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Research data in Czech Republic

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MINISTRY OF EDUCATION, YOUTH AND SPORTS

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Growth and Value of Research data

- The growth of data is **exponential**
- The research is changing with it
- The ability to **handle data properly** is a MUST
- Research community needs awareness, incentives, knowledge, skills and tools

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National Survey of Research Data Management in the Czech Republic 2025

Conducted Institute of Sociology, Czech Academy of Sciences.

3800 PI's of Czech research projects were contacted.

We received over **1100 answers** (ca 30 % response rate).

Before we start, by show of hands, who here in this room has ever…

… lost any data FOREVER due to the technical malfunction?

… lost any data in a true sense – you just don’t know where they are.

… used any data from other scientists?

Storing the Data

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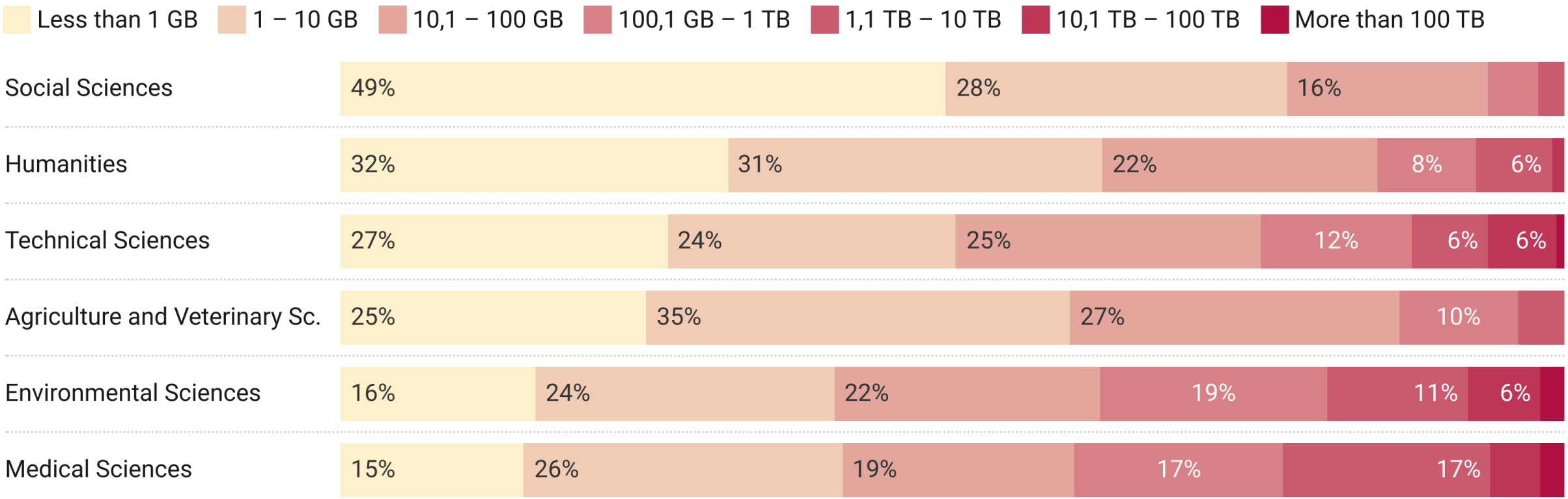
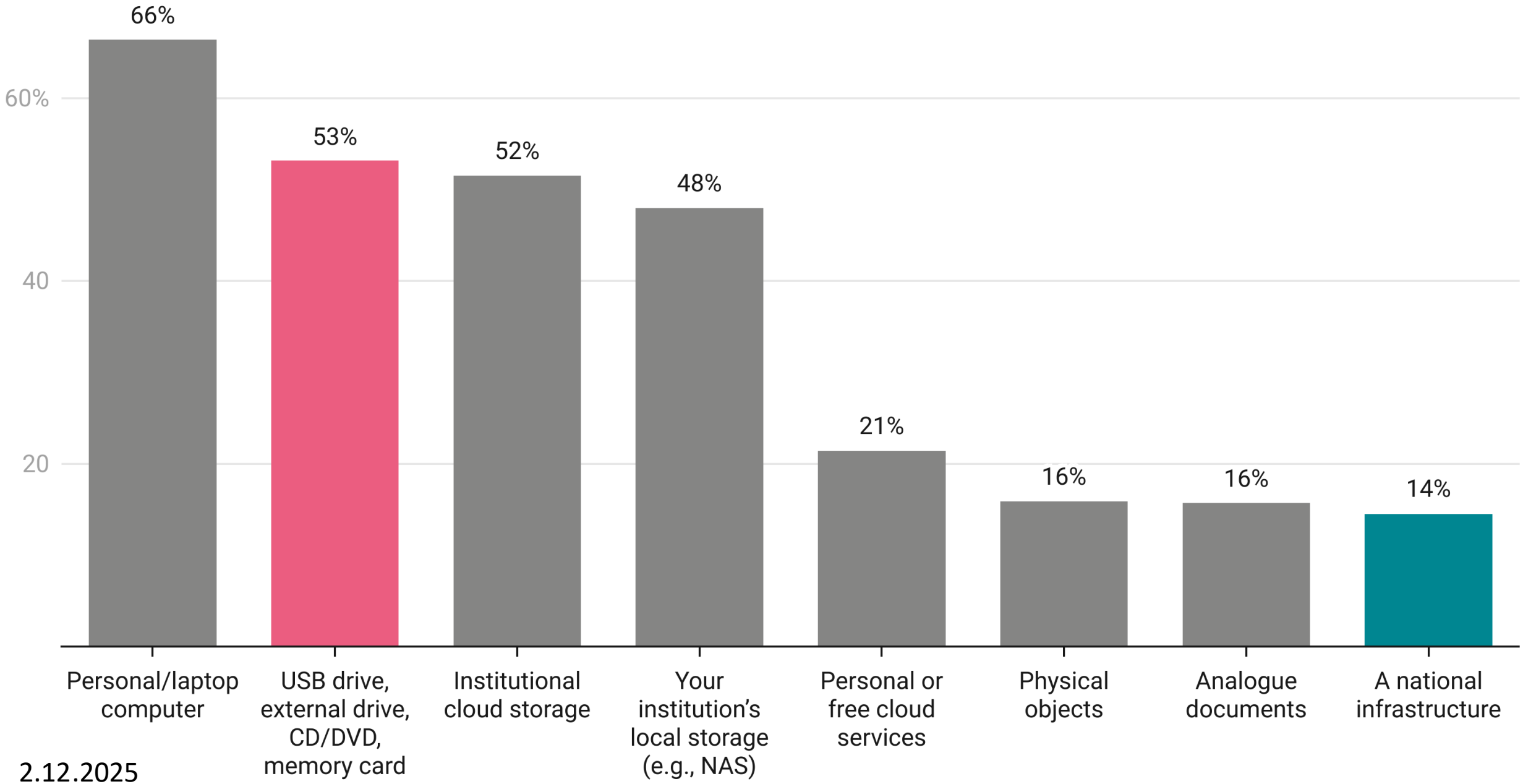
How much data did you generate in the project?



