows the VISS interface with the 'Metadatu katalogs' (Metadata catalog) section active. The search results show 108 records. The first record is 'Atkritumu izgāztnes (poligoni)' (Waste disposal sites (polygons)). The second record is 'Plūdes riska zonas' (Flood risk zones). The third record is 'Vides piesārņojuma ziņošanas vienības (troksnis)' (Environmental pollution reporting units (noise)). The fourth record is 'Latvijas pazemes ūdeņu rajonu apgabali (INSPIRE)' (Latvian underground water area boundaries (INSPIRE)). The fifth record is 'Protected species distribution (data)'.

INSPIRE data – 108 records

The screenshot shows the VISS interface with the 'Metadatu katalogs' (Metadata catalog) section active. The search results show 120 records. The first record is 'INSPIRE_View_GE_HG_PUO'. The second record is 'Protected Sites (Inspire Feature Download)'. The third record is 'Aizsargājamās dabas teritorijas (INSPIRE lejupielādes pakalpojums)' (Protected natural areas (INSPIRE download service)).

INSPIRE data – 120 records



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108

Metadata
records

Last successful harvest: 107

11

Downloadable
Data Sets

Last successful harvest: 8

27

Viewable
Data Sets

Last successful harvest: 20

22

Metadata
records

Last successful harvest: 21

2

Downloadable
Data Sets

Last successful harvest: 2

9

Viewable
Data Sets

Last successful harvest: 3

INSPIRE Geoportal – LV statistics on records 17th September 2019

Priority Data Sets - EU & EFTA Country overview



Show:

Downloadable Viewable

INSPIRE Geoportal Data Set Statistics

1426

Metadata
records

589

Downloadable
Data Sets

Select a COUNTRY

Austria	89 76 84	Finland	16 15 14	Latvia	22 2 9	Portugal	134 28 72
Belgium	124 66 63	France	93 1 1	Liechtenstein	0 0 0	Romania	21 10 10
Bulgaria	148 4 3	Germany	76 23 47	Lithuania	74 63 3	Slovakia	52 10 11
Croatia	15 1 3	Greece	54 2 54	Luxembourg	61 59 56	Slovenia	9 6 0
Cyprus	5 0 0	Hungary	18 2 2	Malta	54 54 54	Spain	84 83 84
Czech Republic	40 13 38	Iceland	2 2 0	Netherlands	54 34 34	Sweden	34 11 25
Denmark	55 20 15	Ireland	18 0 0	Norway	14 1 1	Switzerland	0 0 0
Estonia	21 2 1	Italy	27 1 9	Poland	12 0 3	United Kingdom	0 0 0



Practical solutions already launched regarding priority data sets

Latvian Environment, Geology and Meteorology Centre –
owner of almost all priority data sets

Identified problems with until approval of EU Fund projects:

- Financial and human resources were a major challenge;
- Existing data formats do not meet INSPIRE requirements;
- There is no digitised information available for individual datasets or only partially available in digital format;
- Object coordinate data is maintained in a number of systems, not used together;
- Information is maintained in the form of separate files, in different formats.



Provision and development of INSPIRE ICT infrastructure – the first project



Project «Development and improvement of information systems for geospatial data and flood data of the Daugava basin» is implemented with European Regional Development Fund financing, project promoter LEGMC

Main activities of the project (I):

- to establish a central LEGMC geospatial data information system in which it would be possible to collect all geospatial information at the disposal of the LEGMC, ensure that this information is used in the context of INSPIRE directive,
- at least nine data sets transformed and published in accordance with INSPIRE Directive specifications.



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Provision and development of INSPIRE ICT infrastructure – the first project



Main activities of the project (II):

- to develop the subsystem of the Subterranean Depths;
- to develop Flood risk information system for Daugava's basin district.

Total budget: 1 100 000,00 EUR;

Implementing period: April 27th 2018 - December 26, 2020; however deadline for data sets in accordance with requirements of INSPIRE Directive – December 31, 2019)



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Provision and development of INSPIRE ICT infrastructure – the second project



Project «Improvement of National Environmental Monitoring and Other Environmental Data Processing and Storage Infrastructure» is implemented with Cohesion Fund financing, project promoter LEGMC

Main activities of the project (I):

- To prepare data available to the Latvian Environment, Geology and Meteorology Centre for re-use in accordance with the requirements of the INSPIRE directive (25 data sets);
- to improve the capacity of the data centre



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Provision and development of INSPIRE ICT infrastructure – the second project



Main activities of the project (II):

- updating of transformed data sets, ensuring the maintenance of view and download services for data sets in accordance with INSPIRE directive, including data sets prepared in ERDF project;
- to improve national PRTR register and subsystem of the river basin management

Total budget: 3 350 000,00 EUR;

Implementing period: December 14, 2018 - December 13, 2022;
however deadline for data sets in accordance with requirements of INSPIRE Directive – December 31, 2019)



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2. National Geoportal

Answers to question «Can you demonstrate to us the National Geoportal and how we and others can get access to environmental data through it?»



State Regional
Development Agency
Republic of Latvia

Latvian Geoportal – responsibility and development

1. The State Regional Development Agency of Latvia is an authority operating under the supervision of the Ministry of Environmental Protection and Regional Development.
2. Agency is managing some programs of state support, activities of the European Union Structural Funds and some foreign support instruments.
3. Agency has implemented the Geoportal project through European Structural Funds.

Basic information

- Project start date – 16 July 2009
- Project end date – 30 June 2015

Geoportal include public part of the section «Spatial Development Planning»
Spatial Development Planning Information System implemented as a separate project through European Structural Funds:

- Project start date – 20 August 2009
- Project end date – 04 May 2015



Legislative frame for National Geoportal

1. Regulations No. 668 on the State Uniform Geospatial Information Portal

<https://likumi.lv/ta/en/en/id/235212-regulations-regarding-the-state-uniform-geospatial-information-portal>

