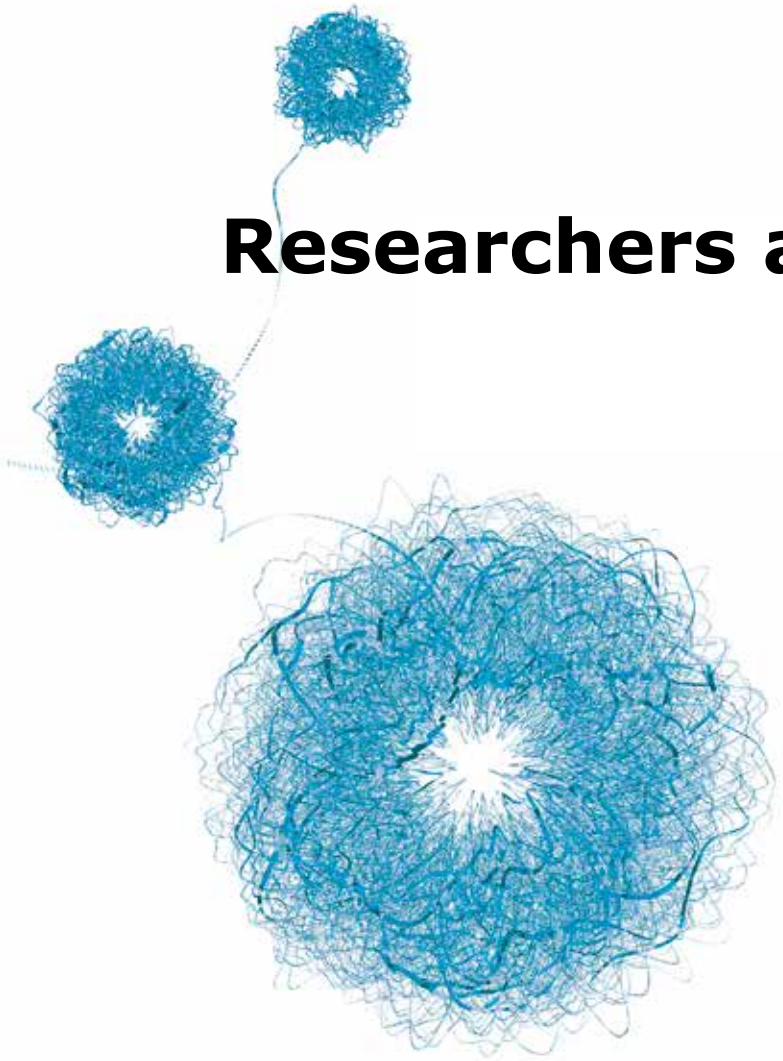

# Researchers and Their Data

## Results of an Austrian Survey

### Report 2015

e-infrastructures austria

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e-infrastructures austria

Report 2015

**Citation proposal:** Bauer, Bruno; Ferus, Andreas; Gorraiz, Juan; Gründhammer, Veronika; Gumpenberger, Christian; Maly, Nikolaus; Mühlegger, Johannes Michael; Preza, José Luis; Sánchez Solís, Barbara; Schmidt, Nora; Steineder, Christian (2015): Researchers and their data. Results of an Austria survey – Report 2015. Version 1.2. DOI: 10.5281/zenodo.34005. Online also at: https://phaidra.univie.ac.at/o:409318

**Summary:** This report provides an overview of the Austria-wide survey on research data, which was carried out within the project e-Infrastructures Austria in 2015. This was directed at the arts, humanities and sciences staff of all 21 public universities and three extramural research institutions in Austria. The participants were asked about the following topics: data types and formats; data archiving, backup and loss; ethical and legal aspects; accessibility and re-use; and infrastructure and services. The first survey conducted at the national level in this context was used for the practical handling of research data in Austria, and is therefore the basis for a consecutive optimization of relevant infrastructure, an adaptation of the services provided, as well as a reorientation in identifying resources in this strategic area which correspond to the expressed needs of people in the research process.

**Tags:** Austria; public university; non-university research institution; researchers; research data; research data management (FDM); e-Infrastructures Austria; survey; report

**Abstract:** This report provides an overview of the Austria-wide survey for research data, which was carried out within the framework of the project e-Infrastructures Austria at the beginning of 2015. This survey was directed at the scientific and artistic-scientific personnel of all 21 public universities and three extramural research institutions in Austria.

**Keywords:** Austria; public university; extramural research institution; researcher; research data management (rdm); e-Infrastructures Austria; survey; report



**Version 1.0**

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# Executive Summary

## Introduction

This report provides an overview of the Austria-wide survey for research data, which was carried out within the framework of the project *e-Infrastructures Austria*[3] at the beginning of 2015. This survey was directed at the arts, humanities and sciences staff of all 21 public universities and three extramural research institutions in Austria.

The participants were asked about the following topics:

- Data types and formats
- Data archiving, backup and loss
- Ethical and legal aspects
- Accessibility and subsequent use
- Infrastructure and services

This first inquiry conducted at a national level in this context, facilitates the collection of methods for the practical handling of research data in Austria, and is therefore the basis (1) for an on-going effort to optimize infrastructure, (2) for an adaptation of the services provided, as well as (3) for a reorientation of the identification method for resources in this strategic area, which correspond to the expressed needs of people in the research process.

## Background

A solid research data management system is the foundation of cooperative, open research and, thus, of its reproducibility and verifiability. Both visibility as well as the reputation of the Austrian research landscape, also play an important role. This topic is relevant and up-to-date for researchers, funding bodies and senior posts of scientific institutions, currently demonstrated by the Pilot for Research Data of the European Commission.[4]

## Methodology

The survey is based on institutional, discipline-specific surveys that have already been performed at univer- sities and research institutions in other countries. Emphasis was placed on the creation of a specially deve- loped questionnaire which took into consideration the differences between the arts and sciences. This was created in German and English and was programmed by means of the open source software, LimeSurvey. The implementation period was January 19 to March 31, 2015. The 3026 completed questionnaires, equivalent to an average response rate of 9 %, were statistically evaluated using the open source statistical software R and the open source spreadsheet OpenOffice.

## Key Findings

The results of the study confirm the current expectations with respect to the handling of research data and settle them statistically. For each thematic area, both cross-curricular commonalities as well as discipline- specific features were determined where relevant.

### *Data types and formats*

- The majority of researchers generate research data in the form of unstructured text files, graphics and tables. One quarter of the participants use structured text, one quarter videos, databases and source code, and a fifth use audio and software. While in the technical disciplines, as expected

[3] Projekt e-Infrastructures Austria, Website. Online at: http://e-infrastructures.at/startseite (access: 30.09.2015).

[4] European Commission: HORIZON 2020, Open Science (Open Access). Online at: http://ec.europa.eu/programmes/horizon2020/en/h2020-section/open-science-open-access (access: 30.09.2015).

– source code and configuration data are frequently generated, the relatively frequent production of databases in the humanities and medicine is particularly striking.
– The majority of the researchers produce more than three quarters of their research data volume in digital form; whereupon analog data is often used only by slightly more than every twentieth participant, especially in the humanities.

***Data archiving, backup and loss***

– The majority of respondents use multiple storage options, where a clear preference was observed for the use of business and private computers as well as external hard drives and USB drives.
– Two-thirds of researchers require memory in the order of up to 100 GB per year. A higher memory requirement can be observed for both the medical and the artistic universities.
– More than two-thirds of researchers indicate that they document their research data individually and inconsistently, and more than nine out of ten of these indicate that they are responsible for the archiving of research data themselves.
– More than one-third already had experience with data loss.

***Ethical and legal aspects***

– While one-third of researchers claim to have never or rarely been confronted with legal ambiguities in foreign data usage, one-fifth experienced legal ambiguities at least sometimes.
– When switching institutions, research data tends to remain at the entity concerned; for about half of researchers, this data was also transferred to the new institution.
– Sensitive data is used by every seventh researcher. Playing a major role here is medicine, which shows that four out of ten researchers often use such data.

***Accessibility and re-use***

– The use of external data is considered by many researchers to be a key aspect of their research, while one-quarter of researchers use no external data.
– Access to self-generated research data by third parties is usually allowed by researchers to a limited degree. While slightly more than half of the respondents allow access only on request, only one in ten provides their research data as open data for the public; the same number of researchers deny access altogether.
– Access to research data is made possible by the majority of researchers either by physical disks or via e-mail. More than two-thirds of the researchers use cloud or website applications for this; data archives or repositories are used by every seventh researcher.
– Approximately one-third of respondents allow the re-use of their own research data; this occurs more often in geography, biology and chemistry, while this occurs relatively less frequently in medicine, social sciences and humanities.
– User agreements are being entered into by more than one-third of the researchers.
– For more than half of the researchers, the most attractive incentives for sharing their data were increased visibility and impact, new cooperation opportunities, recognition in professional circles, as well as their ccontributions being regarded as scientific output.
– Alternatively, the obstacles for to data sharing were mainly the increased time and costs, a possible misuse of data, legal uncertainties, potential data corruption, unwanted commercialization and increasing competitive pressure. Legal restrictions in particular, were the main obstacles in medicine, the social and behavioral sciences and the engineering sciences.