Where do you store the research data from your project?



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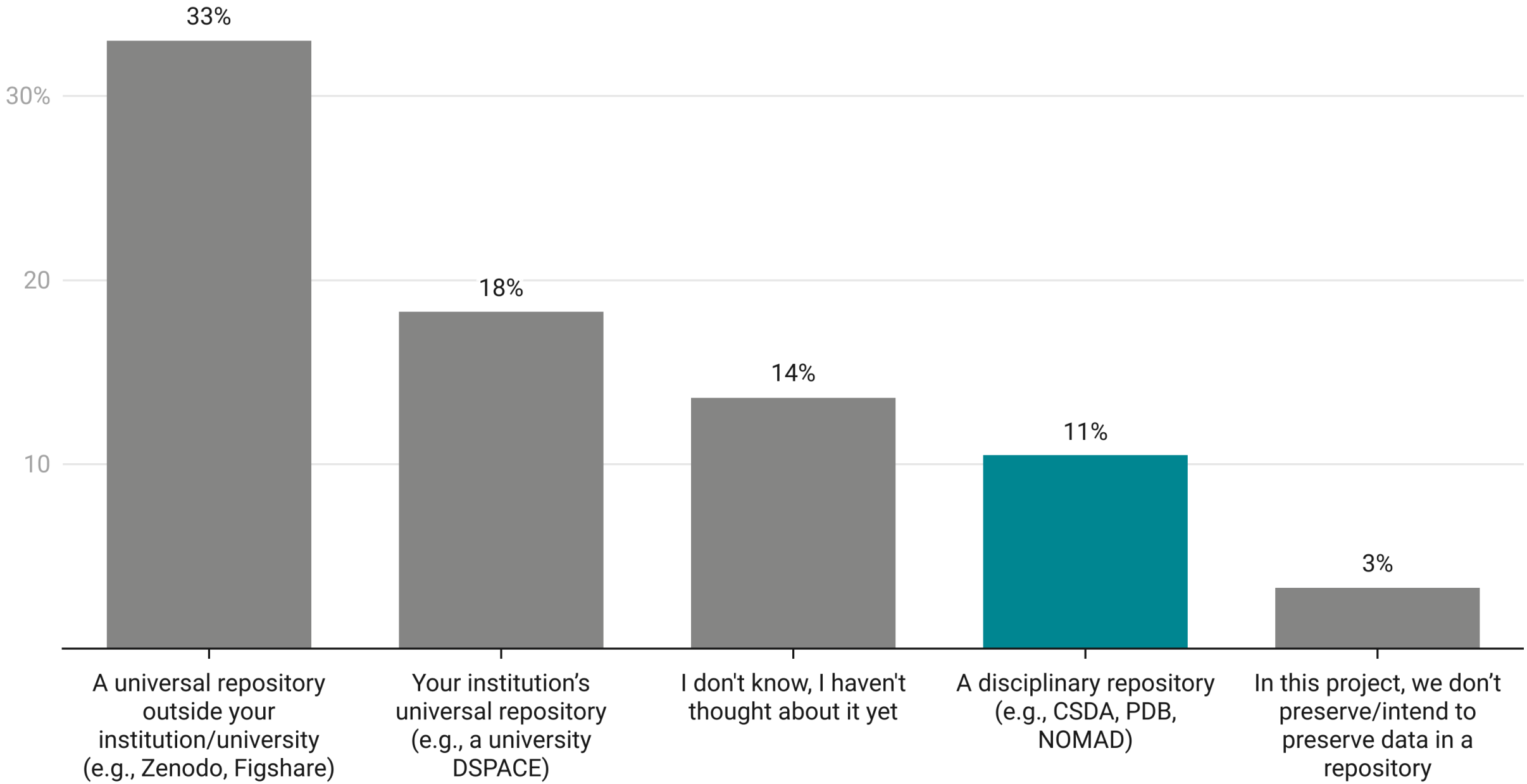
In what kind of repositories do you preserve/intend to preserve the research data from your project?



