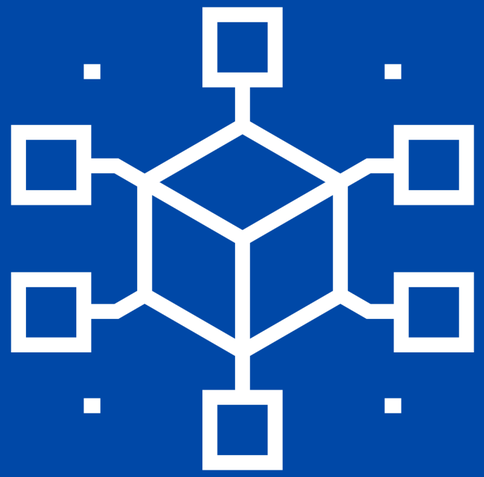

Pētniecības datu pārvaldība dabas zinātņu (un inženierzinātņu) **projekta ietvaros**

10.04.2024.

Latvijas Zinātnes padomes seminārs

LATVIJAS HIDROEKOLOĢIJAS INSTITŪTS

Īsi par mani

- Zooplanktona taksonomists un pelaģiskās vides ekologs. 2022.gadā iegūts doktora grāds (PhD) bioloģijā.
- Visvairāk interesē jūras pelaģiskā dzīvotne (t.i., ūdens) un procesi tajā. It īpaši zemāko trofisko līmeņu barības tīkli.
- Pieredze darbā ar datu apstrādi, analīzi, kvalitātes kontroli, starptautisko datu ziņošanu, projektu realizēšanu un datu pārvaldīšanu.
- Viena no atbildīgajiem Latmare datubāzes izveidošanā un attīstīšanā. Latmare ir brīvpieejas Latvijas jūras vides monitoringa datu portāls. https://latmare.lhei.lv/ .

Astra Labuce

pētniece, Latvijas Hidroekoloģijas institūta hidrobioloģijas laboratorijas vadītāja

Datu pārvaldības cikls

plānošana = DPP (*DMP*)

Piemērs I
Baltic Data Flows projekts
CINEA finansēts

Contents

Baltic Data Flows

Co-financed by the Connecting Europe Facility of the European Union

DPP (*DMP*)

Piemērs I
Baltic Data Flows projekts
CINEA finansēts

Contents

projektu aprakstošā daļa

projektā izmantoto/iegūto datu aprakstošā daļa

metadati - padara datus mašīnrakstā atrodamus

cita būtiska informācija

Baltic Data Flows

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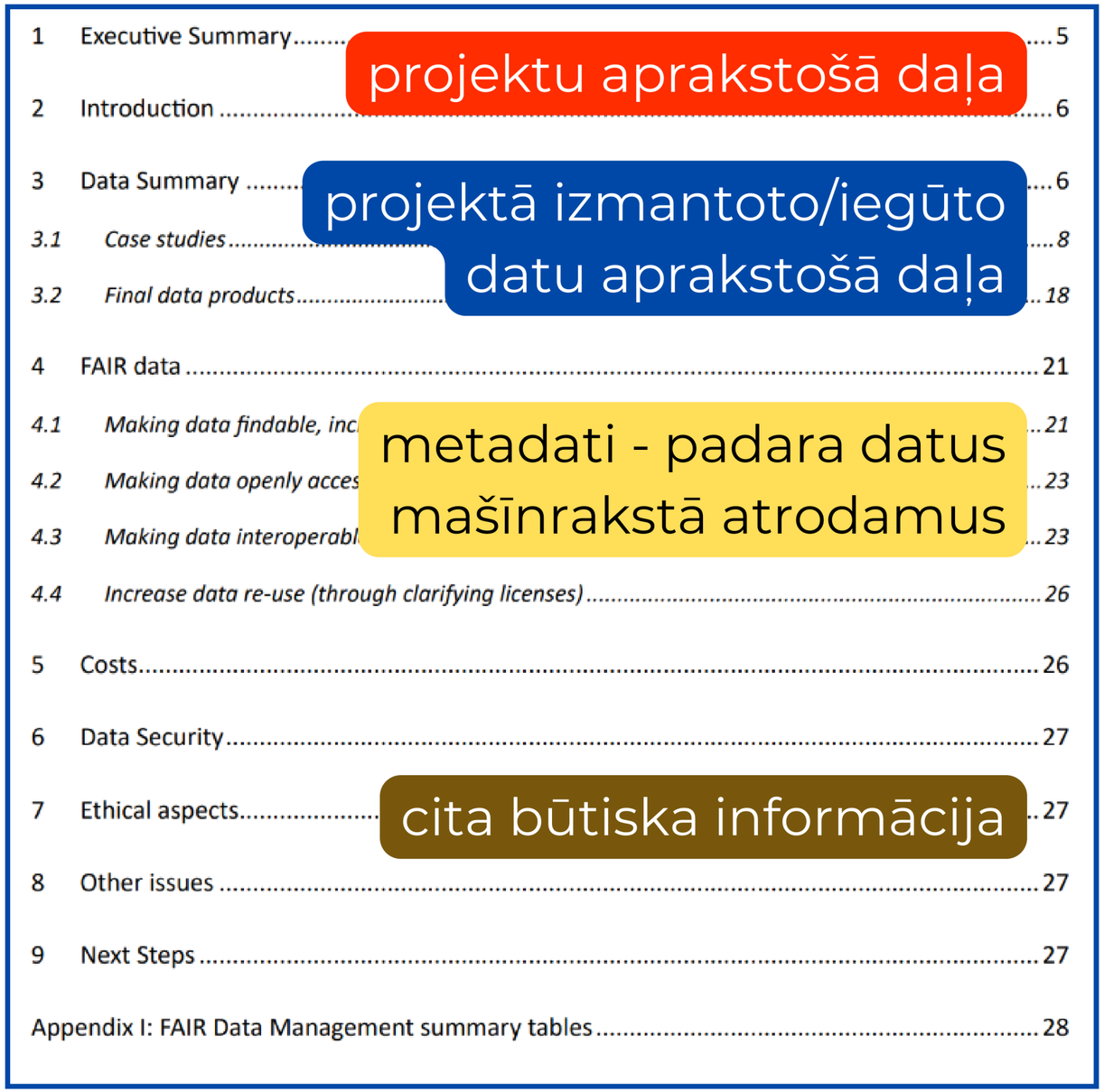
DPP (*DMP*)