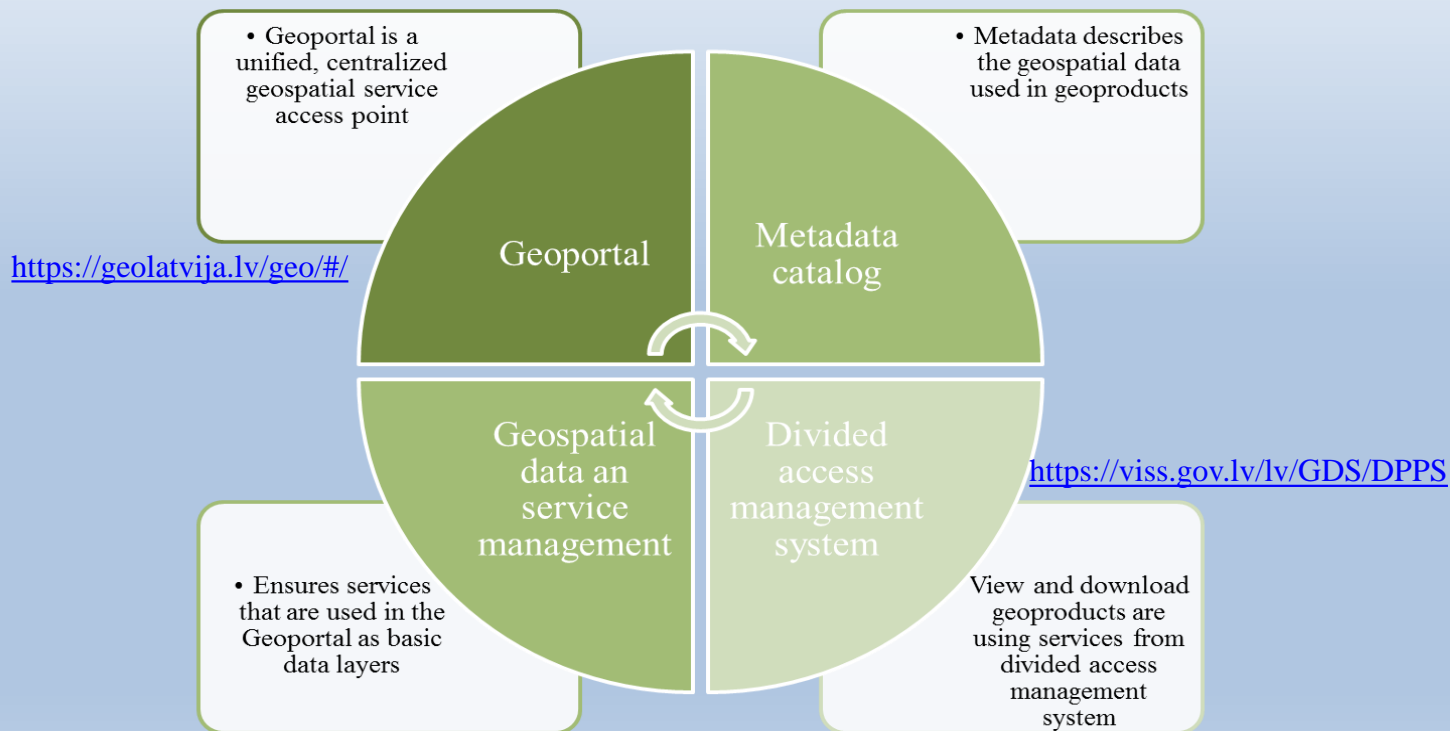
This Regulation prescribes:

- 1.1. the metadata and geospatial data sets (hereinafter - data sets) to be included in the State uniform geospatial information portal (hereinafter - geoportal);
 - 1.2. the functions and tasks of the manager of the geoportal;
 - 1.3. the requirements to be put forward to the holders of data sets and their duties in order to ensure the availability of metadata and data sets in the geoportal and use thereof;
 - 1.4. the provisions for the use of geospatial information included in the geoportal.
2. The geoportal shall ensure uniform access to metadata, data sets and geospatial information services (hereinafter - services).
3. The web address of the geoportal - **www.geolatvija.lv**



Latvian Geoportal architecture

<https://geometadati.viss.gov.lv/geoportal/catalog/wrapper/ivisgds.page>





Geoportal sections

<https://geolativija.lv/geo/mapviewer>



Map browser

<https://geolativija.lv/geo/search>



Geoproducts



Map services

<https://geolativija.lv/geo/tapis>



Embedded
map



Spatial
development
planning



Information
section

https://geolativija.lv/geo/map/edit?call_id=itemsmanager&menusection=emb

https://geolativija.lv/geo/Content/help/lv-LV/GEO_help_DPautoriz/index.html



Embedded map

- Allows institutions to publish iframe maps on their web pages
- Increases the usage of the data
- Allows access to the state institution data from various web pages
- Allows to use state institution maps in different e-services

Public service's card

Search



Home > Public services > 2933

Translated using machine translation service Hugo.lv

Pre-school education services

Izvēlētā teritorija: **Alūksnes novads** ([mainīt](#))

Izvēlētā organizācija: **Alūksnes novada pašvaldība**

Nosaukums pašvaldībā: **Pre-school education services (Aluksne Municipality Self-government)**

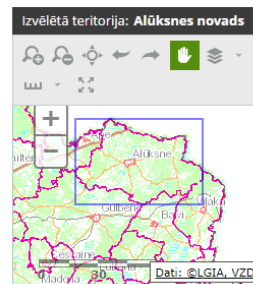
Īss apraksts:

You have the opportunity to apply for / to register the children's nursery school. The lawful representatives of the child, is the possibility of co-financing for the receipt of services of the local government pre-school education in the territory of a child in a private nursery schools.

A local government provides support for the private child supervision services providers established in accordance with the procedures specified in regulatory enactments and shall provide support to pre-school education programmes aimed at encouraging the child's family, than one child from a year and a half old and basic education for the commencement of the acquisition of admission if the child is registered in its municipal nursery schools, which is the declared place of residence of the child

Saņēmēji: Individual

Maksimālais termiņš (darba dienās): 30





Metadata Catalogue I

Metadata Catalogue

- Prepares, maintains and distributes spatial data sets metadata
<https://geometadati.viss.gov.lv/geoportal/catalog/wrapper/ivisgds.page#/>
- Provides INSPIRE Discovery Service
<https://geometadati.viss.gov.lv/geoportal/csw?request=GetCapabilities&service=csw&version=2.0.2&language=LVA>





Metadata Catalogue II

Priority Data sets in Latvia

<https://inspire-geoportal.ec.europa.eu/results.html?country=lv&view=details&legislation=all>

```
▼<gmd:descriptiveKeywords>
  ▼<gmd:MD_Keywords>
    ▼<gmd:keyword>
      <gco:CharacterString>Habitat types distribution (Habitats Directive)</gco:CharacterString>
    </gmd:keyword>
    ▼<gmd:keyword>
      <gco:CharacterString>Habitat types range (Habitats Directive)</gco:CharacterString>
    </gmd:keyword>
  ▼<gmd:thesaurusName>
    ▼<gmd:CI_Citation>
      ▼<gmd:title>
        <gco:CharacterString>INSPIRE priority data set</gco:CharacterString>
      </gmd:title>
      ▼<gmd:date>
        ▼<gmd:CI_Date>
          ▼<gmd:date>
            <gco:Date>2019-05-07</gco:Date>
          </gmd:date>
          ▼<gmd:dateType>
            <gmd:CI_DateTypeCode>
              codeList="http://standards.iso.org/ittf/Public
              codeListValue="publication">publication</gmd:CI_DateTypeCode>
            </gmd:dateType>
          </gmd:CI_Date>
        </gmd:date>
      </gmd:CI_Citation>
    </gmd:thesaurusName>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
```