***Infrastructure and services***

– With respect to the preferred data archive, the researchers show no clear preference. Mentioned quite often in this context are the international, specialized data archive, the institutional repository, the international multidisciplinary data archive and the nationwide specialized repository.
– The majority of researchers desire technical infrastructure and project-specific support for research data management. In addition, more than one-third show interest in legal advice, a general help desk, as well as training programs.

– More than half of the researchers expect the provision of additional qualified staff, as well as the adoption of guidelines or policies for dealing with research data. One-fifth desire that research data management be accepted as part of the educational curriculum and that it becomes anchored as a service requirement.

**Recommendations**

Based on the present survey results, the implementation of the following measures for the handling of research data in Austria is strongly recommended:

– Creation of a comprehensive, technological infrastructure in Austria, including specific disciplinary needs
– Adoption of institutional policies
– Hiring  of information professionals
– Implementation of support services for researchers
– Implementation of appropriate incentive systems
– Encouragement of international and interdisciplinary cooperation

The above recommendations above aim to initiate highly efficient infrastructures for the proper handling of re- search data in the Austrian scientific landscape. In the development and concrete implementation of these infrastructures, not only must rapid changes in this area be considered in an international context, but international cooperation must also be sought in order to develop synergies. The establishment of an e-infrastructure for research data has several advantages, including increases in the visibility and reputation of individual, participating Austrian research institutions, resulting in Austrian research benefitting as a whole.

## Success via a networked approach – e-Infrastructures Austria

When we were imagining for the first time four years ago the possibility of an efficient networking system for constructing digital archives at Austrian universities, this project seemed to be unrealistic. Although a networked approach reflects a tradition of which we librarians are proud and which we have lived out and exercised over several centuries, in this visionary task, far more complex tasks stood in our field of vision; tasks that require a special management effort. Initially, this involved identifying different fields of action in technical as well as non-technical areas. Soon, the involvement of IT service institutions was necessary, as was the involvement of other research-supporting organizational units representing the university environment. And of course, the creators of digital data, the researchers themselves, had to be involved. Thus, the basis for the extended network structure was established, which today forms the backbone of the project.

Initial discussions at the level of the university rector resulted in positive feedback regarding the vision that was now becoming more concrete. An ad hoc inventory organized and conducted throughout Austria promptly and unsurprisingly revealed a very diverse landscape, which required focusing on a few goals. The results were again presented at the level of the vice rectors, whereupon the green light was given to proceed with the project. When the call for a short-term response to this project came from the Ministry, rapid action in the existing network could be taken and the ensuing application was filed in time.

I am therefore grateful to be able to contribute a foreword to this important result at the mid-term of the project. This was made possible by the successful cooperation of the members of a working group which has been professionally managed, but also through the active support of rectors and privacy commissions. This is the first research data collection effort that has been carried out on an Austria-wide basis, including the 20 public universities and three other non-university research institutions in Austria, and employs current practices and technologies. The broad and structured synopsis of different disciplines shows that the use of digital resources carries with it varying, but also common requirements which will have a material impact on the future strategic planning of services. It is obvious that not every institution needs to offer solutions to every requirement, because in some areas, central services provided throughout Austria prove to be significantly more sensible and more efficient. Other trend-setting results, including an expression of sustainability of the project, are to be expected in the coming months in the project e-Infrastructures Austria.

Vienna, September 2015

Maria Seissl, Vienna University Library and Archive Services
Promoter of the project e-Infrastructures Austria

## Quality-assured research data – the cornerstone of scientific knowledge

With the promotion of e-Infrastructures Austria, the project funded by higher education, the Federal Ministry of Science, Research and Economics is fostering an informed discussion of research data with the progessive theme of managing such data at the national level. The project, in which 25 scientific institutions and now four institutions with observer status are participating, has a term of three years (from 2014 to 2016) and is divided into three sub-projects that are processed in twelve work packages. The objectives of e-Infrastructures Austria are the establishment of local repositories, the design and construction of infrastructures for research data repositories and other complex data sets, and the structure of the knowledge network e-Infrastructures Austria.[5]

In recent years, research data has increasingly become the focus of research policy and research funding. The importance of research data was declared by the Alliance of German Science Organisations on 24 June, 2010 in a document on the *Principles for Dealing with Research Data: "Quality assured research data forms a cornerstone of scientific knowledge and can, regardless of its original method of collection, often be the basis for further research. This holds true for the aggregation of data from different sources for common use. The sustainable protection and provision of research data thus serves not only the examination of previous results, but to a large extent, the generation of future results. It then forms a strategic purpose, to which science, politics and other sectors of society must jointly contribute."*[6]

A key objective of e-Infrastructures Austria is the creation of a strategic concept for the competent future management of quality-assured research data in Austria. A prerequisite for the creation of a suitable infrastructure is knowledge about the practical use of research data by researchers. To achieve this goal, in 2014/15 a nationwide survey on research data was designed, conducted and evaluated for the project.

As elected board members of the General Meeting of the 25 project partners, we are pleased that with this report, the results can be presented to the interested public. In support of this, the creation of a strategic concept for the future handling of quality assured research data is scheduled for the second phase of the project. The aim is the creation of a sustainable infrastructure for research data at Austrian universities and research institutions, in order to ensure that the research location Austria is competitive and future-oriented by international comparison.

Vienna, September 2015

Bruno Bauer, University Library of the Medical University of Vienna
&
Elisabeth Frasnelli, University and State Library of Tirol
Chairpersons of the General Assembly of the project e-Infrastructures Austria

[5] Bauer, Bruno; Budroni, Paolo; Ferus, Andreas; Ganguly, Raman; Ramminger, Eva and Solís Sánchez, Barbara: e-Infrastructures Austria 2014: Report on the first year of the higher education-funded project. Announcements of the Association of Austrian Librarians 68 (2015) No. 1, pp 91-118. Online at: http://eprints.rclis.org/25467/ (Access: 30.09.2015).

[6] Focus initiative "Digital Information" of the Alliance of German Science Organisations: action field research data. Online at: http://www.allianzinitiative.de/de/handlungsfelder/forschungsdaten (Access: 30.09.2015).

## e-Infrastructures Austria

e-Infrastructures Austria is a project for the coordinated development and advancement of repository infrastructures throughout Austria. It guarantees the reliable archiving and provision of electronic publications, multimedia objects, and other digital data from research and teaching.

**Project objectives:**

- Construction of repositories for all partner institutions
- Developing a strategic approach for future research data management in Austria
- Construction of a knowledge network and accessible knowledge infrastructure for dealing with digital resources for all 25 + 1 project partners

Start: 1 January 2014
End: 31. December 2016
Project coordination: University of Vienna
Project partners: 25 + 1 partner institutions
Client: Federal Ministry of Science, Research and Economics
Project management: University of Vienna

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# I. Introduction

### The survey

In early 2015, a call was made to the arts and sciences staff of all 21 public-sector universities and three non-university research institutions in Austria to participate in an Austria-wide survey related to research data, in order to improve the practical use of research data and to adapt the services available to the existing needs in this field.

The survey was conducted as part of the higher education-funded project e-Infrastructures Austria. In addition to the coordinated development of digital archives and the development of services, e-Infrastructures Austria pursues the establishment of a knowledge network for the dissemination and secure archiving of electronic publications, multimedia objects and other data from research and teaching.

In the present survey, the term ”research data“ stands for all of the data that arises in the course of scientific research and artistic creation processes (e.g. text, tables, video, audio, graphics, etc.) and which are based on their research results and/or art pieces (e.g. from experiments, source research, measurements, surveys, digital copies and drafts).

### Goals

This survey was intended to, for the first time, elucidate the status quo throughout Austria concerning how research data is dealt with, to raise awareness of the topic and to identify the desiderata of Austrian researchers, to determine possible incentives for research data management in general and especially *open data*, and to derive from this the needs for future research data services.

The final report is the basis for developing a strategic approach for future research data management in Austria. For the purpose of a coordinated initiative it is necessary to determine which tasks could be bundled or performed centrally, and what demands the transformation and expansion of specific organizational structures require at a local level. It is equally significant to clearly define areas of responsibility with associated roles and authorities, and establish them within the institutions.