Piemērs II
AquaINFRA projekts
HORIZON finansēts

eosc
AquaINFRA



DPP (*DMP*)

Piemērs II
AquaINFRA projekts
HORIZON finansēts

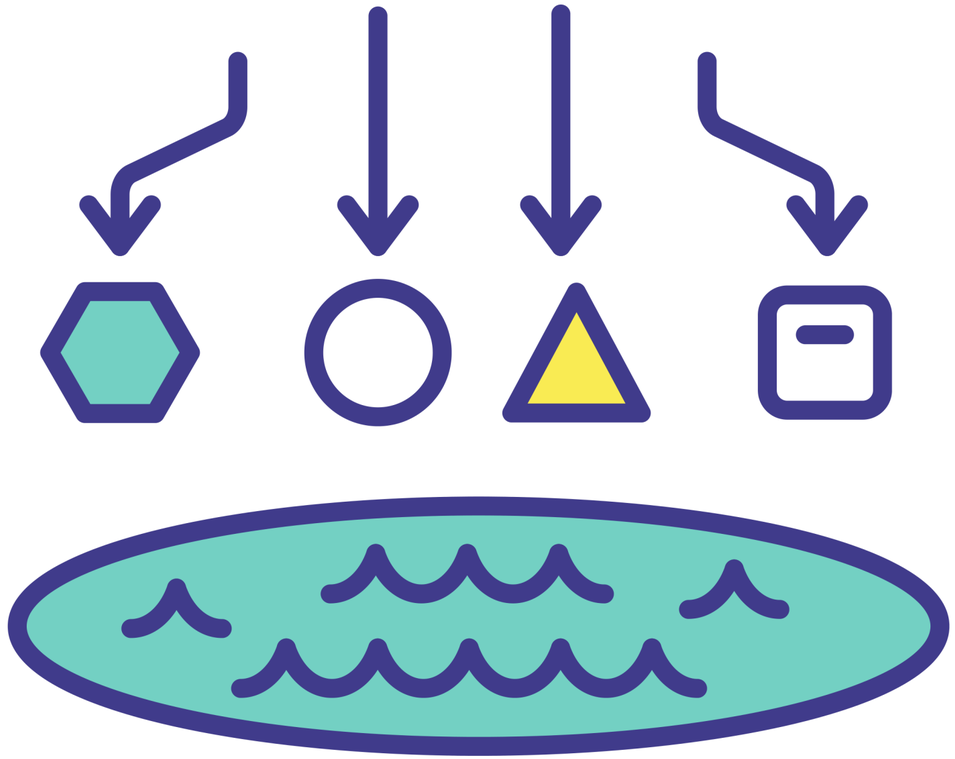
eosc
AquaINFRA

DPP (*DMP*)