INSPIRE prioritārās datu tēmas

Prioritārās datu tēmas

Prioritārā datu tēma Habitat types distribution (Habitats Directive), Habitat types range (Habitats Directive)

Vārdnīca

Izmantotā kontrolētā vārdnīca INSPIRE priority data set

Atskaites datums 2019-05-07

Datuma tips publicēšana



Metadata Catalogue III

Example, where data and services are linked correctly ->

Data metadata

-> <https://geometadati.viss.gov.lv/geoportal/rest/document?id={5C6DA8EA-4312-41B9-A359-AED0A62039DF}>

View service metadata

-> <https://geometadati.viss.gov.lv/geoportal/rest/document?id={2377EA68-A90B-4634-AFFE-0F53FC814F6F}>

Download service metadata

-> <https://geometadati.viss.gov.lv/geoportal/rest/document?id={8B015438-5E12-4F2C-8D5C-C658DCB5AC74}>

View service ->

http://proxygds.viss.gov.lv/arcgis/rest/services/Predefined/Forest_fire_statistics/MapServer/exts/InspireView/LAV/service?request=GetCapabilities&service=WMS

Download service ->

http://proxygds.viss.gov.lv/arcgis/rest/directories/arcgisforinspire/Predefined/Forest_fire_statistics_MapServer/serviceatoma1.xml



Geospatial data and service management

Geospatial data an service management

- Backend solution for preparation, use, exchange and maintenance of geospatial information:
 - OGC service standard:
 - View Services (WMS)
 - Feature Services (WFS)
 - Discovery Services (CSW)
 - INSPIRE standard:
 - View Service (OGC WMS + INSPIRE requirements)
 - Download Service (OGC WFS + INSPIRE requirements)





Divided access management system (DPPS) I

<https://viss.gov.lv/lv/GDS/DPPS>

Divided access management system

- Storing access rights for geospatial services
- User permissions validation against geospatial service access permissions, access control
- Receiving geospatial service data from geospatial service suppliers
- Providing data to user portals from geospatial services



Divided access management system (DPPS) II

[Atbalsts](#)[Resursi](#)[E-uzdevumi](#)[E-veselība](#)[E-pakalpojumi](#)[PK](#)[ĢDS](#)[Administrēšana](#)[VIRSIS](#)

Metadatu katalogs Dalītās piekļuves pārvaldības sistēma

Autentifikācija

Palīgs

Jurijs Hoļms

Beigt darbu

▼ DPPS katalogi

- ▶ Pakalpju katalogs
- ▶ Sagatavju katalogs

▼ DPPS licences

- Izsniegtās licences
- Neapstiprinātās licences

▼ DPPS administrēšana

- Pieprasījumu atsekošana
- Lietotāju/sistēmas audits

Viss > ĢDS > Dalītās piekļuves pārvaldības sistēma

Dalītās piekļuves pārvaldības sistēma

Dalītās piekļuves pārvaldības sistēma (DPPS) ir Ģeotelpiskā datu savietotāja (ĢDS) sastāvdaļa, kas nodrošina piekļuvi pie dažādu datu turētāju (valsts aģentūru vai organizāciju) ģeotelpiskiem servisiem un ģeotelpisko servisu licenču definēšanu. Par ģeotelpisko datu pārvaldību un uzturēšanu atbild attiecīgie datu turētāji (vai VRAA administratori), bet DPPS sistēmas uzdevums ir nodrošināt tām piekļuves kontroli.

DPPS nodrošina:

- lietotāju pieprasījumu saņemšanu no portāliem;
- lietotāju autentificēšanu un autorizēšanu;
- piegādātāju ģeotelpisko pakalpju metadatu glabāšanu;
- ģeotelpisko pakalpju piekļuves tiesību glabāšanu;
- lietotāju tiesību salīdzināšanu ar ģeotelpisko pakalpju piekļuves tiesībām (ar mērķi dot lietotājiem tiesības ģeotelpiskajām pakalpēm);
- ģeotelpisko pakalpju datu saņemšanu no ģeotelpisko pakalpju turētājiem;
- ģeotelpisko pakalpju datu sniegšanu klientu portāliem.

[Dalītas piekļuves pārvaldības sistēmas lietotāja rokasgrāmata](#)



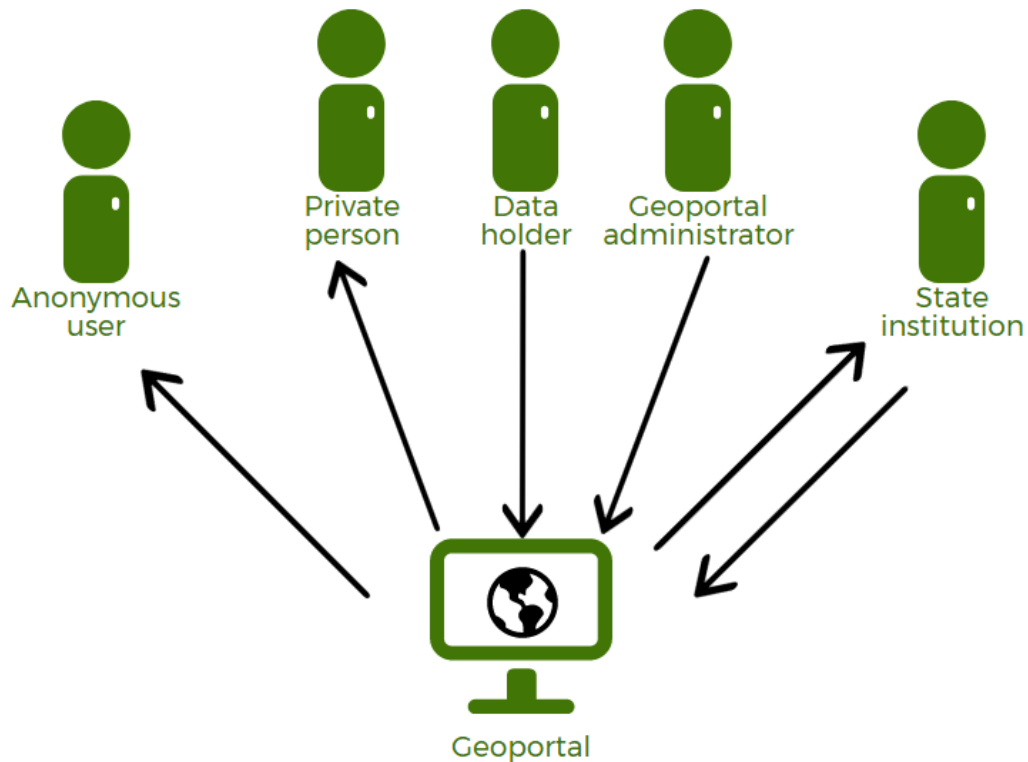
Divided access management system (DPPS) III