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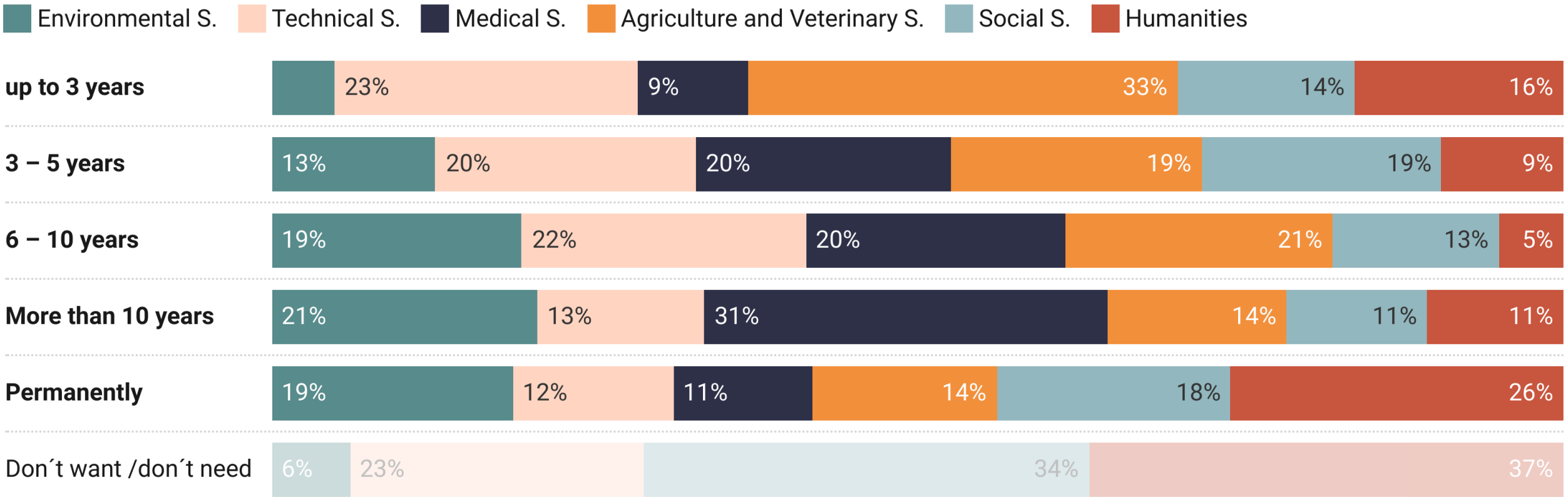
For how long after the project's conclusion do you intend to preserve your research data?



Sharing the Data

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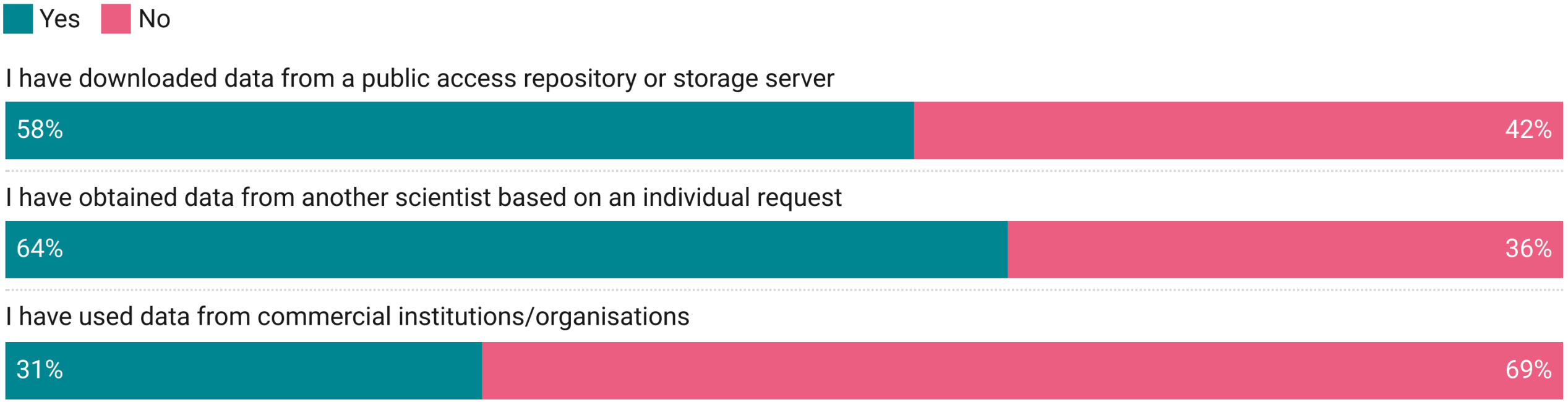
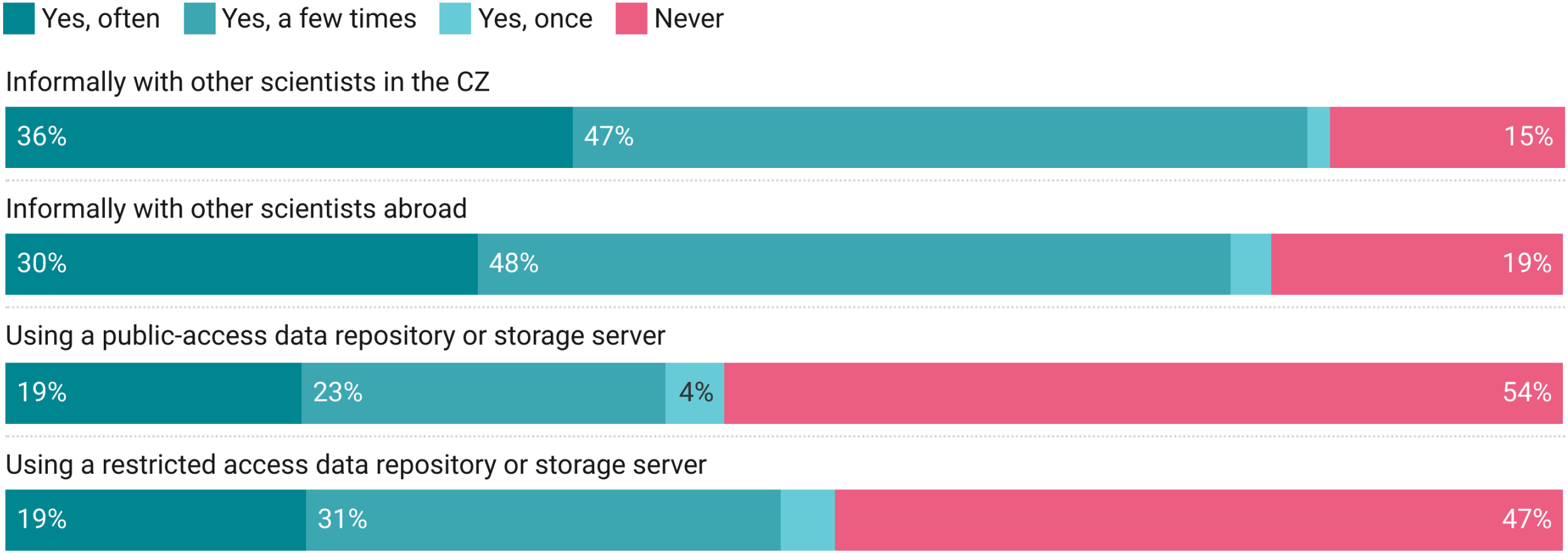
Have you ever used research data from others scientists or institutions?