metadati - padara datus mašīnrakstā atrodamus

- pieejamus
- izmantojamus

FAIR dati



METADATI

DCAT-AP/INSPIRE

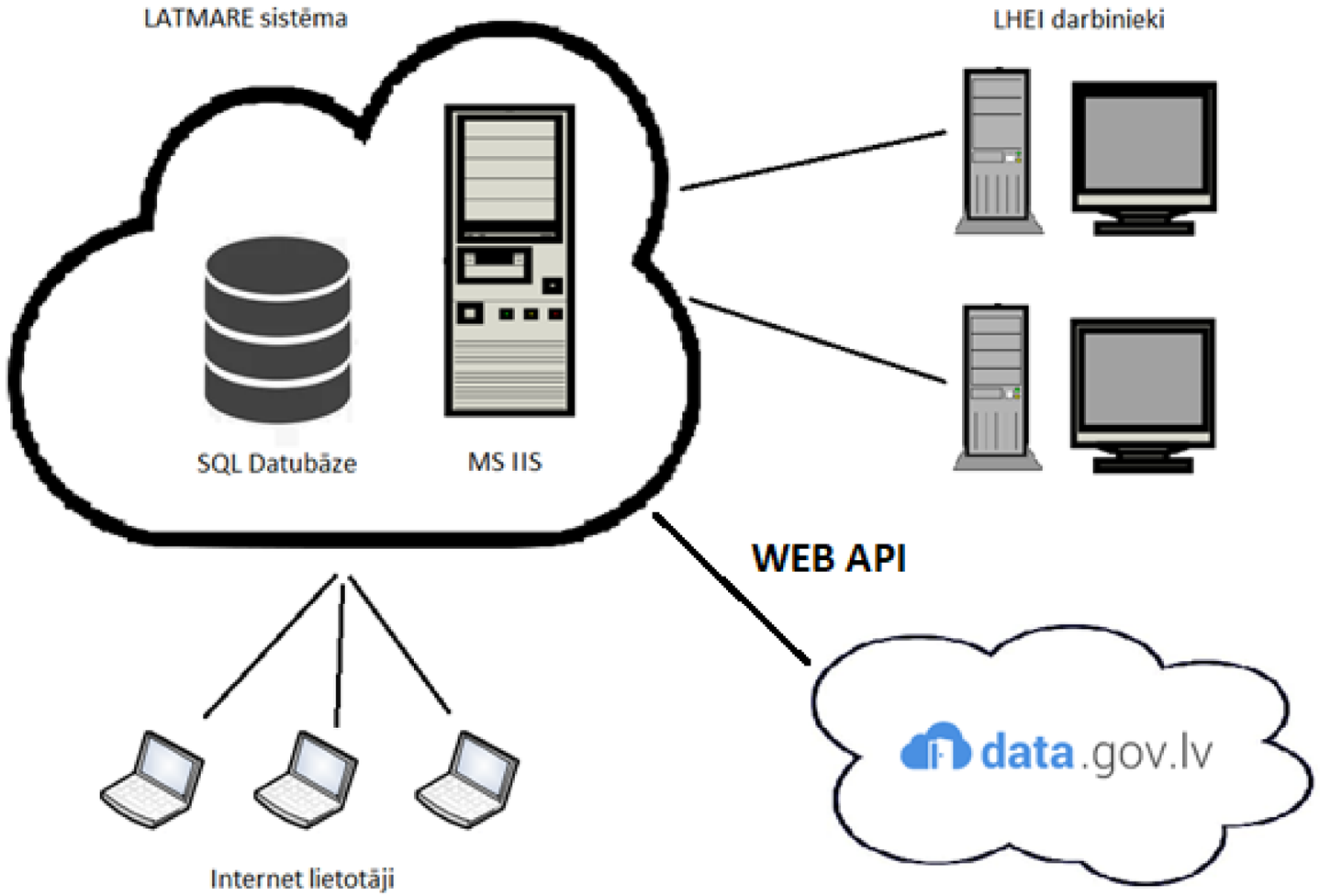
Baltic Data Flows

Co-financed by the Connecting Europe Facility of the European Union

METADATI

DCAT-AP/INSPIRE

FAIR dati



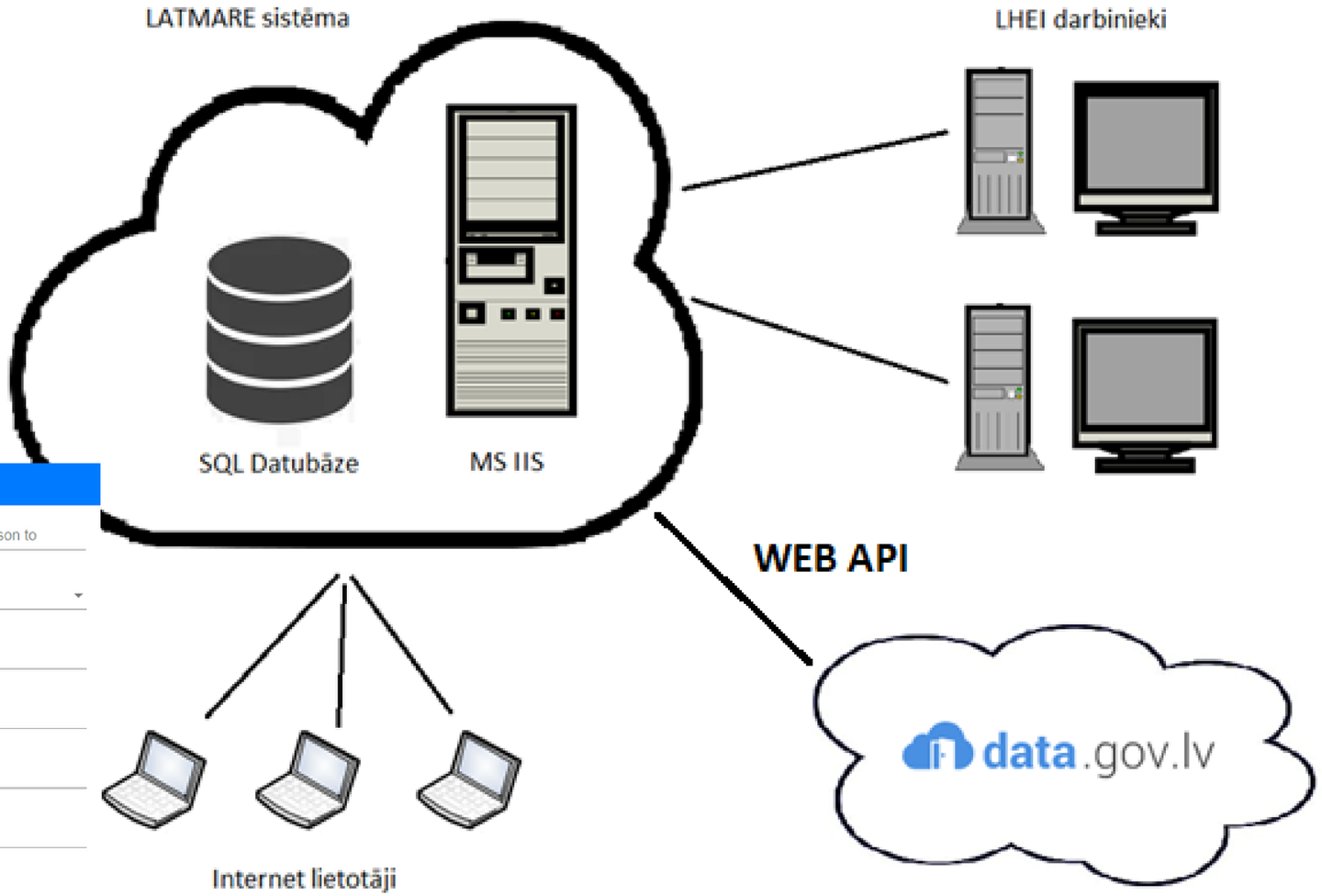
Baltic Data Flows

Co-financed by the Connecting Europe Facility of the European Union

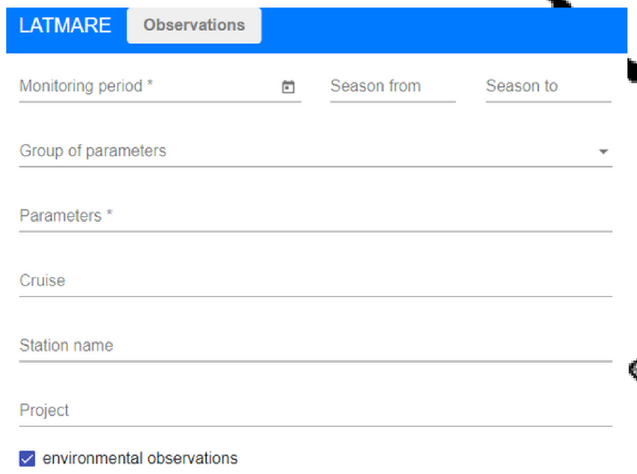
METADATI

DCAT-AP/INSPIRE

FAIR dati

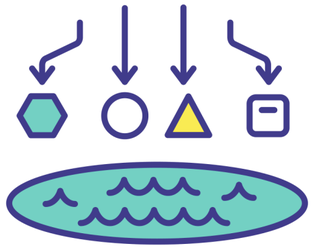


https://latmare.lhei.lv



Baltic Data Flows

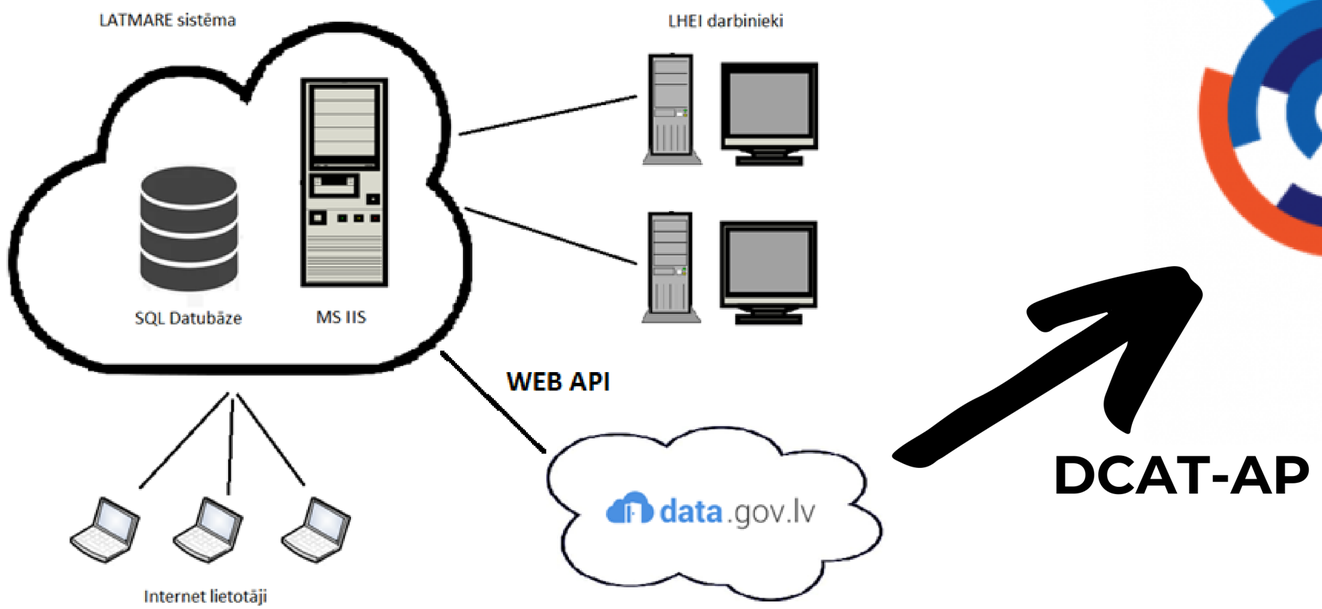
Co-financed by the Connecting Europe Facility of the European Union



METADATI

DCAT-AP/INSPIRE

FAIR dati



EUROPEAN DATA PORTAL