All service registering in a DPPS - <https://youtu.be/zPQ2hyxI060>

Workpiece definition in a DPPS - <https://youtu.be/-nfzg8KFQu8>

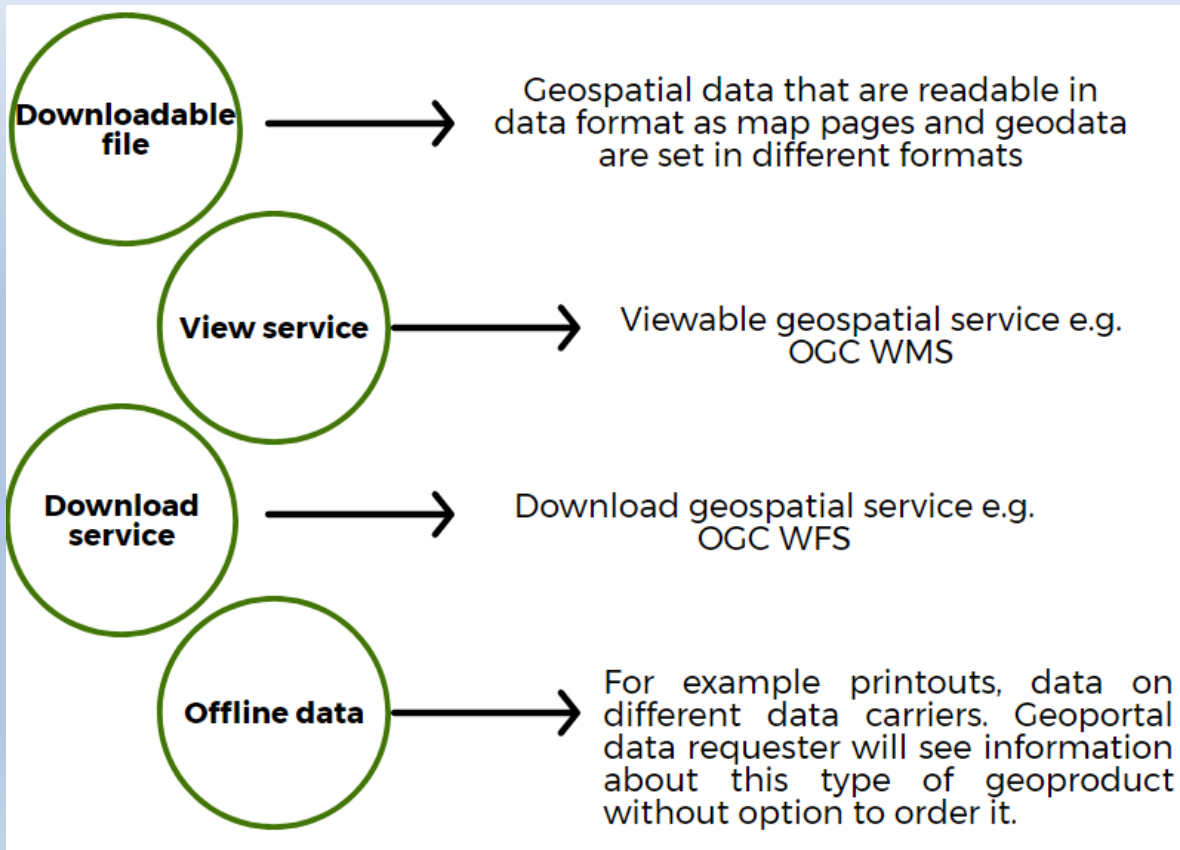


Geoportal users





Types of geoproducts





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National Geoportal – practical demonstration



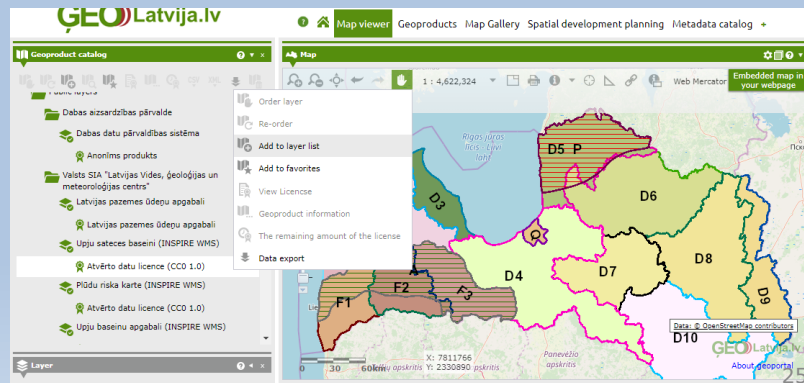
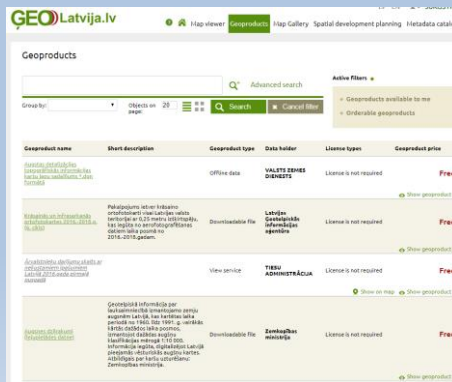
Metadata Catalogue

- Prepares, maintains and distributes spatial data sets metadata
<https://geometadati.viss.gov.lv/geoportal/catalog/wrapper/ivisgds.page#/>

Provides INSPIRE Discovery Service

<https://geometadati.viss.gov.lv/geoportal/csw?request=GetCapabilities&service=csw&version=2.0.2&language=LVA>