### Context

The subjects of research data and the generation of digital data are not new, whereas the potential and value of, and need for, efficient, sustainable data management is becoming increasingly recognized in the international research environment, as well as in this country, by sponsors, researchers and leading positions at academic institutions. The accessibility of research data, together with the use of powerful technologies, support the idea of cooperative, open research and its traceability and verifiability.

Research results can be made more visible through appropriate measures and available to a larger number of people across all boundaries. In this social dimension, the issue also occupies an important place in the European Commission. Currently, this is made particularly clear by the general requirement of open access in the funding program entitled, *Horizon 2020 and the pilot for research data*.[7]

Data may have heterogenous origins, different formats and different degrees of accessibility. The basic conditions for working with digital content are satisfied if the access to data is ensured using suitable tools and taking into account the differentiated access concepts and legal requirements. In addition, data must be identifiable over the long-term, readable, quotable, technically interchangeable, understandable concerning content, and must maintain institutional availability. Strategies and technology are necessary for interaction between different groups of researchers.

[7] European Commission: HORIZON 2020, Open Science (Open Access). Online at: http://ec.europa.eu/programmes/horizon2020/en/h2020-section/open-science-open-access (access: 30.09.2015).

**Approach**

The survey used is based on surveys that have already been carried out, as well as institutional or discipline-specific surveys from universities and research institutions in other countries. The particular challenge in the present survey, however, was to accurately depict all possible disciplines in Austria in a representative fashion.

To include important stakeholders at the institutional level in a timely manner, a briefing on the project was issued parallel with the design phase of the survey to the Ministry and to the rectors and governing bodies of all participating project partners. The number of respondents and corresponding contact addresses were identified by responsible persons from each institution, and works councils and data protection employees of the project partners were involved in order to guarantee the anonymity of the survey and the relevant data protection provisions. Through this careful preparation and coordinated approach, a meaningful overview for handling digital data throughout Austria was obtained.

# II. Methods

### General

In addition to the planning of the implementation of the survey, the creation of a questionnaire at the beginning was the central task of the working group. This was based on four surveys, which were carried out at individual institutions (Humboldt University Berlin[8], University of Leeds[9], University of Exeter[10]) as well as part of a larger project in the arts (*KAPTUR project*[11]) from 2011 to 2013, and a discipline-specific survey from the field of humanities (*IANUS*-Projekt[12]).

The final wording of the questions was completed during intense discussions in the working group. The final 26 questions, two of which were dependent on a parent question, were then assigned to the following sections:

- Data types and formats
- Data archiving, backup and loss
- Ethical and legal aspects
- Accessibility and re-use
- Infrastructure and services
- Personal information

Except for the final outstanding question and the issue of the position of the participants, it was necessary to answer all questions, and for this, free text fields were provided for additional comments.

### Technical issues

The survey was conducted using the open source software *LimeSurvey*[13] (formerly, *PHPSurveyor*). It enables the user to develop online surveys without any programming knowledge, to publish such, to collect their results in a database, to generate statistics, and to export the data for processing with other applications.

### Statistical issues

The survey was evaluated by methods of descriptive and inductive statistics, using the open source statistics program R, and the open source spreadsheet program OpenOffice.

For the evaluation of the free text fields, all the answers were viewed, intellectually evaluated and assigned categories in order to create word clouds.. These categories were entered on the website http://www.jasondavies.com/wordcloud. There the following settings were selected:

- One word per line
- Two orientations from -90 and zero

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8 Simukovic, Elena; Kindling, Maxi; Schirmbacher, Peter (2013): Survey on the Use of Digital Research Data at Humboldt University of Berlin. Survey Report, Version 1.0. urn:nbn:de:kobv:11-100213001; Simukovic, Elena; Kindling, Maxi; Schirmbacher, Peter (2013): Results of the Survey on the Use of Digital Research Data at the Humboldt University of Berlin ("Ergebnisse der Umfrage zum Umgang mit digitalen Forschungs- daten an der Humboldt-Universität zu Berlin"). DOI: 10.5281/zenodo.7446.

9 University of Leeds Research Data survey (2012). Online at: http://library.leeds.ac.uk/info/377/roadmap/122/ roadmap_project_outputs/7 (Access: 30.09.2015).

10 Open Exeter Project – Summary Findings of the Open Exeter Data Asset Framework (DAF) Survey (2012). Online at: http://hdl.handle.net/10036/3689 (Access: 30.09.2015).

11 The *KAPTUR* project funded by JISC ran from 2011-2013 under the aegis of the Visual Arts Data Service. Project partners were the Glasgow School of Art; Goldsmiths College, University of London; the University of the Arts London and the University for the Creative Arts. KAPTUR Project Final Report (2013). Online at: http://www.vads.ac.uk/kaptur/outputs/KAPTUR_final_report.pdf (Access: 30.09.2015).

12 Heinrich, Maurice; Schäfer, Felix (2013): Survey for Stakeholder Analysis 2013 – for research data in Classical Studies. [Version 1.0] Hrsg. IANUS. DOI: 10.13149/000.jah37w-q.

13 LimeSurvey, Website. Online at: https://www.limesurvey.org/en/ (Access: 30.09.2015).

- Scale: log n
- Spiral: Archimedean
- Number of words: One billion (Maximum)

For each participating research institution, the absolute and relative participation rates were determined. The headcounts were, when available, taken from the intellectual capital (31.12.2013) or provided by the contact persons from institutions that were unrepresented in the intellectual capital. The average attendance rate for all institutions is 9%.

From all of the surveys filled in, 68% of the completed ones were extracted (3026 pieces). Based on the sample size of the completed questionnaires, general statements can be made concerning the entire scientific and artistic staff, with a high confidence level (fluctuation width of about +/- 1.8%). For the completed answer sheets, the density function of the mean and the mode of the total response time were determined. The average response time was about 11 minutes (average) or about eight minutes (median).

In the analysis, a distinction was made between single selection questions and multiple selection questions. For each question, summary tables were created, whereby the absolute and relative frequencies were determined. The determination of both frequencies was based on the distribution of the research institutions and on the distribution of disciplines.

For each question, simple bar charts, stacked bar charts, and cluster analyses were created. The absolute frequencies of a characteristic value can be read from simple bar charts (bar plots). In the stacked bar charts (stacked bar plots), the relative distribution of responses is represented by research institutions as well as by the distribution of the disciplines. The sum of the relative frequencies of characteristic values will always yield one, which is why the bars for all variables have the same length in relative stacked bar charts. The cluster analyses mentioned are not part of this report, but only served in the preparation of the results to enhance the recognition of similarities between the responses in individual disciplines and those of research institutions.

In selected questions, answers have been combined to form larger classes in order to determine a ranking with respect to the distributions involved. In addition, for selected questions, the statistical discriminability in response behavior was determined using the distributions of each research institution or discipline using the chi-square tests. For other selected questions, cross relations tables were created, whose results were then represented in mosaic plots. This serves to locate dependencies according to groups of persons in their responses to questions.

## III. Response and participators

**Response by institutions**

***"Please select the institution at which you are mainly employed."***

*Question rationale*

The survey was originally offered to all 21 public universities and three other research institutions in Austria. From the perspective of the Mozarteum Salzburg, however, a survey did not seem appropriate because the subject matter at the time still involved intra-university dialogue and could therefore not exclude difficulties and misinterpretations. For the project partners, it was a fundamental objective to gather representative data from their own institutions, and thus derive appropriate organizational, structural and strategic measures for the establishment of infrastructure and services. Although the list included all participating institutions, the participants were given the opportunity to select the option "Other institution", in addition to other measures of anonymization.