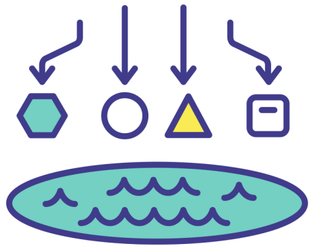
DCAT-AP

The DCAT Application profile for data portals in Europe (DCAT-AP) is a specification based on the Data Catalogue vocabulary (DCAT) for describing public sector datasets in Europe.

Baltic Data Flows

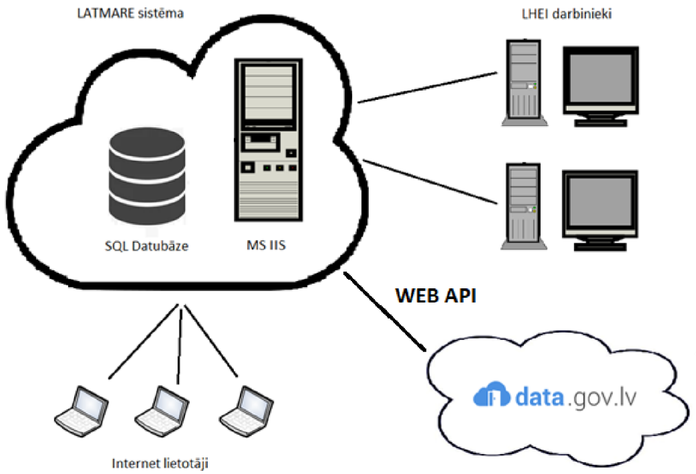
Co-financed by the Connecting Europe Facility of the European Union

FAIR dati



METADATI

DCAT-AP/INSPIRE



DCAT-AP

EUROPEAN DATA PORTAL

Baltic Data Flows

Co-financed by the Connecting Europe Facility of the European Union

FAIR pārbaude

Pieejamība

Lejupielādes URL	0%	Biežākās piekļuves URL...	200	Biežākās lejupielādes U...	n/a		

Atkārtota izmantojamība

Piekļuves ierobežojumi	false	Licences informācija	0%	Piekļuves ierobežojumu v...	{}	Kontaktpunkts	true
Publicētājs	true						