<https://geolatlviija.lv/geo/#/>



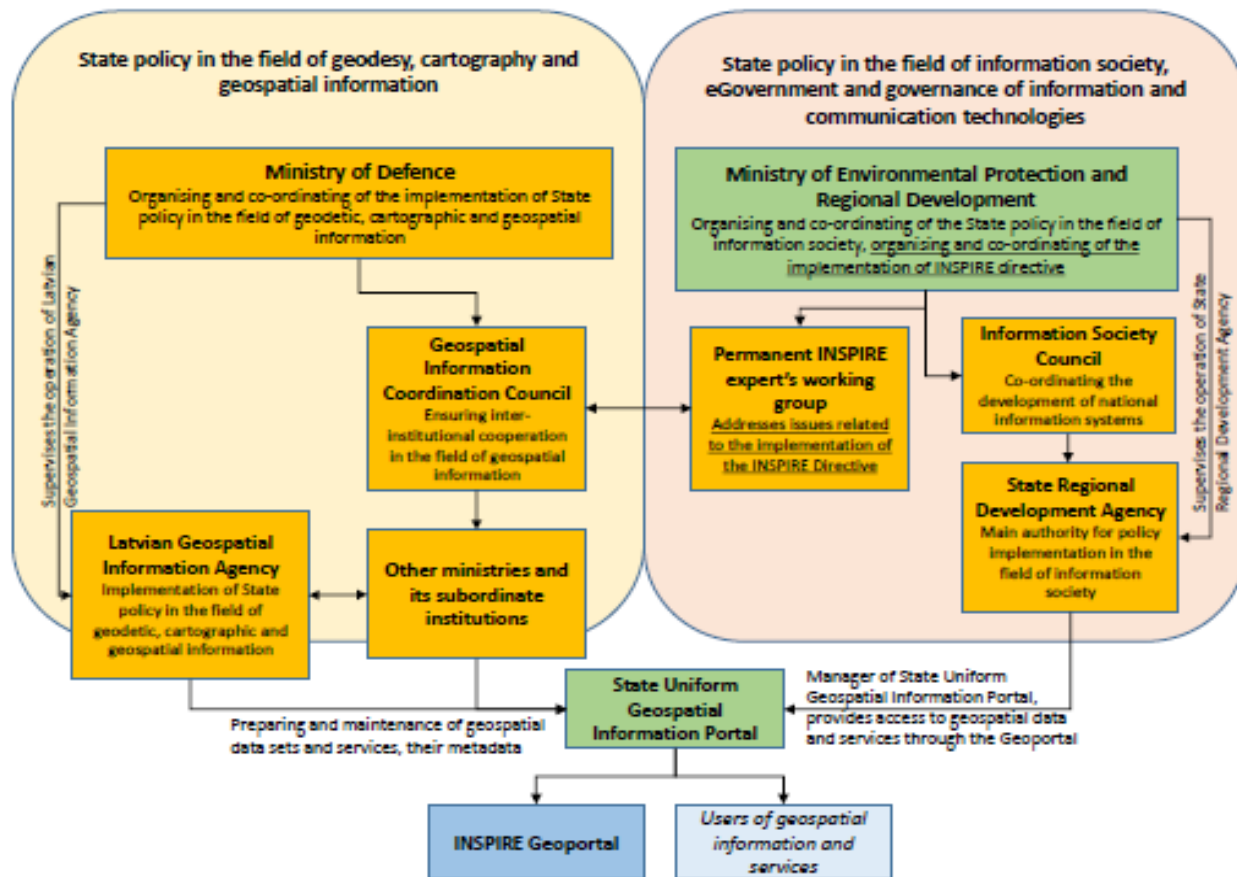


3. The coordination mechanisms on place

Answers to question «What are the coordination mechanisms in place or planned to ensure that environmental data (i.e. the priority datasets and the associated attributes) are made available and regularly updated in line with the INSPIRE Directive?»

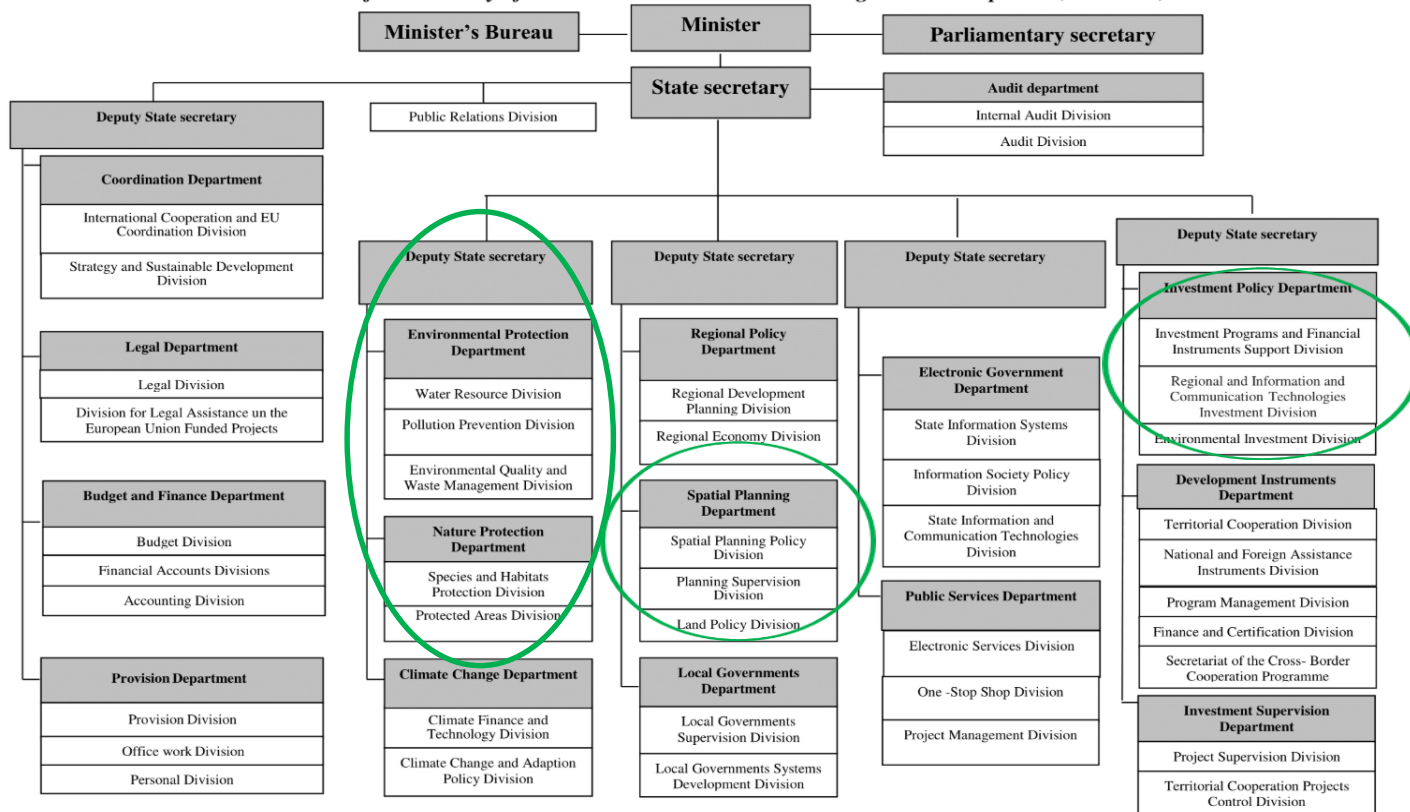


Coordination Structure, responsible institutions





Structure of the Ministry of Environmental Protection and Regional Development (17.10.2016.)