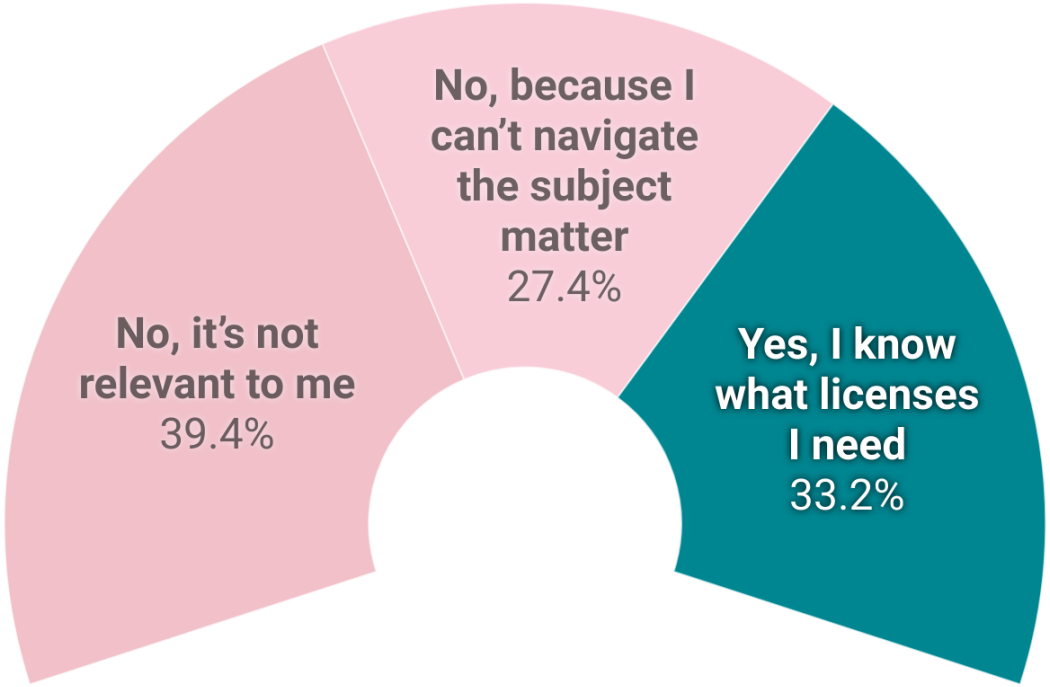
Half of the participants re-use data from other scientists.

Have you ever shared your research data?

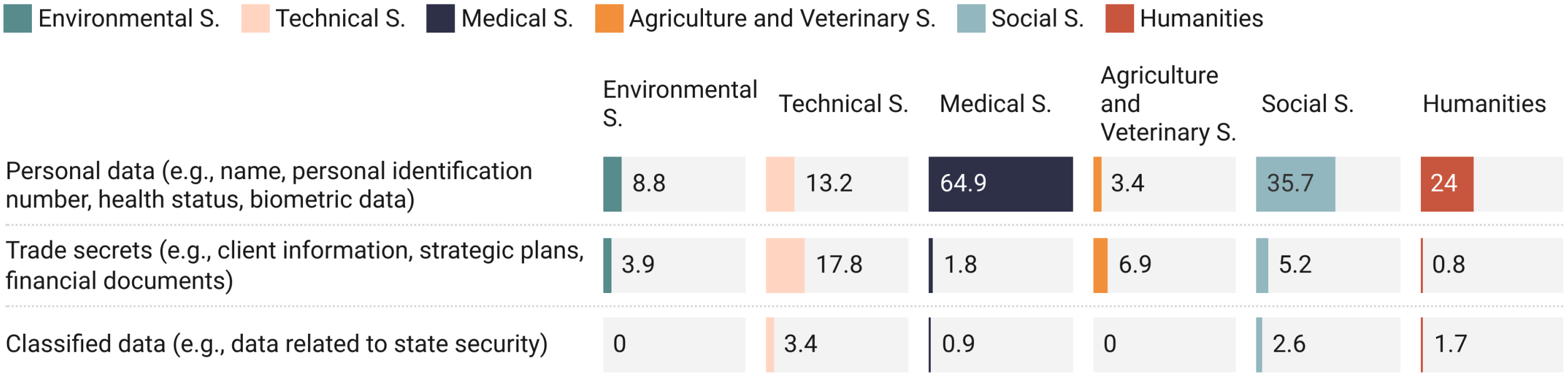


Researchers **share their data**,
when they have a full **control over how and whom with.**

Do you implement licensing for your research data?