Kontekstualitāte

Faila lielums	50%	Tiesības	0%	Modificēšanas datums	true	Modificēšanas datums	0%

Atrodamība

Atslēgvārdu izmantošana	true	Kategorijas	false	Ģeogrāfiskā meklēšana	false	Uz laiku balstīta meklē...	false

Savietojamība

DCAT-AP atbilstība	true	Formāts	100%	Multivides veids	50%	Formāts/multivides vei...	50%

FAIR pārbaude

Resources

Gaignard, A., Rosnet, T., de Lamotte, F., Lefort, V., & Devignes, M. (2023). **FAIR-Checker: supporting digital resource findability and reuse with Knowledge Graphs and Semantic Web standards.** *Journal of Biomedical Semantics, 14.* https://doi.org/10.1186/s13326-023-00289-5

Rosnet, Thomas, Lefort, Vincent, Devignes, Marie-Dominique, & Gaignard, Alban. (2021). **FAIR-Checker, a web tool to support the findability and reusability of digital life science resources.** *JOBIM (JOBIM)*, Paris. https://doi.org/10.5281/zenodo.5914307

Gaignard, Alban, Rosnet, Thomas, de Lamotte, Frédéric, & Devignes, Marie-Dominique. (2021, June 4). **Automatic evaluation of FAIR metrics.** *Elixir All-Hands meeting*. https://doi.org/10.5281/zenodo.5914367

https://fair-checker.france-bioinformatique.fr

Latvijas atvērtās zinātnes stratēģija

2021.-2027. gadam

Zinātniskajām institūcijām jāveido drošus, FAIR principiem un OAI-PMH protokolam[65] atbilstošus pētniecības datu repozitorijus. VPC kā organizācijai ar tehnisku kompetenci un ciešu sadarbību ar zinātniskajām institūcijām, ar Izglītības un zinātnes ministrijas atbalstu **jāizveido vispārējo pētniecības datu repozitoriju tīkls *DataverseLV*[66]**, kas nodrošinās iespēju jebkuram interesentam atrast un piekļūt Latvijas pētnieku pētniecības datiem.

Datu atvēršana: piemērs I

kopā ar publikāciju

Mendeley Data

Dataset on microplastic concentrations, characteristics, and chemical composition in the marine surface waters of Latvia – the Eastern Gotland basin and the Gulf of Riga

Published: 6 February 2023 | Version 2 | DOI: 10.17632/x9ptrn83sz.2
Contributors: Marta Barone, Natalija Suhareva, Juris Aigars, Ieva Putna, Inta Dimante-Deimantovica

Description

This dataset provides information on composition and spatial distribution of spectroscopically verified microplastics of two Baltic Sea sub-basins – the semi-enclosed Gulf of Riga and the Eastern Gotland Basin – as well as meteorological conditions during sampling events for further studies and research activities. The data can be used e.g., for modelling spatial distribution or pinpointing sources and transport pathways of spectroscopically verified microplastics in marine environment and for the calibration of existing models.

Datu atvēršana: piemērs I

kopā ar publikāciju

Steps to reproduce

Marine surface water microplastic samples were collected from 44 transects in two Baltic Sea sub-basins – the semi-enclosed Gulf of Riga and the Eastern Gotland Basin. Sampling was performed by using Manta trawl with a mesh size of 300 µm. This was followed by organic material digestion using sodium hydroxide, hydrogen peroxide and enzymes. After that the samples were filtered on glass fiber filters and analyzed visually, registering the shape, size, and color of each item. Chemical composition of particles was determined using Attenuated Total Reflection Fourier Transform Infrared (ATR-FTIR) spectroscopy method.

Institutions

Latvijas Hidroekologijas instituta, Daugavpils Universitate

Categories

Spectroscopy, Pollution, Fourier Transform Infrared Spectroscopy, Baltic Sea, Microplastics

Funding

European Social Fund
Project No. 8.2.2.0/20/I/003

Ministry of Environmental Protection and Regional Development project "Improvement of knowledge of the state of the marine environment in the marine waters under the jurisdiction of Latvia"
Project No. IL/106/2017

Related Links

Article
https://doi.org/10.1016/j.marpolbul.2021.112860
is related to this dataset

Licence

Mendeley Data

Dataset on microplastic concentrations, characteristics, and chemical composition in the marine surface waters of Latvia – the Eastern Gotland basin and the Gulf of Riga

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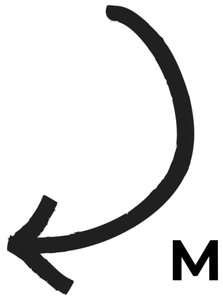

METADATI

Datu atvēršana: piemērs I

kopā ar publikāciju

runMSTS

Labuce, Astra[1]; Gorokhova, Elena[2]

Show affiliations

This release provides a script-based workflow applying widely-used R-packages to compute the core indicator Zooplankton Mean Size and Total Stock (MSTS) for assessing the ecological status of the pelagic habitat in the Baltic Sea. The indicator MSTS was developed as a part of HELCOM (Helsinki Commission; The Baltic Marine Environment Protection Commission) activities (Gorokhova et. al., 2016) and used in the holistic environmental assessment in the Baltic Sea (HELCOM, 2018).

runMSTS was developed within the "Baltic Data Flows" and "HELCOM BLUES" projects funded by the Climate Infrastructure and Environment Executive Agency (CINEA) of the European Union and the Directorate-General for Environment of the European Commission, respectively. Complementary funding was provided by The Swedish Agency for Marine and Water Management (SwAM).