4. Implementing obstacles and solutions to overcome them

Answers to question «What are other encountered obstacles in implementing and how do you deal with these?»



Identified problems with implementation until now I

- ✓ Environmental reporting mechanism to EEA and EIONET Central Data Repository (CDR) in accordance with the EU environmental directives` requirements sometimes differ from those as defined in INSPIRE Directive - there`s no requirement to report in such format, e.g. reports under Water Framework Directive, Flood Directive.
- ✓ Not all defined priority data are collected in the country, e.g. mercury storage facilities – Latvia hasn`t such volumes and business facilities, as well as river basin district sub-units are not defined in Latvia.
- ✓ In some places, e.g., in the theme «Nature» old services still exist, now data are broken down, transformed and new service developed, planned publication date is the mid of December 2019.
- ✓ Regarding theme «Industrial accidents» (data set No 39.01) - Seveso III location of establishments, involving dangerous substances - locations of all Seveso III establishments are reported in eSPIRS database (last updated on May/June 2019). On these data, Member States, for a number of reasons (mainly for national security or reservation of the establishments owners) stated in the Art. 4.3 and 4.4 of the Aarhus Convention can claim a confidentiality clause.



Identified problems with implementation until now II

- ✓ Data are collected and available in different formats.
- ✓ Low data quality, incl.:
 - there`s no link between the data set metadata and the service (view and download) metadata,
 - services (view and download) do not refer to the data set and the service metadata.
- ✓ Often services do not exist at all.
- ✓ Difficulties with resources - both experts and financial, incl.:
 - lack of high qualified IT and GIS specialists, data and business analysts,
 - uncompetitive remuneration / wage in public institutions compared to the private sector



What are we doing / going to do? I

- ✓ Preparing an informative report to Cabinet of Ministers on problems, solutions and tasks identified with a proposal for establishment of Geospatial Information Centre - political aspect and responsibility is so important!
- ✓ Identifying the necessary revision in the National Geospatial Conception, changes in some legislative acts
- ✓ Adjusting fragmented licensing policy
- ✓ Strengthening responsibilities and duties between institutions for the active and efficient performance of their tasks regarding INSPIRE issue
- ✓ Developing appropriate ICT infrastructure for INSPIRE Directive`s implementation
- ✓ Fostering partnership with business structures, NGOs, universities
- ✓ Starting to provide training / workshops for data set holders, using much wider training materials, manuals, guidelines



What are we doing / going to do? II

- ✓ Adopting the best practices, providing full functionality of the geoportal, provision of technological solutions, choice of standards, semantic interoperability of information etc.
- ✓ Fundraising, new project implementation, overcoming existing budget scarcity, clarifying implementation costs
- ✓ Ensuring regular participation in the INSPIRE MIG-P and MIG-T groups, starting to cooperate with other successful countries, doing by learning and by the best practices
- ✓ Improving knowledge and competence in cooperation with universities, scientists, practitioners, implementing the appropriate curricula in the University of Latvia- a new study program in Geoinformatics Engineering
- ✓ Providing the INSPIRE data as open data

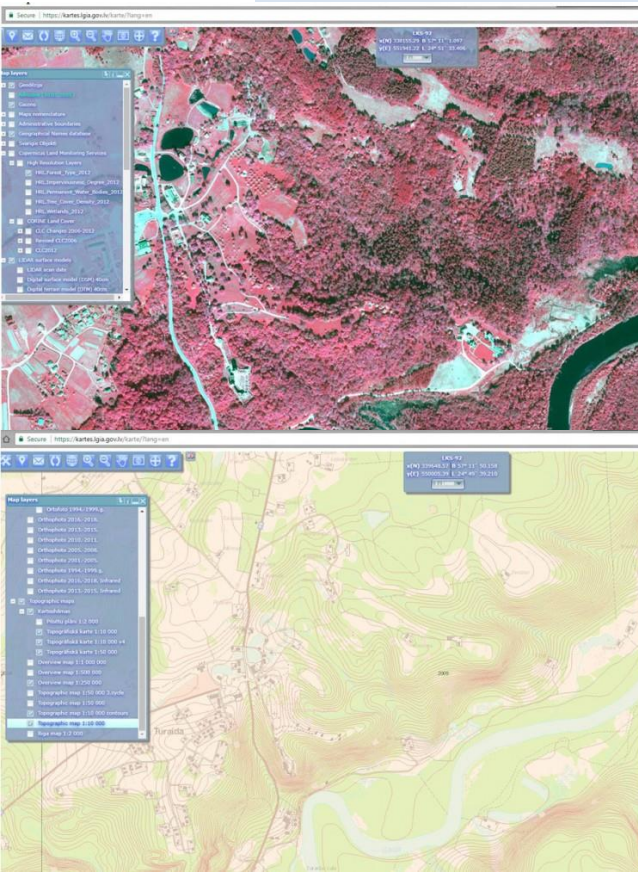


5. Open data policy in Latvia

Answers to question «What is the current data policy and what plans do you have, if any, to develop an open data policy?»