Share of projects producing sensitive data



	Environmental S.	Technical S.	Medical S.	Agriculture and Veterinary S.	Social S.	Humanities
Personal data (e.g., name, personal identification number, health status, biometric data)	8.8	13.2	64.9	3.4	35.7	24
Trade secrets (e.g., client information, strategic plans, financial documents)	3.9	17.8	1.8	6.9	5.2	0.8
Classified data (e.g., data related to state security)	0	3.4	0.9	0	2.6	1.7

Kind reminder: **”FAIR data” does not mean “OPEN data”.**

The Future Outlook

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Assignment of the Metadata

- **59% of respondents** assign metadata to their research data
  - **36.3%** rely on a README file
  - **23.2%** use automatically generated metadata from instruments or electronic lab notebooks
  - **7.2%** use standardized metadata schemas
- **41% of respondents** do not use metadata
  - **28.8%** It’s not important for the project
  - **10.7%** don’t have sufficient capacity (human or financial)
  - **6.2%** don´t know how to do it
  - **2.4%** lack of technical equipment

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Why is Data Management Plan used?

Out of 1100 answers, 607 claimed they use DMPs.

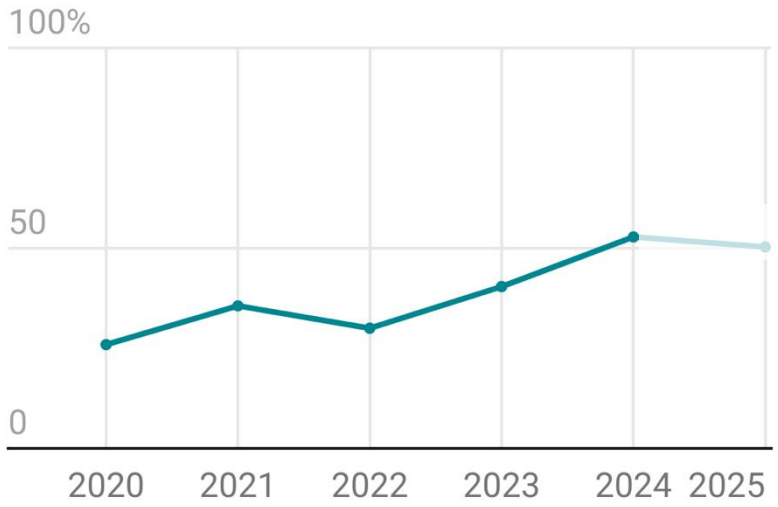
Out of those:

- **257 respondents** do it just to fulfil the rules and obligations by the grant agencies.

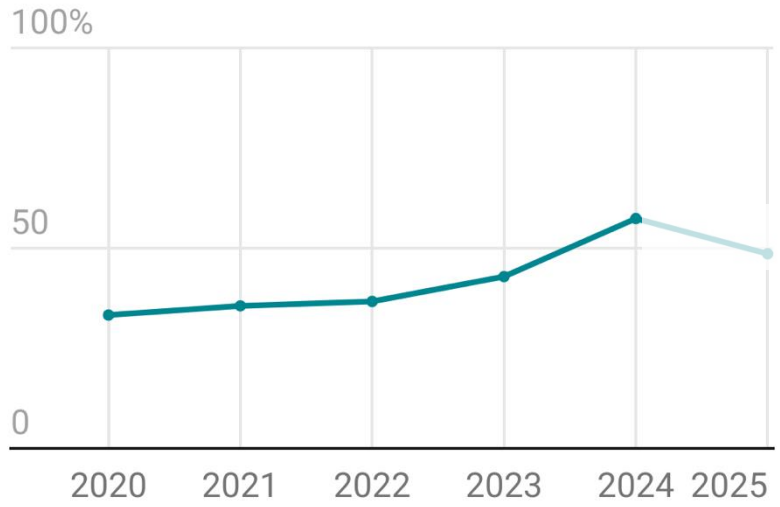
- **350 respondents** claim practical reasons, including:
  - **180** to **set data management practice** in the project
  - **152** to adhere to the FAIR principles
  - **119** to **communicate about data-related issues within the team**
  - **79** to manage opportunities and restrictions with respect to the project's data
  - **31** to manage project's risks

Obligation to retain research data in relation to the project's start year

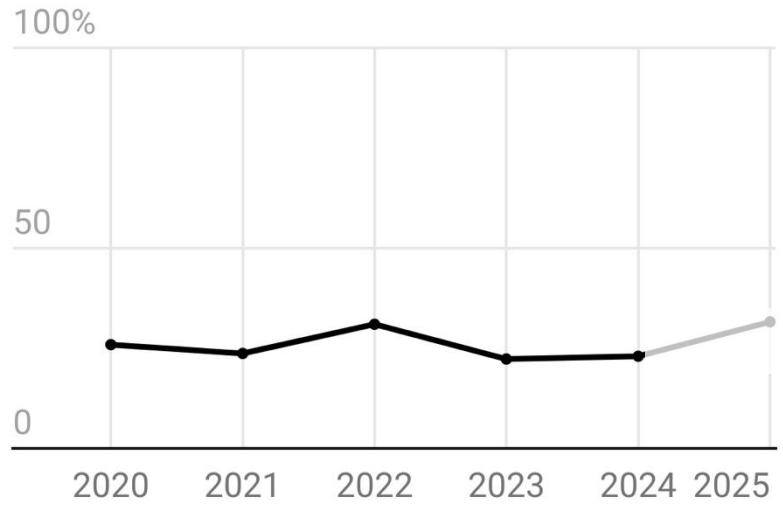
Yes, it's part of our data management plan