Files

runMSTS.zip

runMSTS.zip

README.txt	825 Bytes
input	
addInfo.txt	156 Bytes
nonaggregated.txt	495.7 kB
yearlymeans.txt	739 Bytes
runMSTS.Rmd	71.8 kB

METADATI

runMSTS

Labuce, Astra[1]; Gorokhova, Elena[2]

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runMSTS.Rmd	71.8 kB

Details

DOI

DOI 10.5281/zenodo.7467616

Resource type

Software

Publisher

Zenodo

Languages

English

Rights

GNU General Public License v2.0 only

Citation

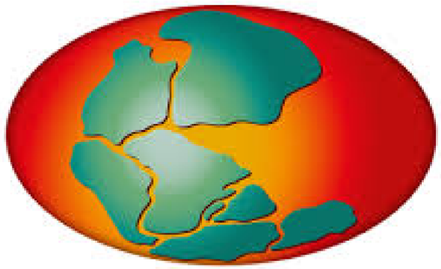
Labuce, A., & Gorokhova, E. (2022). runMSTS (1.0.0). Zenodo. https://doi.org/10.5281/zenodo.7467616

Style APA

Datu atvēršana

nespecifiskie repozitoriji

zenodo



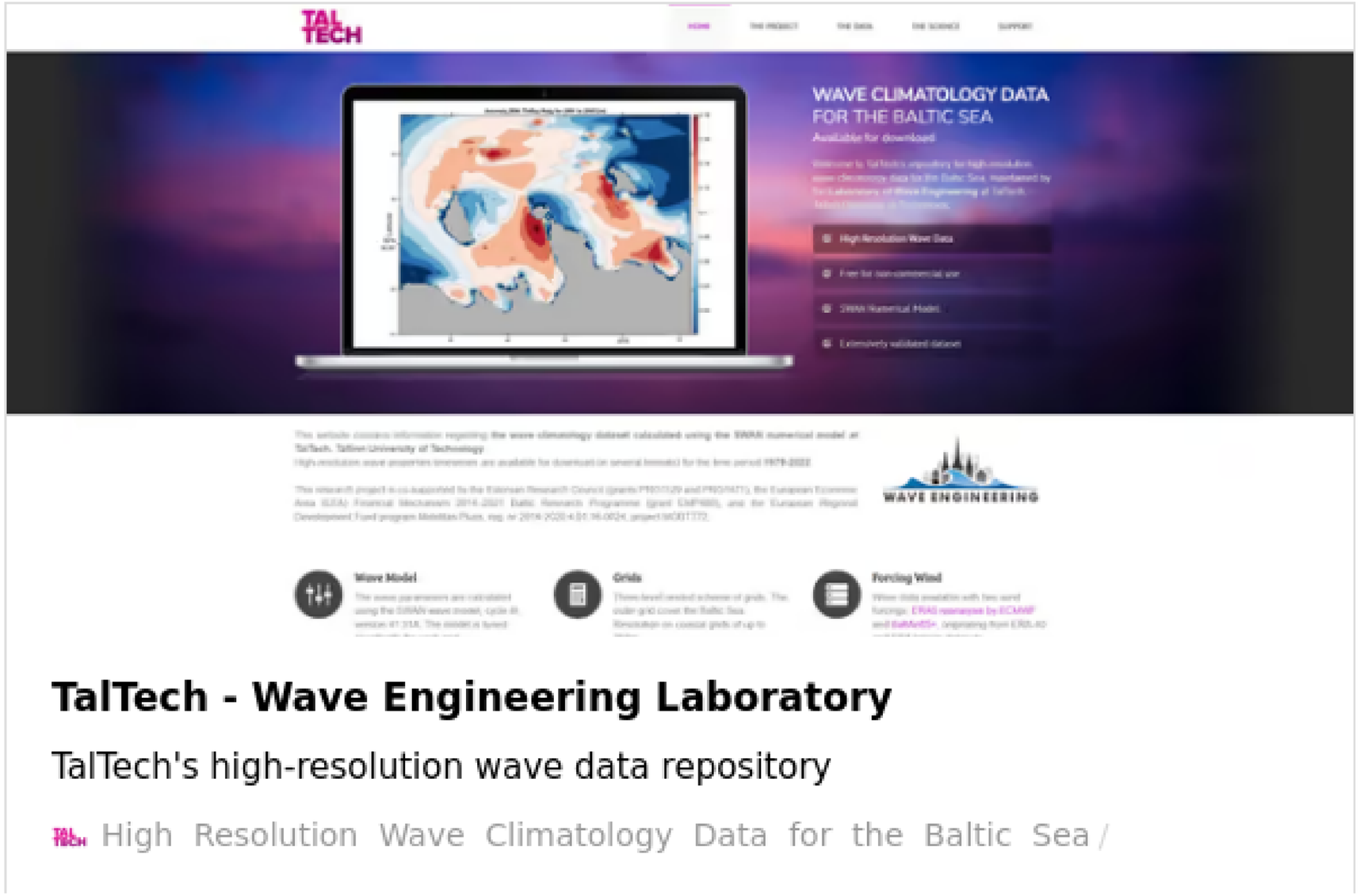
PANGAEA.

arXiv

saraksts nav izsmeļošs

Datu atvēršana: piemērs II

platforma



FAIR ?