*Results*

Researchers and artistic persons at the following 23 institutions participated in the survey:

- Academy of Fine Arts Vienna
- Vienna Chamber of Labour
- Institute of Science and Technology (IST Austria)
- Medical University of Graz
- Medical University of Vienna
- Medical University of Innsbruck
- Montanuniversität Leoben
- Austrian Academy of Sciences
- Technical University of Graz
- Technical University of Vienna
- University of Applied Arts Vienna
- University of Natural Resources and Life Sciences
- University of Arts and Industrial Design Linz
- University of Music and Performing Arts Graz
- University of Music and Performing Arts Vienna
- University of Graz
- University of Innsbruck
- University of Klagenfurt
- University of Linz
- University of Salzburg
- University of Vienna
- University of Veterinary Medicine Vienna
- Vienna University of Economics and Business

Based on absolute figures on the responses, five institutions clearly stand out as the largest contributing institutions:

1. University of Vienna
2. Technical University of Vienna
3. University of Innsbruck
4. Medical University of Vienna
5. University of Graz

This means that about two-thirds (64%) of the completed questionnaires originate from the five largest Austrian research institutions. The remaining third (36%) is distributed among the nineteen remaining facilities. One particularly salient larger institution is the University of Veterinary Medicine in Vienna, which achieved a

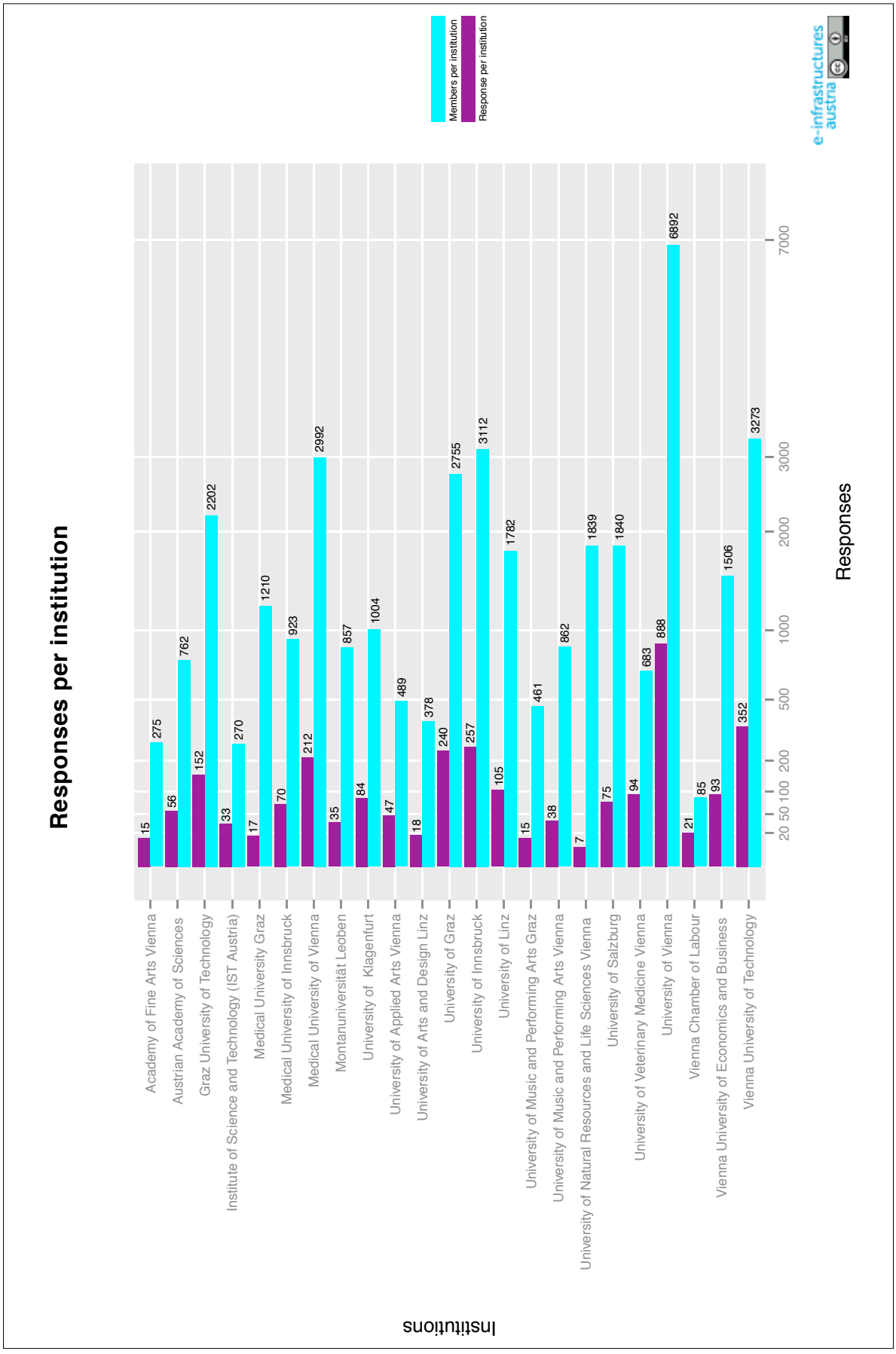



Fig. 1: Number of participants of each institution and their overall headcounts, determined by ICRs (overview)

response rate of over 13% (compared to the average participation rate for all institutions of 9%). Surprising, however, was the low participation from the University of Natural Resources and Life Sciences, and, particularly in comparison to the other two medical universities, there was a very low participation rate at the Medical University Graz. In the smaller, non-university research institutions, the Chamber of Labour of Vienna (25%) and the IST Austria (12%) had a high relative rate of return (see Figure 1).

*Conclusions*

For further studies, other efforts to reach even smaller institutions could be pursued in order achieve a clearer overview of educational disciplines. In this context, it would be sensible to further break down the questionnaires in terms of their structure, and then integrate individual groupings of subjects for the smaller institutions.

**Distribution by disciplines**

***"Please select your main discipline."***

*Question rationale*

By way of discipline-specific differentiation, similarities and differences can be identified with respect to the research data management system currently in use. This supports strategic planning and fosters the development of targeted infrastructure projects. In order to achieve unambiguous distribution, the selection only has an answer option, including the "Other discipline" field. An expanded distribution within the disciplines was optional and contained the answer option "Other". For the survey, the subject classification of the Deutsche Forschungsgemeinschaft (DFG)[14] ("German Research Community") was applied and slightly adjusted, since it appeared clearer to the Austrian Classification System for the Branches of Science (Österreichische Systematik der Wissenschaftszweige – ÖFOS).

*Results*

Regarding the response from the different disciplines, in first place was the humanities (23%), followed by the social and behavioral sciences (16%) and the engineering sciences (11%). In the natural sciences, biology had a response rate of 9%, followed by physics (7%), chemistry (6%), geosciences (4%) and mathematics (3%). The remaining 21% are distributed among medicine (7%), agriculture, forestry, horticulture and veterinary medicine (1%) as well as the category "Others" (13%).

A high proportion of completed questionnaires (39%) thus came from the so-called "soft sciences" (humanities, social and behavioral sciences), whereas another 29% from the scientific subjects (biology, chemistry, earth sciences, mathematics and physics).

*Conclusions*

At first glance, the high proportion of "soft sciences" seems surprising, where one would expect a rather larger return from the natural sciences which, presumably, are familiar with the term research data, and which already have run freely accessible department repositories.

The following factors are suspected to be the reason for the strong involvement of the "soft sciences": Digital content primarily occurs in the awareness of researchers, because the appropriate infrastructures are already in place for this. Digital archives and cultural heritage projects are constantly gaining in significance, and projects such as DARIAH[15] provide technology infrastructure for researchers in the humanities and cultural studies.

[14] Classification of Subjects and Expert Committees of the DFG for the Term 2012-2015. Online at: http://www.dfg.de/download/pdf/dfg_im_profil/gremien/fachkollegien/amtsperiode_2012_2015/fachsystematik_2012_2015_de_grafik.pdf (Access: 30.09.2015).

[15] Project DARIAH, Website. Online at: https://www.dariah.eu/ (Access: 30.09.2015).

It is striking that many participants (13%) selected none of the disciplines, but instead the category “Others” (see Figure 2). Basically, there is the possibility that 13% of the participants, who appear under ”Others“, manually selected their respective disciplines. As part of the survey, however, the necessary resources were lacking to fulfill this very time-consuming task.

The current study shows, as shown in greater detail in the following pages, that medical, technical, scientific and artistic research institutions differ from each other in dealing with research data. For any follow-up studies, it could therefore be envisaged that, depending on the technical disciplines, an array of questions be designed to address specific questions related to the respective disciplines.