Open data policy



- ✓ OECD Open Government Partnership
- ✓ PSI directive -> Freedom of Information Law
- ✓ COM regulation: Procedures by which institutions publish information on the internet
- ✓ Data Driven Nation initiative
- ✓ Geospatial data sets
- ✓ Open data strategy 2019-2022

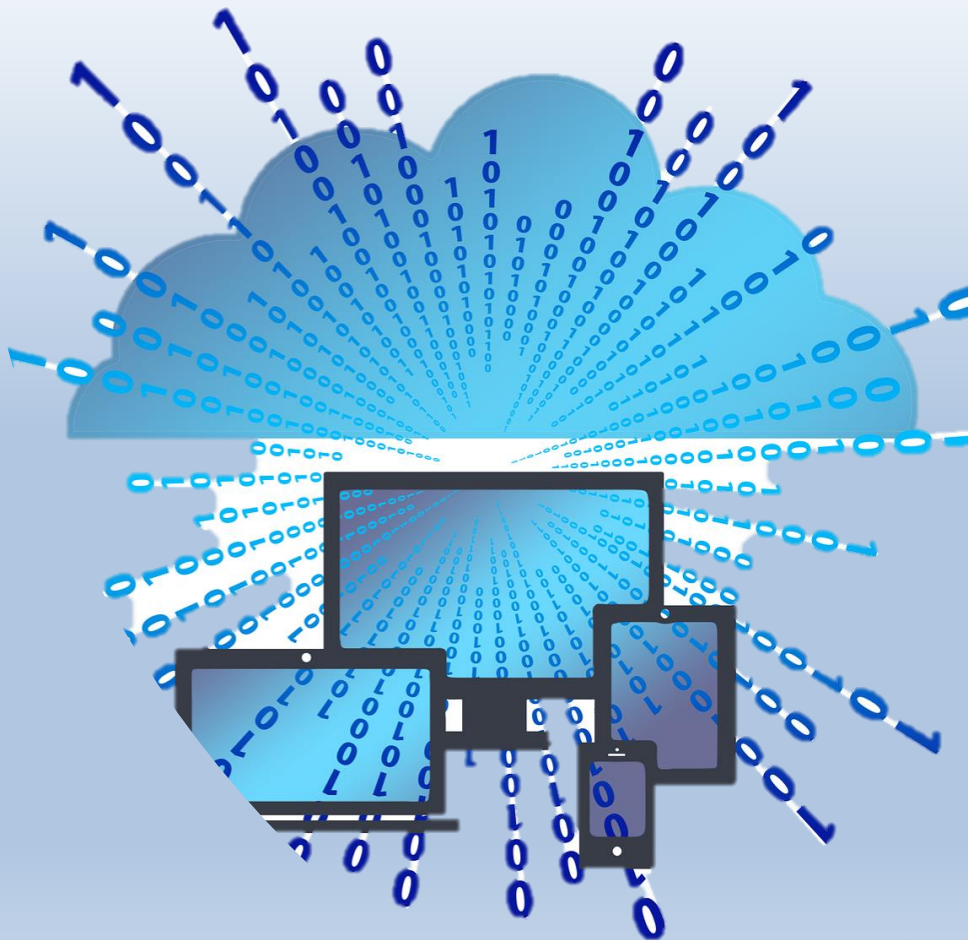


Latvian Open Data Strategy I

Launched in 20th of August 2019

Directions of action:

- ✓ Increase of open data availability
- ✓ Increase use of high-value data sets
- ✓ High-value and priority open data, e.g. hydrographic, meteorological data, chargeable data
- ✓ Coordination of open data





Latvian Open Data Strategy II

- ✓ Develop guidelines introducing the “open by default” principle
- ✓ Instructions for identifying priority datasets
- ✓ Data auditing + develop a timetable for publication of open data
- ✓ Commercialization of data and data technology-based innovations
- ✓ Implement public administration and private sector capacity building and awareness-raising measures





Open data assessment



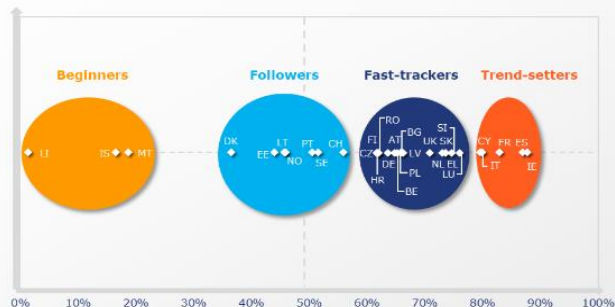
LATVIA

State-of-Play on Open Data - 2018



MATURITY LEVEL 2018

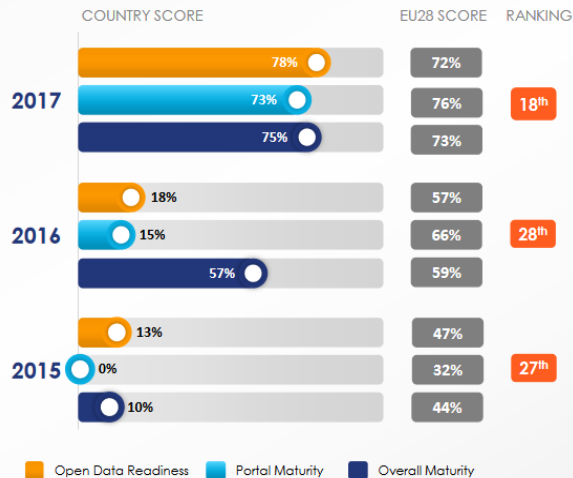
CLUSTER: FAST-TRACKER



2018 Overall Maturity: 66,2% EU28 Average: 65% **12th**

Overall Maturity EU28 Average

PROGRESS 2015-2017



Latvia ranked at the high **12th** place in the European data portal's data re-use index, compared to the 18th place in 2017!



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Ievadiet terminus, kurus meklēt.



Meklēt

Aktualitātes

Par portālu

Laipni lūdzam Latvijas Atvērto datu portālā!


Aicinām iepazīties ar portāla saturu un iespējām! Portāla datu publicētāji ir valsts iestādes vai organizācijas, kas pilda valsts funkcijas. Saskaņā ar normatīvajiem aktiem, atvērto datus iestādes publicē pēc savas iniciatīvas.

288

DATU KOPAS

66

PUBLICĒTĀJI

 Iepazīties ar datiem >

DATU KATALOGA KATEGORIJAS

Ārlietas

Ekonomika un
uzņēmējdarbība

Enerģija

Iedzīvotāji un sabiedrība

Izglītība un sports

Kultūra

Reģioni un pašvaldības

Tieslietas, iekšlietas un
drošība

Transports

Valsts pārvalde

Veselība

Vide

Zemkopība, pārtika un
mežsaimniecība

Zinātne un tehnoloģijas

Latvia's Open Data Portal

<https://data.gov.lv/lv>

The portal was launched in June 12th, 2017

The main task of the portal is to ensure the re-use of data held by the state administration.