Datu atvēršana

nozares repozitoriji
institūcijas repozitoriji

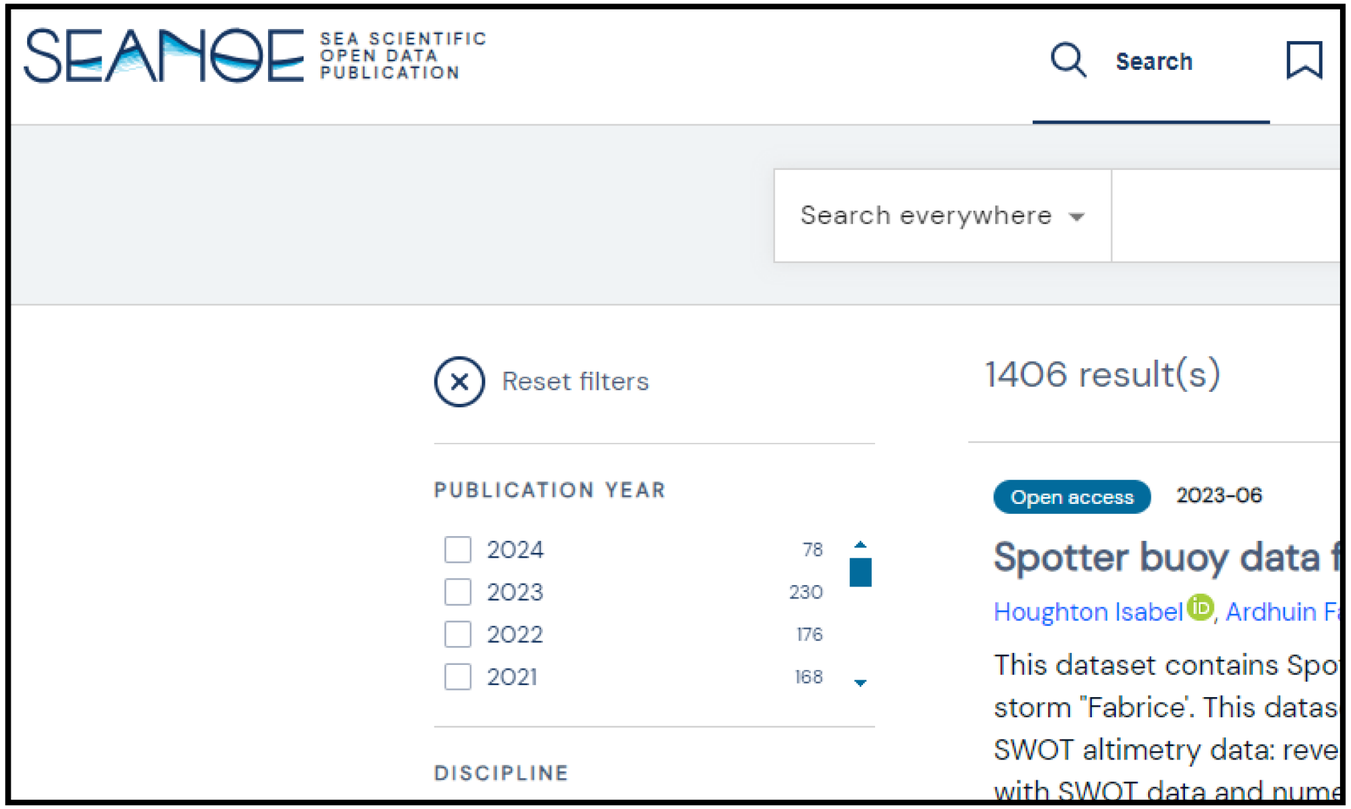
Datu atvēršana: piemērs III

startautisks nozares repozitorijs

EMODnet

European Marine Observation and Data Network

konkrēts publicēšanas formāts



Datu atvēršana: piemērs III

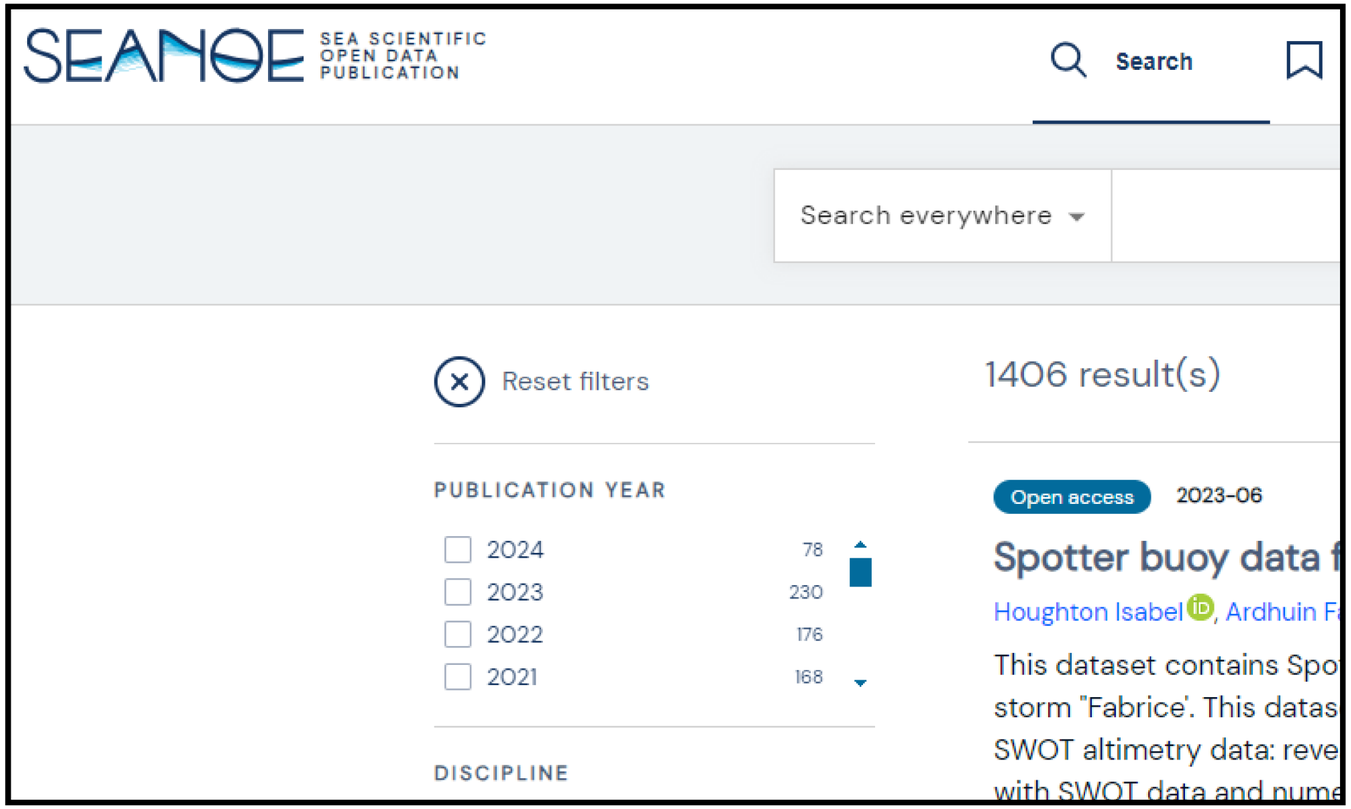
startautisks nozares repozitorijs

EMODnet

European Marine Observation and Data Network

!Datu kvalitāte!

attīstās un virzās arī uz liela apjomu datu uzturēšanu, piem, datu plūsma no flowCam



Kādā formātā dati jāglabā?