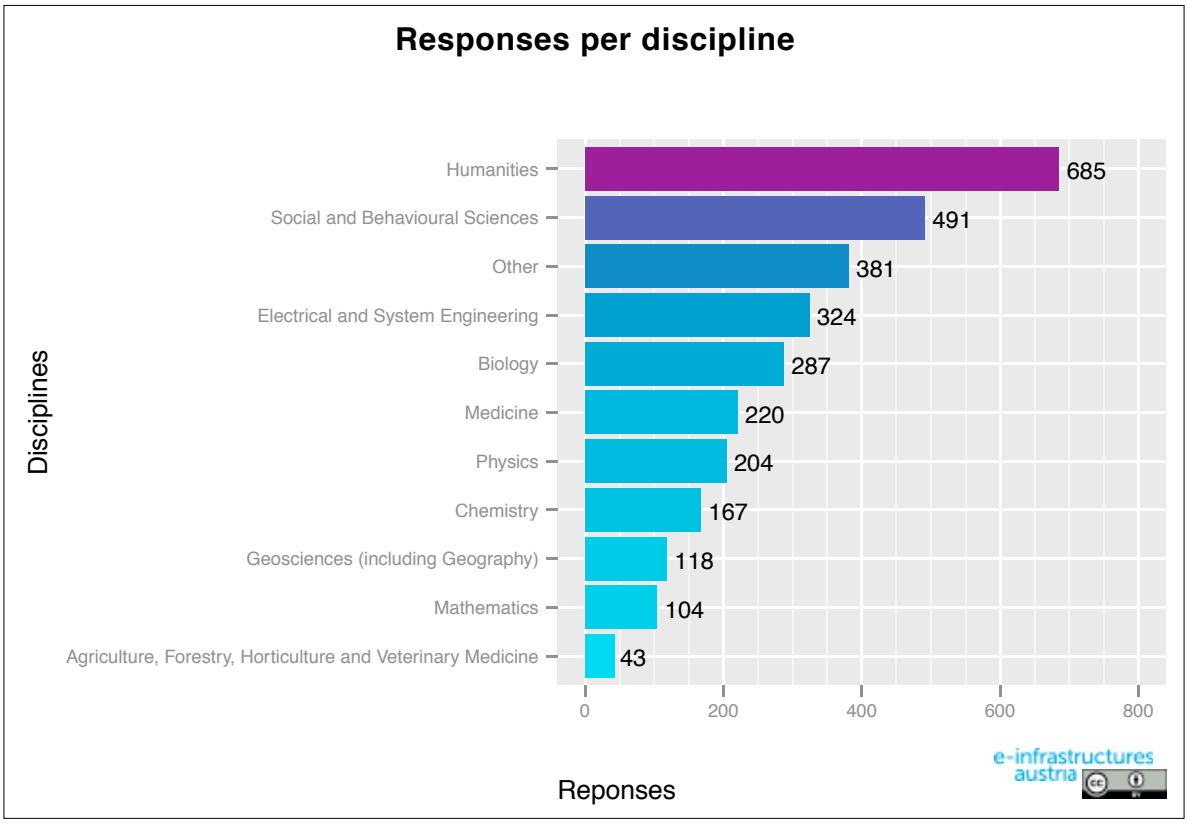



Fig. 2: Number of participants (by discipline)

**Position and age of participants**

***”Please select your position at the institution selected above.”***

*Question rationale*

This question is about differentiating the various target groups and determining whether awareness is particularly pronounced for the subject research data in specific groups. The findings should prove especially useful for future communication and training (single entry).

*Results*

Because this question was not declared as a mandatory field in order to satisfy the demands of anonymity, there are only 2902 responses related to the position of the participants, unlike those of the other questions, so the following percentages refer to this smaller sample size. The following groups are represented in approximately equal parts: the strongest being university assistants (22%), followed by doctoral students (21%) and university professors (19%). Project staff and associates (15%), assistant professors (13%) are also represented in greater numbers. Some lecturers (4%) and student employees (2%) also participated in the survey. The 4% in the category ”Others“ is explained by the involvement of non-university institutions such as the Chamber of

Labour and the Austrian Academy of Sciences where the position designations are not mandatory due to the collective agreement for the workers of the universities in the sciences. Importantly, in addition to the non-professorial teaching staff, which represents by far the largest group among the addressees, professors are also well represented with a stake of 19% in the survey (see Figure 3).

The age of participants is, as expected, also related to the academic position. More than half of the participants (55%) selected the age interval 30-50 years. Twenty-five percent claim to be older than 50 years, while 20% of respondents are younger than 30 years.

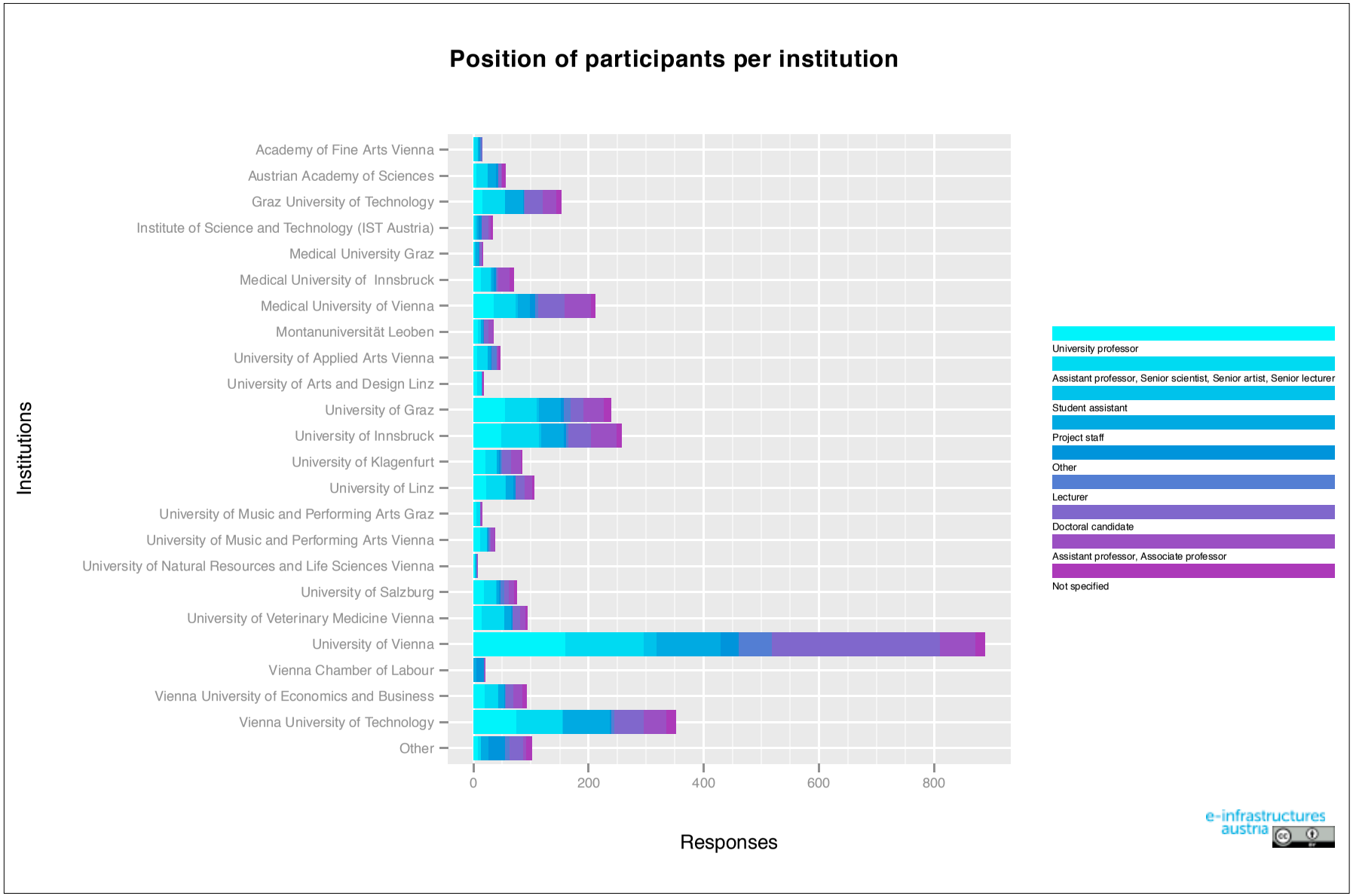



Fig. 3: Number of participants (by institution and location)

# IV Data types and formats

### 1. Content formats used

***"Which types of digital content do you create when generating research data?"***

*Question rationale*

Different digital content requires different forms of data management and archiving. In this question, it was resigned, for reasons of complexity, to differentiate formats that are defined by free standards, although this has a large impact on the possibilities of long-term archiving and convertibility. This question was also posed in order to better estimate the amount of data or data volumes even after the continuous technical development of formats and compression technologies (multiple choice).

*Results*

As Figure 4 shows, almost all of the surveyed researchers produce unstructured text documents (97%) and graphics (81%). While about two-thirds choose table documents as the format for their research data (67%), all other options are much less common. Structured text is used by every third respondent, whereas every fourth uses videos, databases and source code, and every fifth uses audio and software. Hardly any uses configuration files.