@datagovlv

The screenshot shows the homepage of the Latvia's Open Data Portal. At the top, there is a navigation bar with the logo 'data.gov.lv' and four links: 'Datu katalogs', 'Apgūsti datu prasmes!', 'Publicētājiem', and 'Jautājumi un atbildes'. Below this is a search bar with the placeholder text 'Ievadiet terminus, kurus meklēt.' and a magnifying glass icon. To the right of the search bar are two links: 'Meklēt', 'Aktualitātes', and 'Par portālu'. The main content area features a large banner with the text 'Laipni lūdzam Latvijas Atvērto datu portālā!' and a subtext: 'Aicinām iepazīties ar portāla saturu un iespējām! Portāla datu publicētāji ir valsts iestādes vai organizācijas, kas pilda valsts funkcijas. Saskaņā ar normatīvajiem aktiem, atvērto datus iestādes publicē pēc savas iniciatīvas.' To the right of the banner are two statistics: '286 DATU KOPAS' and '66 PUBLICĒTĀJI'. Below the banner is a button labeled 'Iepazīties ar datiem >'. The bottom section is titled 'DATU KATALOGA KATEGORIJAS' and contains a grid of 10 categories: 'Ārlietas', 'Ekonomika un uzņēmējdarbība', 'Energija', 'Iedzīvotāji un sabiedrība', 'Izglītība un sports', 'Kultūra', 'Reģioni un pašvaldības', 'Tieslietas, iekšlietas un drošība', 'Transports', 'Valsts pārvalde', 'Veselība', and 'Vide'. The last row also includes 'Zemkopība, pārtika un mežsaimniecība' and 'Zinātne un tehnoloģijas'.



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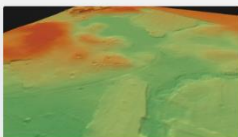
Ministry of Environmental
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Old Latvian hillforts

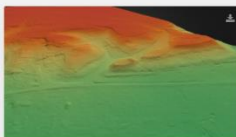
<https://sketchfab.com/gatons/models>

Latvijas pilskalni / Latvian hillforts

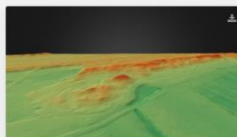
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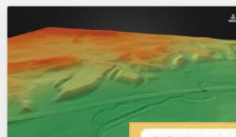
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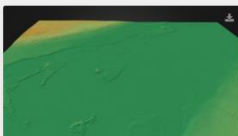
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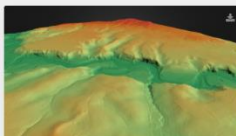
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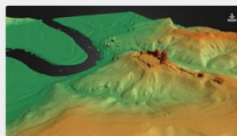
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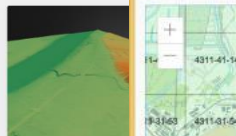
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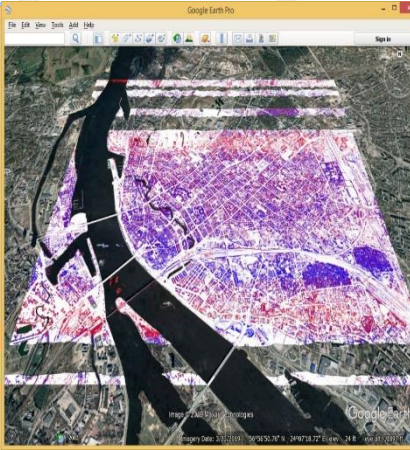
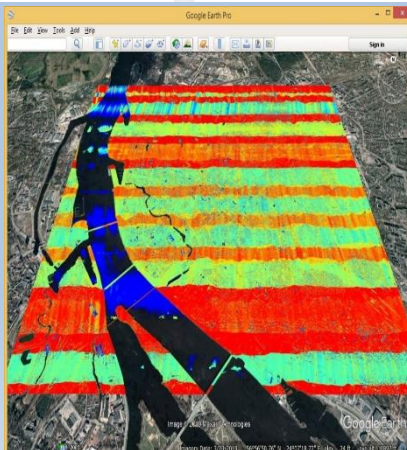
Meiņa iezis pilskalns



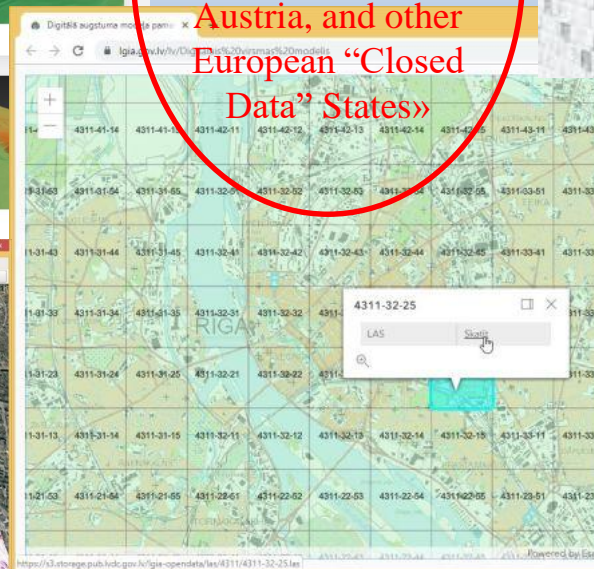
Turaidas pilskalns



Asotes pilskalns



Publication
«National Open LiDAR
Strategy of Latvia
humiliates Germany,
Austria, and other
European “Closed
Data” States»



<https://rapidlasso.com/2019/09/03/national-open-lidar-strategy-of-latvia-humiliates-germany-austria-and-other-european-closed-data-states/>



Ministry of Environmental
Protection and Regional
Development
Republic of Latvia

Thank you!



Uģis Bisenieks

Acting Deputy State Secretary

Director of Electronic Government Department

Ministry of Environmental Protection and Regional
Development Department of Environmental Protection

Peldu Str.25 Riga, LV-1494, Latvia

e-mail: ugis.bisenieks@varam.gov.lv

Phone: +371 67026933

Arvīds Ozols

Senior Expert

Latvian Geospatial Information Agency

Ojara Vaciesa Str. 43, Riga, LV-1004, Latvia

Phone: +371 29233519

E-mail: arvids.ozols@lgia.gov.lv



Anta Jantone

Head of Information Analysis Department

Latvian Environment, Geology and Meteorology Centre

Maskavas Str. 165, Riga, LV-1019, Latvia

e-mail: anta.jantone@lvgmc.lv

Phone: +371 67770058

Ieva Bruņeniece

Senior Expert

Ministry of Environmental Protection and Regional
Development Department of Environmental
Protection

Peldu Str. 25 Riga, LV-1494, Latvia

e-mail: ieva.bruneniece@varam.gov.lv

Phone: +371 67026564