- **iekļaut tikai datus**
  - izvairīties no grafiskus attēlojumus (ko mašīna nevar interpretēt)

Kā tos sagatavot?

Kādā formātā dati jāglabā?

- iekļaut tikai datus

- **labāk mazāk, bet lielākus failus**
  - atkārtotai izmantošanai vieglāk ir paņemt daļu no lielas datu kopas nekā apvienot daudz mazas

Kā tos sagatavot?

Kādā formātā dati jāglabā?

- iekļaut tikai datus
- labāk mazāk, bet lielākus failus
- **izvairīties no “saspiešanas”**
  - lai gan atsevišķi (parasti nespecifiskie) repozitoriji to pieļauj

Kā tos sagatavot?

Kādā formātā dati jāglabā?

- iekļaut tikai datus
- labāk mazāk, bet lielākus failus
- izvairīties no “saspiešanas”
- ja konkrētais repozitorijs neprasa noteiktu datu formātu, **pēc iespējas .txt vai .csv faili tabulāriem datiem**

Kā tos sagatavot?

Kādā formātā dati jāglabā?

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- labāk mazāk, bet lielākus failus
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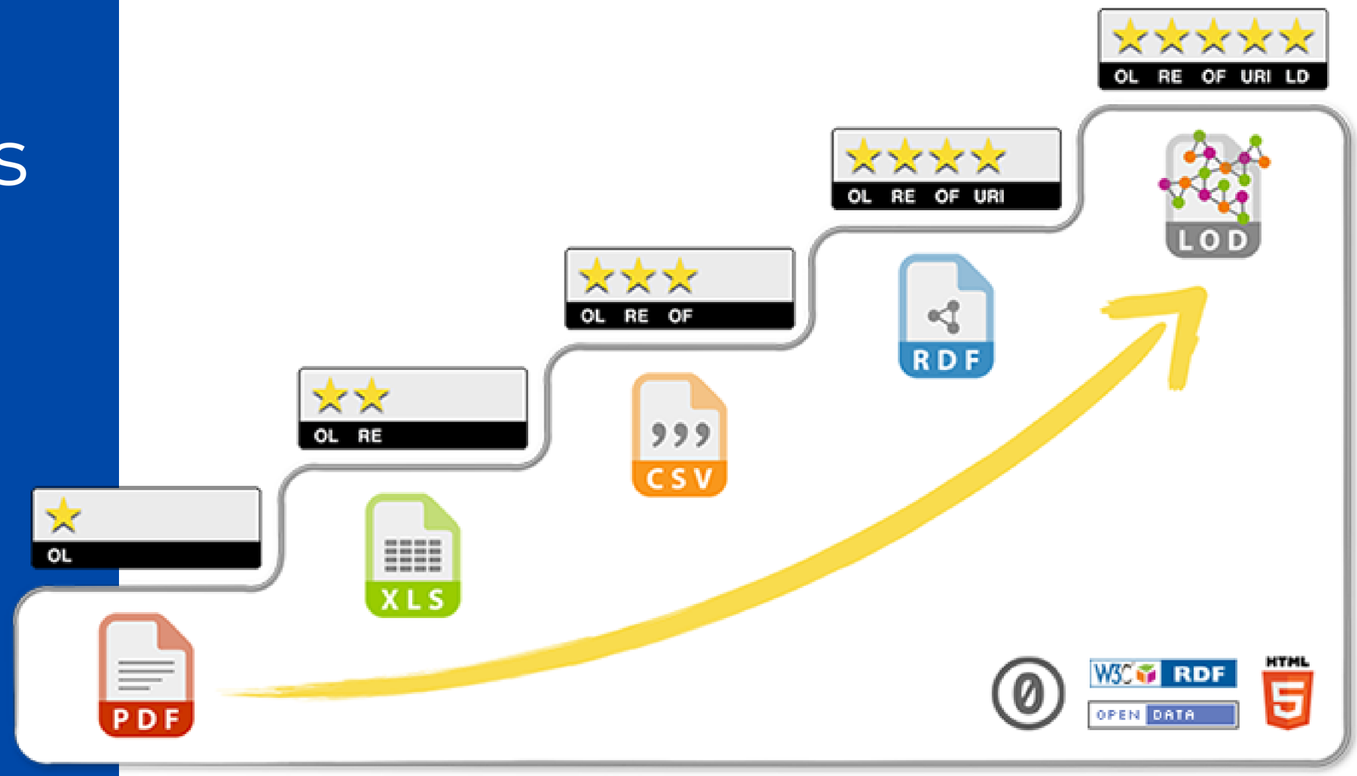
  - ja konkrētais repozitorijs neprasa noteiktu datu formātu, **pēc iespējas .txt vai .csv faili tabulāriem datiem**

Kā tos sagatavot?



- Datu pārvaldīšanai, atvēršanai, metadatu sagatavošana ir jāparedz laiks un cilvēkstundas!!

- Dati pirms atvēršanas vienmēr ir jāpārbauda.
- Metadati ir bagātīgi un precīzi jāapraksta

Kā tos sagatavot?

- organizēt kolonās un rindās

- katrs mērījums/datu punkts ar unikālu identifikatoru

- katrai rindai vienāds kolonu skaits un katrai kolonai vienāds rindu skaits (NA aizpildīt pēc repazitorija noteikumiem vai brīvi aprakstot metadatos kā)

Paldies par uzmanību!

Astra Labuce
astra.labuce@lhei.lv

http://www.lhei.lv