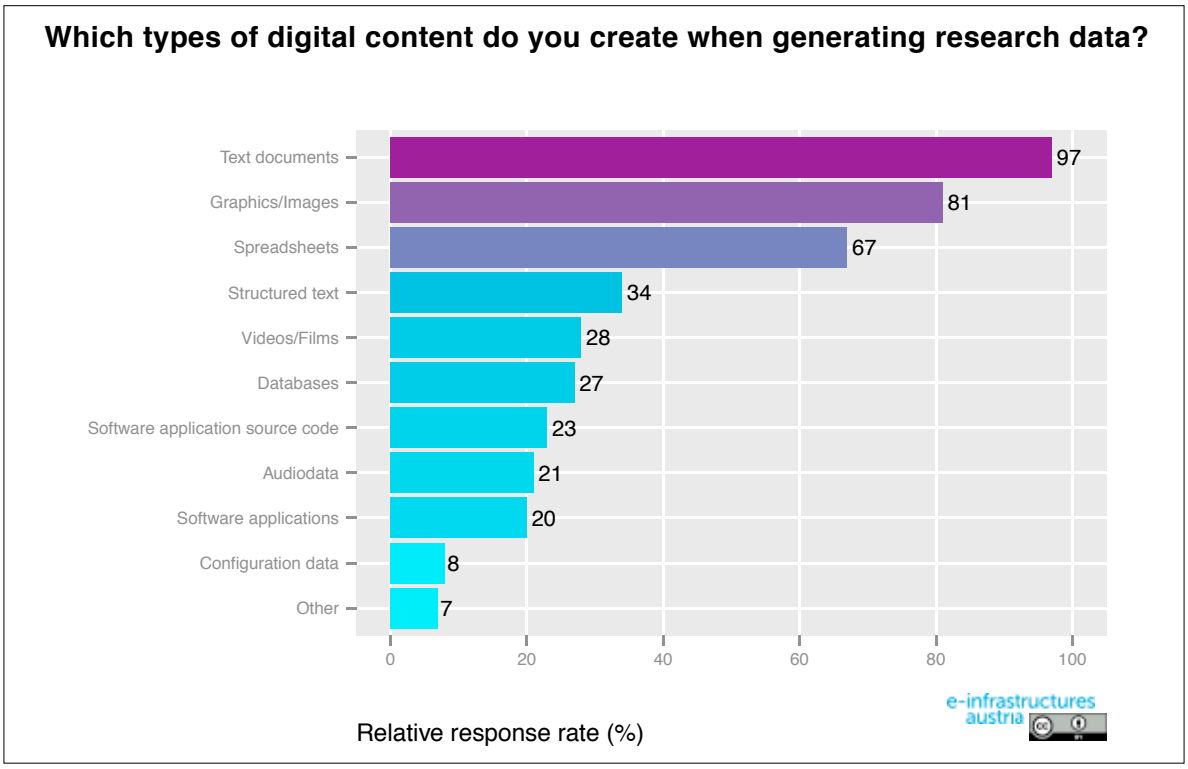



Fig. 4: Content used formats (Overview)

The evaluation organized by disciplines shows that the relatively high proportion of structured text is mainly attributed to mathematics, where texts are written using LaTeX typesetting software. In the humanities, the relatively frequent production of databases is apparent, which is only just overtaken by medicine (35 and 36% in their respective disciplines), while about half of the researchers in the natural sciences and engineering sciences write source code or software. According to the institutions evaluated, it can be demonstrated on the basis of the responses from arts universities that audio and video data cause an increased demand for storage there.

The free text analysis (see Figure 5) showed that it is not just a few of the researchers (23 of 212) who generate measurement data or other raw data and who do not select the predefined response options. Some data is generated in an analog format by devices and then digitized thereafter. Some of the comments also point out that the use of specialized, sometimes proprietary software and data formats is not a rare occurrence. In addition, presentation formats of some of those commenting are considered research data. On the whole, the comments show that the given choices, apart from subject-specific or device-specific data formats, cover the resulting digital content quite well. Based on the comments, there could be improvements in the following: Spatial data, drawings and binary data.

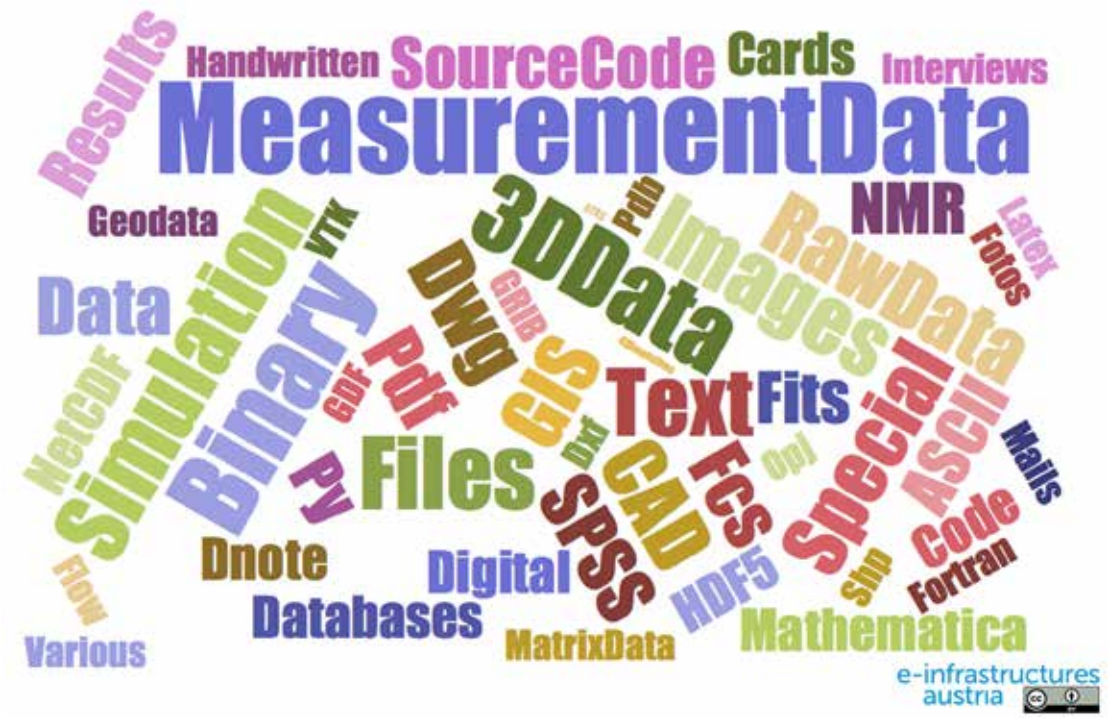



Fig. 5: Content formats used (Wordcloud for evaluating the free text comments)

*Conclusions*

The majority of the research data resulting from the respondents including text, graphics and tables can be managed and archived without further ado using proven methods. However, it should not be underestimated what size the archive data volume will be, even if audio and video files are generated only in parts of the academic community. In order to manage and archive device-specific data, the demand must occasionally be jointly raised at the relevant institutions by specialist researchers and information professionals.

**2. Analog and digital research data**

***What percentage of your research data volume do you generate (on estimated) in a digital format?***

*Question rationale*

The current debate on research data management almost exclusively concerns digital data. Is this focus justified or should not the management of analog data take a much greater role in development of integrated services (single selection)?

*Results*

Seventy-three percent of researchers say they produce more than three-quarters of their research data volume digitally. Only 18% estimate the digital part of their research data being between 50 and 75%. Unsurprisingly, the answers are distributed unequally throughout the various disciplines. In the humanities, a considerable proportion of researchers often work with analog data: an above-average number of survey participants,

whose data is mainly not currently in digital form, is the humanities. Over all the disciplines, only 6% work often with analog data.

*Conclusions*

Focusing on digital data in the development of research data services is largely justified. Nevertheless, opportunities for digitization and archiving of analog data should be identified, for example in the context of tutorials. If needed, cooperation efforts with the library or with institution archives may be undertaken.

## V. Data archiving, backup and loss

### 3. Memory location

***"Where do you usually store your research data?"***

*Question rationale*

For the storage of research data, researchers can choose from a wide range of options. The issue aims to focus on the options which are used by Austrian researchers to save their research data. Additionally, it should be determined to what extent official or private infrastructures are used (multiple choice).

*Results*

A total of 9627 different answers have been selected so that for each scientist in the survey an average of 3.18 responses were given.
The most common type of memory for research data was the work computer (71%), followed by storage on an external hard disk or on a USB drive (64%), local storage on a private computer (54%), central storage on a server of the institute (39%) or the University (33%). Much less common is storage in a cloud service (21%), storage directly on a device or instrument (17%), storage on CDs or DVDs (11%) and storage at an external data center (5%). Hardly common anymore was storage on magnetic tapes (1%) (see Figure 6).