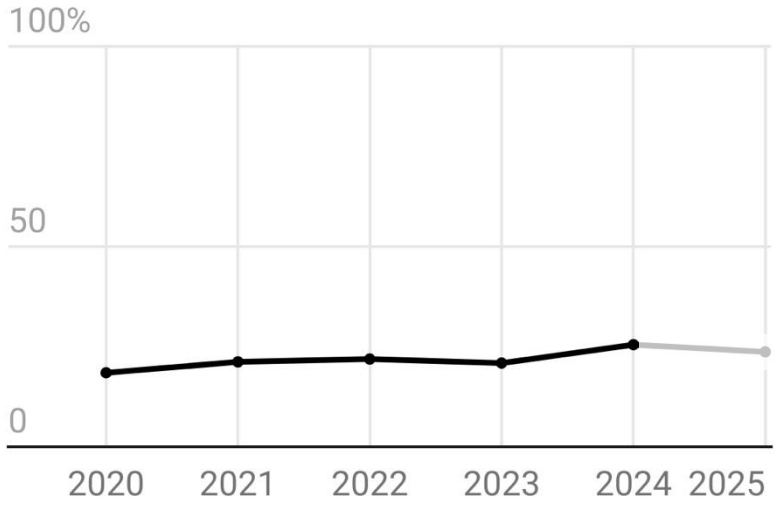
Yes, it's a funder's stipulation



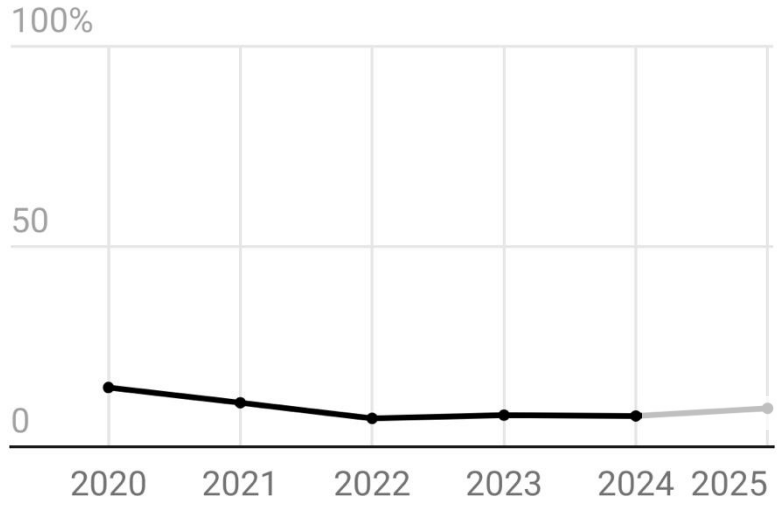
Yes, it's stipulated by the home institution/organization



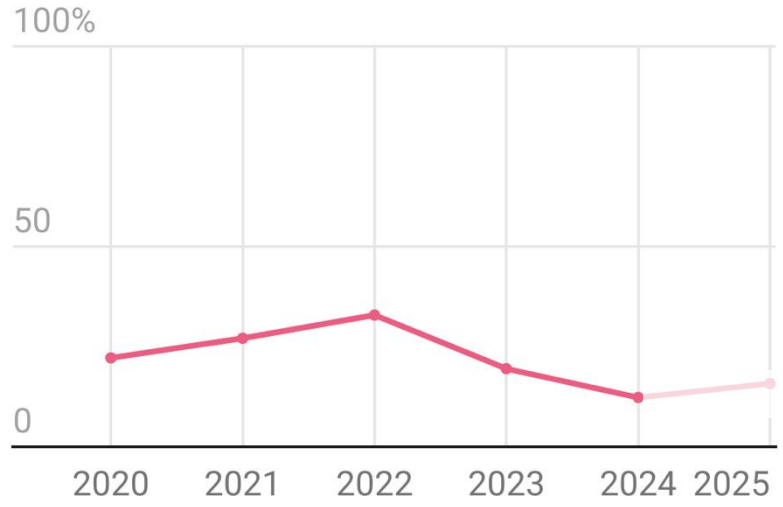
Yes, it's a publisher/journal's stipulation



