





## LATVIAN OPEN SCIENCE STRATEGY TIMELINE











Study on Open Science

Q3 2020

Draft strategy complete

Q1 2021

Discussions with key stakeholders

Q1 2021

Public consultation

Q2 2021

Approval by the Cabinet of Ministers

Q3-Q4 2021



#### **3 PILLAR STRUCTURE**

1. Open Access 2. FAIR Data 3. Citizen Science Requirements & Incentives E-infrastructures and Tools Skills State-of-the-art Monitoring

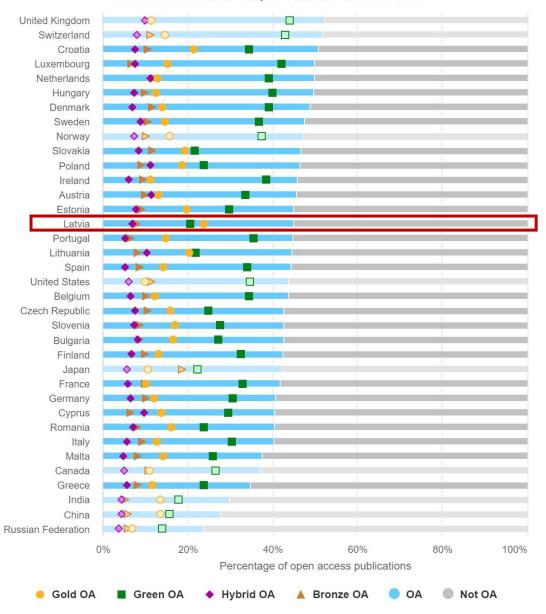


### STATE OF OPEN SCIENCE OPEN ACCESS

- Average position in EU
- > Year-on-year growth
- Huge variability depending on data source (WoS/Scopus/Scopus+Unpaywall)
- ▶ High percentage of Gold OA publications
- OA encouraged in many programs, not yet mandatory
- APCs are eligible costs in state funded programs
- Self-archiving strongly encouraged in recent programs

#### Percentage of Open Access publications in total publications, by country







### OPEN SCIENCE STRATEGY OPEN ACCESS

- All State funded research publications must be Green or Gold OA without an embargo period
- Increasingly centralized journal licensing, transformative agreements
- OA guidelines for researchers, encouraging including APC costs
- Centralized hub for publication data/metadata (integration with national CRIS system, antiplagiarism database)



### STATE OF OPEN SCIENCE FAIR DATA

- ▶ Good RDM practice seen by many researchers as burden\*
- ➤ No national DMP requirements
- No monitoring system for FAIR data
- > Research data repositories slowly emerging
- ➤ Some investments in e-infrastructures via ESFRI
- > Several projects incl. EOSC Nordic, OpenAIRE
- ▶ First Data Steward vacancy at Riga Stradinš University



### OPEN SCIENCE STRATEGY FAIR DATA

### Standardized **Data Management Plans** (**DMPs**)

<u>Principles</u>: minimal burden to researchers, international templates, machine-actionable and connected to CRIS systems

### DataverseLV Research Data Repository Network

Participation in the **European Open Science Cloud** 

<u>Commitments for Partnership</u>: 3.5M Financial; 2M in-kind

#### **PRINCIPLES**



Research data, metadata, einfrastructures as FAIR as possible



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Data Collection (2 / 2)		+
Documentation and Meta-	ata (0 / 1)	+
Ethics and Legal Complian	ce (0 / 2)	+
Storage and Backup (0 /	)	+
Selection and Preservation (0 / 2)		+
Data Sharing (0 / 2)		+
Responsibilities and Reso	rces (0 / 2)	+



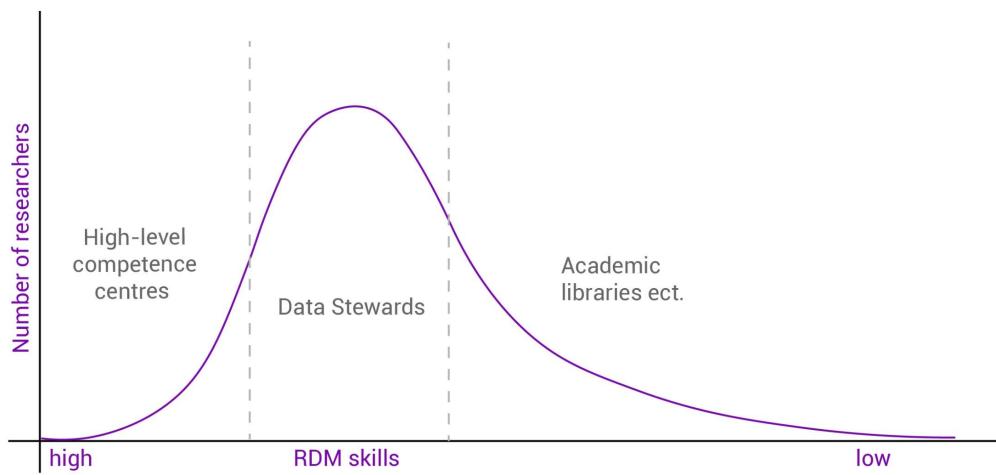


#### PROPOSAL FOR A DATA STEWARDS PROGRAM

- Main instrument for increasing RDM skills and encouraging use of e-infrastructures and tools
- Developing general and field-specific skills and practice
- Joint coordination and trainings
- Potential for Nordic-Baltic cooperation
- Current proposal: ~30 Data Stewards @ Postdoc salary



#### FAIR DATA SKILLS





### STATE OF OPEN SCIENCE CITIZEN SCIENCE

- 15+ initiatives in Latvia\*
- Wide range of fields of Science (natural sciences, humanities, etc)
- High-level political support
- Integral part of strategic communication (researchLatvia)
- Several events organized by the Ministry

### Pandemic Diaries



#### Nature Data





### OPEN SCIECE STRATEGY CITIZEN SCIENCE



- Societal involvement in all stages of the research process
- Emphasis on co-creation; benefits must accrue to society and science
- Strategy incorporates ESCA 10 principles of Citizen Science\*
- Support from the Ministry: researchLatvia platform and research data infrastructures



### OPEN SCIENCE STRATEGY MISCELLANEOUS

- Integration of Open Science criteria in research institution evaluation
- Nomination of National Open Science Coordinator
- ➤ Active participation in ERAC SWG OSI, CoNOSC and other groups
- Implementing a monitoring system based on OpenAIRE Monitor
- ▶ Encouraging research institutions to develop Open Science strategies
- ▶ Encouraging 1-2 Latvian organizations to join the EOSC association
- Giving national mandate to a member organization
- ➤ Long-time archiving of digital objects
- ▶ Registering researchers in ORCID, RIs in ROR
- Providing DOIs to digital object repositories
- Opening API of National CRIS system



### JOINT SERVICES CENTER HIGHER EDUCATION AND RESEARCH



- Modeled on CSC in Finland
- University-led initiative
- **>** Objectives:
  - Reducing the fragmentation of service providers
  - Providing economies of scale
  - Concentrating technical expertise
- Co-funded between universities and the Ministry
- ➤ Client-orientation; cooperation with private-sector
- ▶ Innovation through procurement; active use of Open Source
- ➤ Membership in intl. organizations/networks



# JOINT SERVICES CENTER HIGHER EDUCATION AND RESEARCH



### Services:

- Academic network / GEANT
- CRIS systems
- Dataverse network
- CRIS systems
- eduGAIN IDP / ESCI services
- MikroTik Genome Data Network
- Possibly HPC