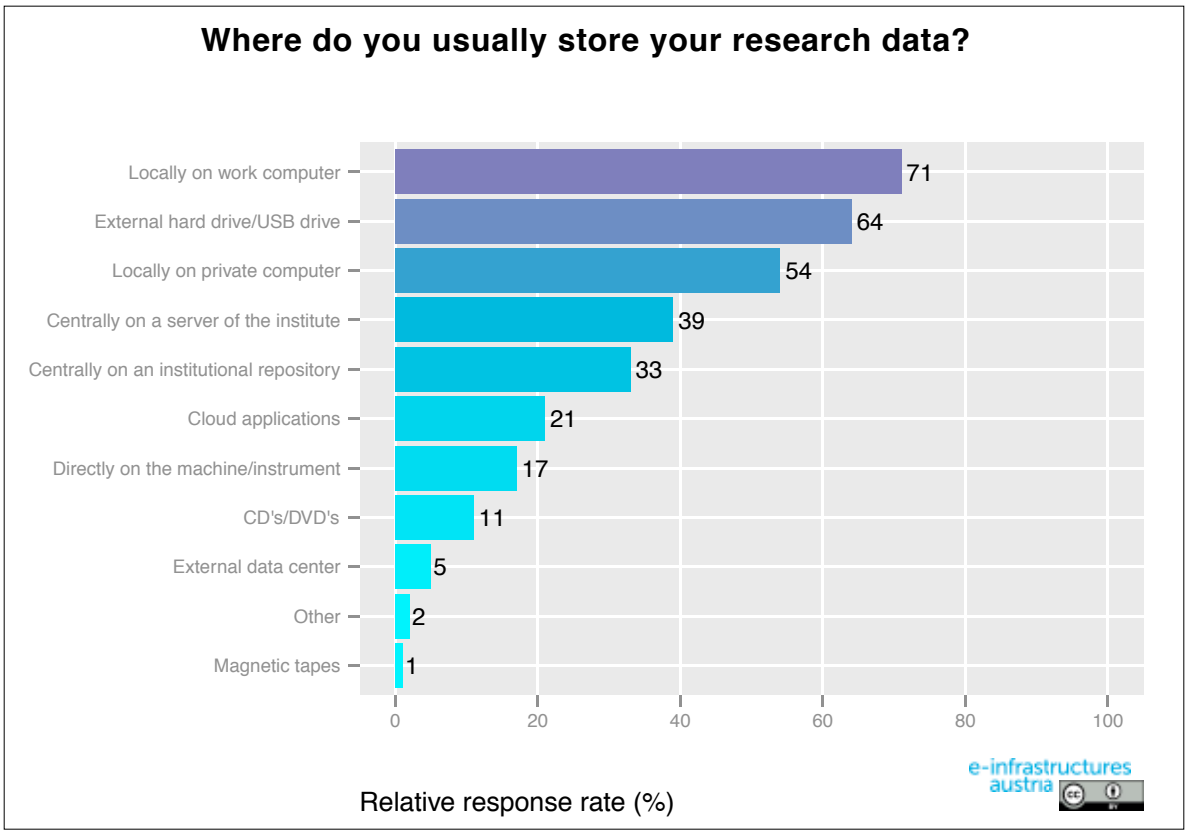



Fig. 6: Memory location for research data (Overview)

At an institutional level, it is a noteworthy fact that servers of the institute or university are used by technical universities and the Vienna University of Economics for data archiving.

*Conclusions*

The current practice in the storage of research data shows a very heterogeneous picture, where locally the available storage options are used significantly more as a central storage option. In this result it is evident that

uniform guidelines or policies are missing for sustainably securing research data as an important resource in the scientific enterprise so that it can be used for follow-up projects where appropriate.

**4. Size**

***"Please estimate the total volume of your research data based on the storage space you require (your estimated average per year)."***

*Question rationale*

The majority of the research data is now produced digitally. The question aims to assess the need for storage in the event that data center infrastructures are implemented for storing research data (single selection).

*Results*

The majority of participants require up to 100 GB per year (66%), an order of magnitude that falls into the category of small or medium. Twenty-seven percent of the researchers need more space (20% require 100 GB to 1 TB per year, 7% more than 1 TB per year). 7% cannot assess this demand (see Figure 7).

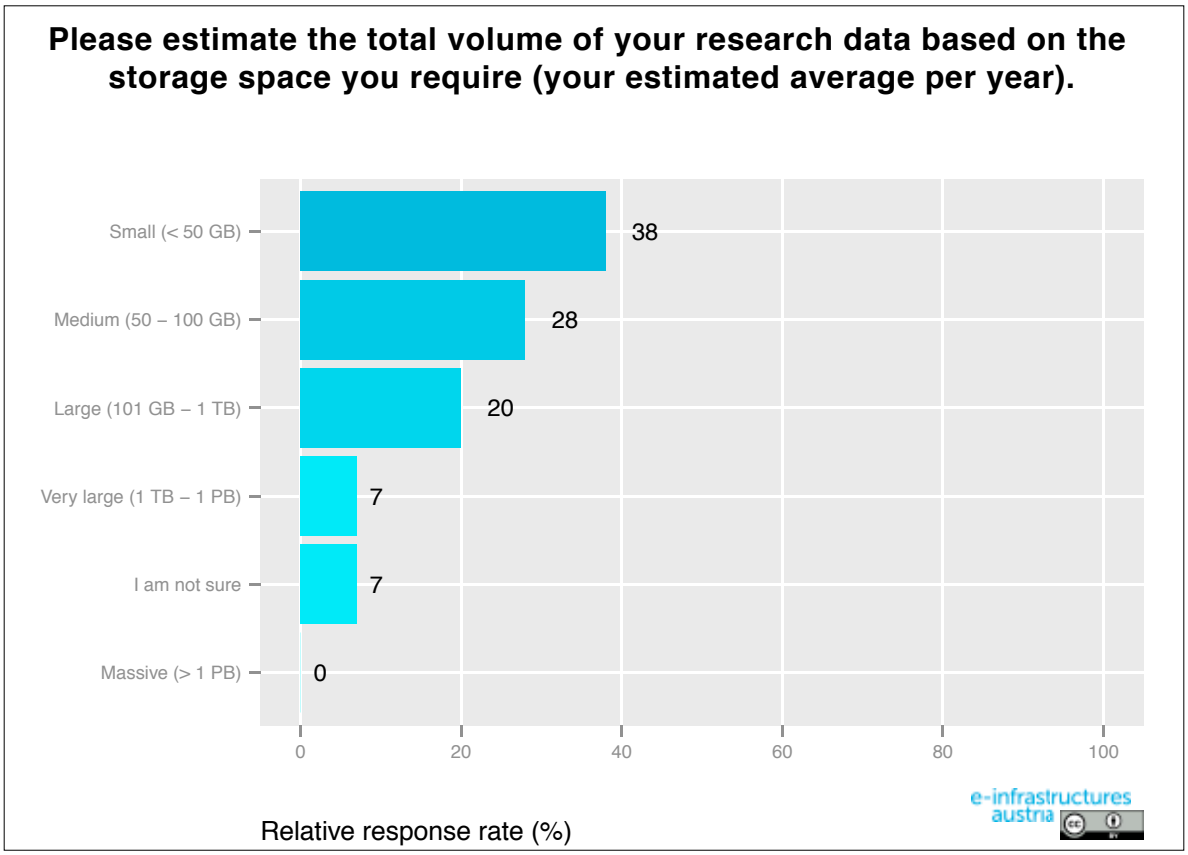



Fig. 7: Memory location for research data (Overview)

There was an above average number of very large or huge data requirements (more than 1 TB of storage) recorded at the institutional level for the medical and artistic universities and the Austrian Academy of Sciences. In the comments it is clear that it is difficult for many researchers to estimate the memory requirement. In several comments it was expressed which data requires the most memory. Data mentioned included media data (video, sound, music), computer simulations, climate models and high-resolution images from microscopes.

*Conclusions*

Although the majority of the researchers only require up to 100 GB of storage per year for the archiving of their own research data, there is still a not insignificant group that require more than 1 TB storage space per year.

For an adequate assessment of resources in terms of future planning, an in-depth survey, especially in those disciplines in which very large or huge data requirements arise, would be an important prerequisite.

### 5. Description

***"Do you normally document your research data?"***

*Question rationale*

This question should be raised to determine whether researchers in Austria have an awareness of the need for the description of research data. Furthermore, it should be determined whether or, to what extent, the use of description standards has already spread (multiple choice).

*Results*

When asked about the description of research data, it is shown in the answers of the respondents that the data are usually described very inconsistently. All disciplines have similar description standards.

Eighty-five percent of researchers gave an affirmative answer to the question of whether their research data is usually described (using appropriate standards, individually and consistently, individually and not uniformly), 12% of the respondents answered "No", while 15% did not know (see Figure 8).