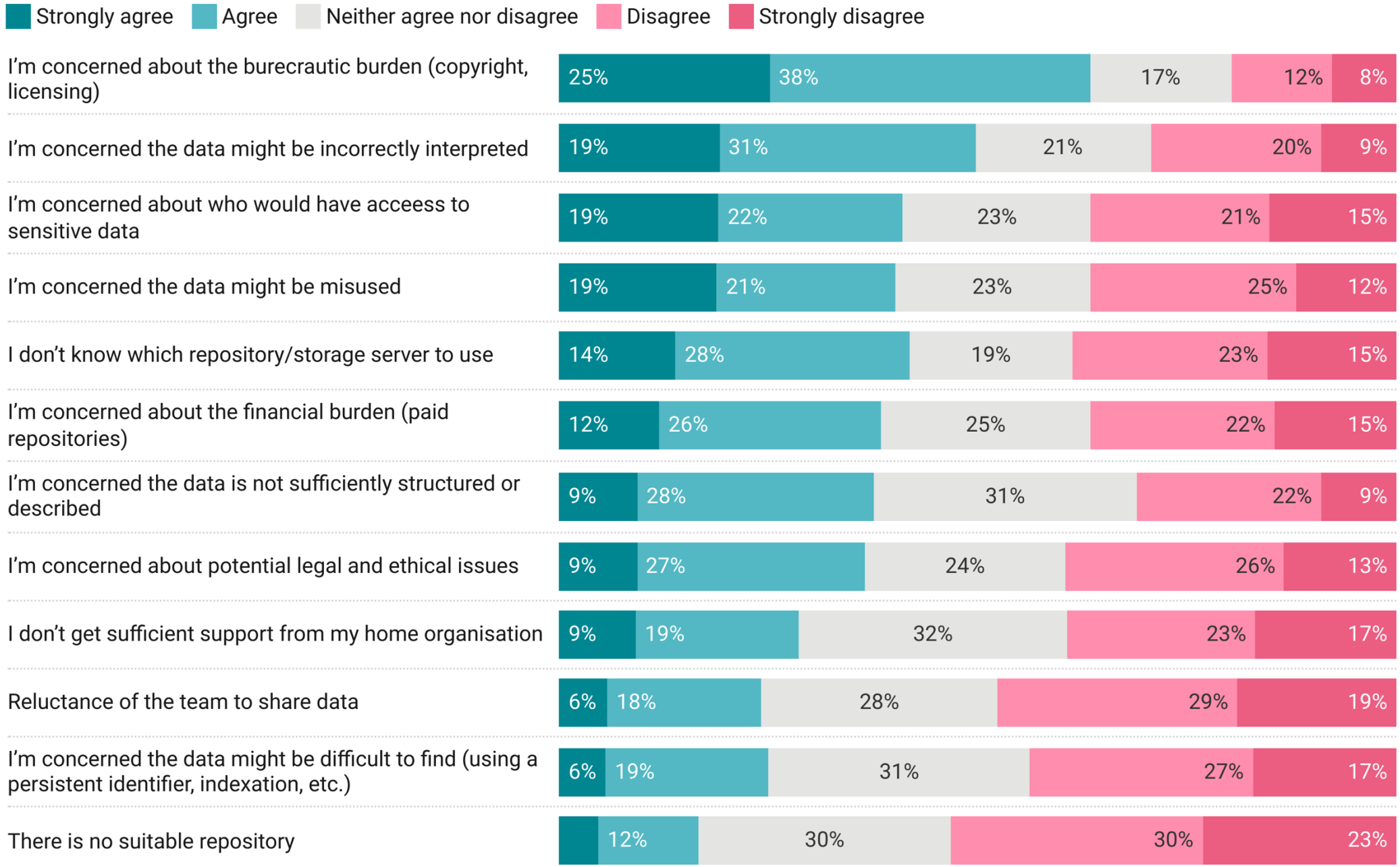
Yes, based on collaboration with our international partners



No, we haven't encountered such a requirement



What kind of obstacles do you see in sharing the data?



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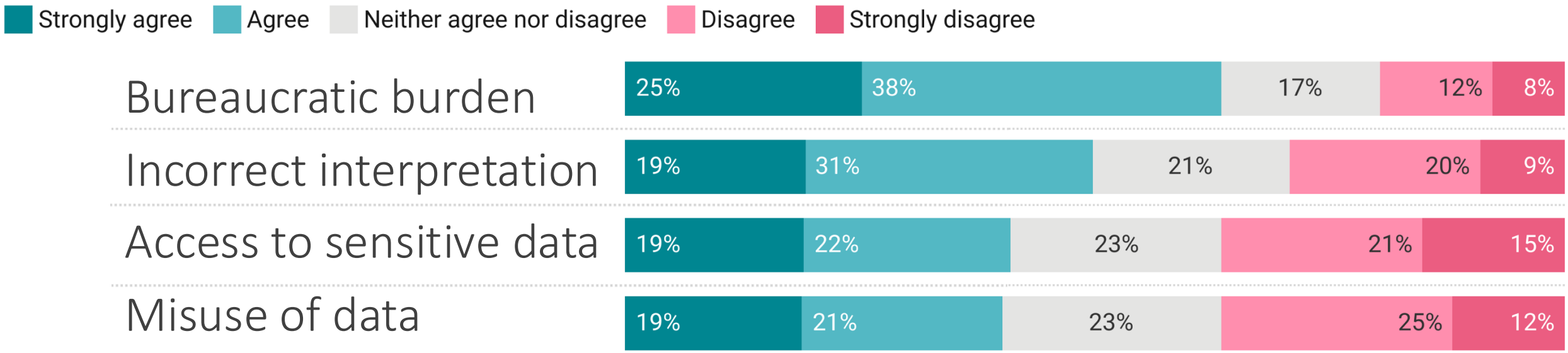

Research data in Czech republic – way forward

We, the scientific community, need to:

- **increase the awareness**

- develop and actively use **new tools for data management**

- adhere to everchanging incentives and **seize the opportunity**

- advance our **data related skills**

Tools for data management

Data storage

National Data Repository

A service for the storage, sharing and long-term preservation of research data, supporting open access and data management according to FAIR principles

e-INFRA CZ storage

within t… Repository Pla…

ZENODO

Enables researchers around the world to store, share and publish research data, papers, software tools and other outputs across disciplines, supporting the … of open science

Data management planning

ARGOS

ARGOS is a joint effort by OpenAIRE and EUDAT to create an open platform for data management planning

Data Stewardship Wizard (NRP)

An open-source tool in its pilot version, available in a localized instance for the Czech Republic. It helps researchers create DMPs in accordance with the FAIR principles and provides methodological support and documentation.

Data searching

CCMM

CCMM is the core metadata model for describing research data in the Czech Republic. Its goal is to define unified elements for dataset description across repositories and ensure interoperable metadata across disciplines.

National Metadata Directory

Enables search and access to scientific data metadata and repositories

data.gov.cz

National Open Data Portal of the Czech Republic, which provides access to public administration datasets

Google D… a search engine … finding and accessing … publicly available research datasets from a variety of disciplines and sources around the world

Analyzing data and performing calculations

Supercomputing Capacities

IT4Innovations computing capacity for research and development tasks

MetaCentrum Services

Cloud and grid-based computing services

CERIT-SC Services

Computing services on batch, cloud and container platforms

Sensitive data processing

Advanced security features to ensure your data is safe and compliant

BLOCK #1 TODAY:
Tools for Data Management


ARTS
AGROFOOD
AI
CORPUS
GENASIS
OMICS
ZOOLOGY
SIMULATIONS
SENSORS
DUNE
ARCHAEO-LOGY
BIOIMAGING
PLANTS
MAPS AND DATA
LINGUISTIC
ISOARCH
SOCIAL
SENSITIVE SOCIAL DATA
MOLECULAR BIOPHYSICS
BIO/CHEM
ARCHAEO-MAPS
BIODIVER-SITY
CRYSTALO-GRAPHY
PLASMA
PHENOTYPE
LASER PHYSICS
LAUEDB
MATERIALS
EXPOSOME
TELESCOPE
BIBLIO-GRAPHY
BIOPHYSICS
BIOMONI-TORING
REPO CZ
Repo Builders Workshop tomorrow

Everchangi… …ntives, and storie… …)Use

BLOCK #2 TODAY:
Stories of Data (Re-)Use

- We will hear the stories of res… …portunities of responsible research data management
- RIV recognizes **new output – "type T"** – digita…
- **Data planning is required** by the funders – anyone who re… …esearch must manage data responsibly
- It's not about if or when anymore, but about **how we approach the manage… …our research data responsibly today**

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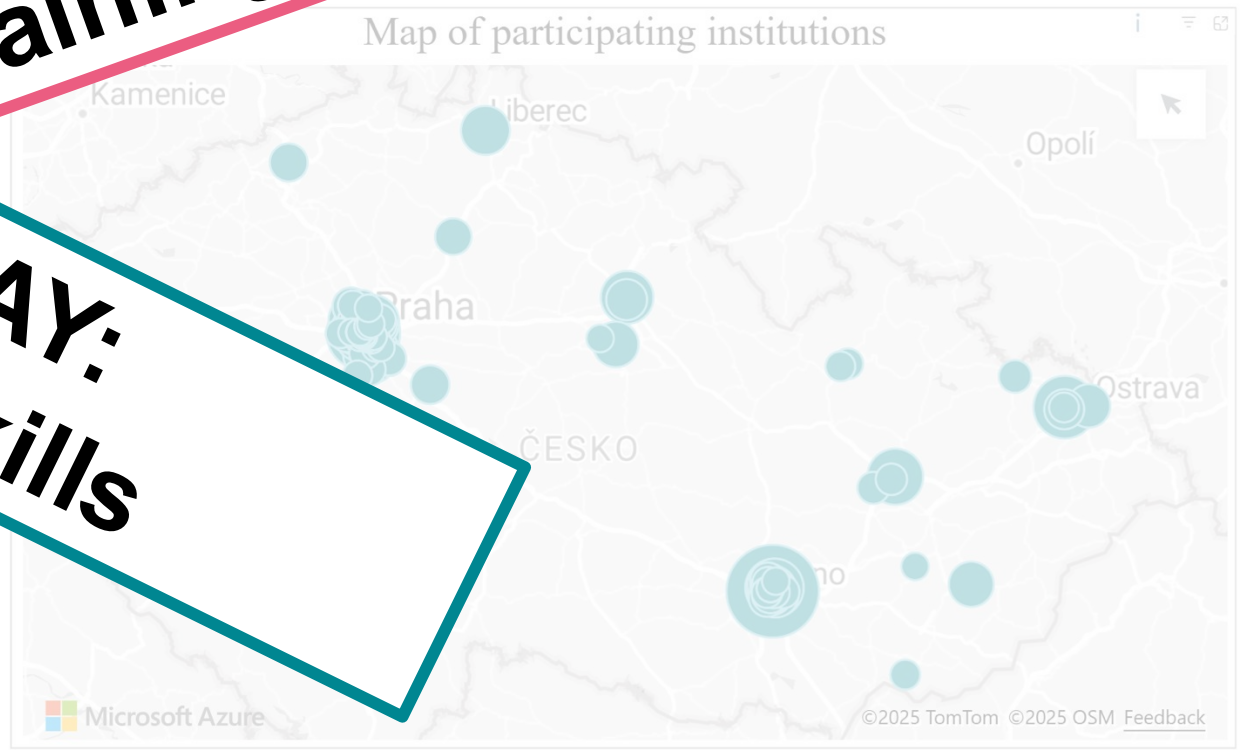
Advancing data skills

EOSC training center on itself served over 4.000 (6
trai hops and one summer sch

Cours
at the unive

Young Researchers training tomorrow

BLOCK #3 TODAY: Advancing Data Skills



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Conference Sessions (today)

Tools for Data Management	10:30–12:00
Stories of Data (Re-)Use	13:00–14:30
Advancing Data Skills	15:00–16:30
Poster Session	17:00–17:45

Workshops and Training (tomorrow)

Repo Builders	parallel sessions
Young Researchers	