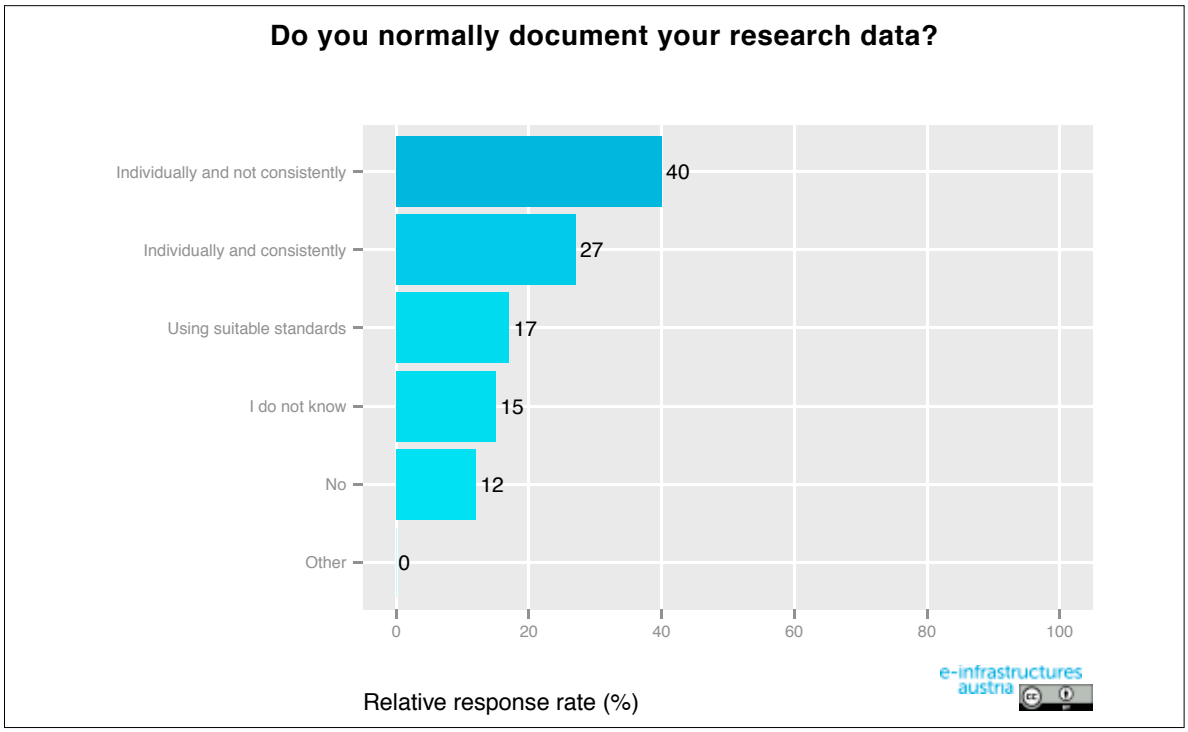



Fig. 8: Description of the research data (overview)

At the institutional level, it is noteworthy that medical universities are most likely to apply standards.

*Conclusions*

The majority of researchers describe their research data, but use very different criteria. In order to implement standards here, the adoption of binding guidelines or policies should be sought. Firstly, it is necessary to find out whether they should be made discipline-specific, or whether they can be developed at the institutional level.

## 6. Responsibility

***"Who is responsible for the archiving of your research data?"***

*Question rationale*

Expert archiving of research data is an essential prerequisite for enabling their future use. The question should be raised, to what extent researchers are responsible for the archiving of research data or which departments have taken over archiving duties (multiple choice).

*Results*

As for storing the data, the researchers themselves are mainly responsible (93%). Much less often is the archiving performed by scientific (17%) or non-scientific colleagues (8%), project/group managers (12%) or computer centers (IT) (9%) (see Figure 9).

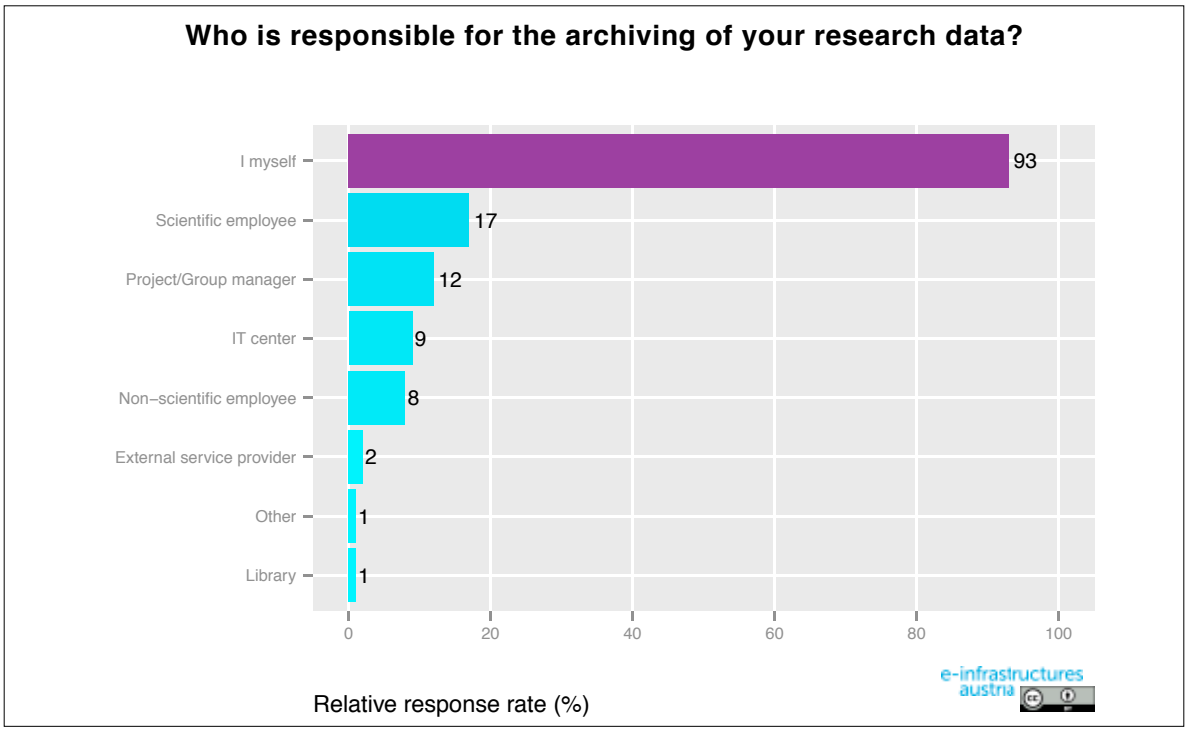



Fig. 9: Person responsible for preservation of research data (overview)

*Conclusions*

Currently, the responsibility for the storage of data in the majority of cases is taken on by researchers themselves. To reach the objective of archiving research data according to uniform standards and make it usable for follow-up projects, the provision of properly trained data experts is important, especially since researchers were relieved by such a measure.

## 7. Data loss

***"Have you already experienced research data loss?"***

***Question rationale***

The question aims to find out to what degree Austrian researchers have already had experience with research data loss. In view of the sometimes very high costs for the generation of research data, this aspect of the survey is of great importance. The prevention of research data loss can help to achieve increased efficiency in spend-

ing on research in, that research data is backed up over the long term and ensures the possibility of its re-use (single selection).

*Results*

Although the majority of participants replied no to the question regarding negative experiences with data loss (65%), it was nevertheless affirmed by more than one-third of the participants (35%).

At the level of the disciplines, it is noteworthy that data is lost most commonly in medicine (42%), while this is relatively rare in mathematics (26%).

In the comments section – with 368 entries, the free text field was used here most often throughout the entire survey so it is clear that data loss often happens in science, whereas the range of reasons for data loss include failure to back up, computer viruses or a hard disk failure, defective USB sticks, data theft, data migration and accidental deletion of data. To avoid data loss, it has been recommended by researchers, to perform frequent backups.

*Conclusions*

A relatively high proportion of respondents already had experience with data loss. This makes it evident that the sustainable backup and supply of research data represents a rather important issue which directly affects the researchers themselves in their core. At this point, it would and should be appropriate to raise awareness for the topic of data management.

## VI. Ethical and legal aspects

### 8. External data usage

***"Do you use any external data (i.e. not generated by you) in your own research?"***

*Question rationale*

Research is often based on the findings, ergo data, of others. This question is used to determine whether and, if so, in what form awareness of the distinction between personally collected and external data exists (multiple choice).

*Results*

Almost half of the respondents (42%) use external data after minor editing, one-third (33%) after significant editing. One-quarter say they use no external data. Only 13% use external data without any further editing (see Figure 10).

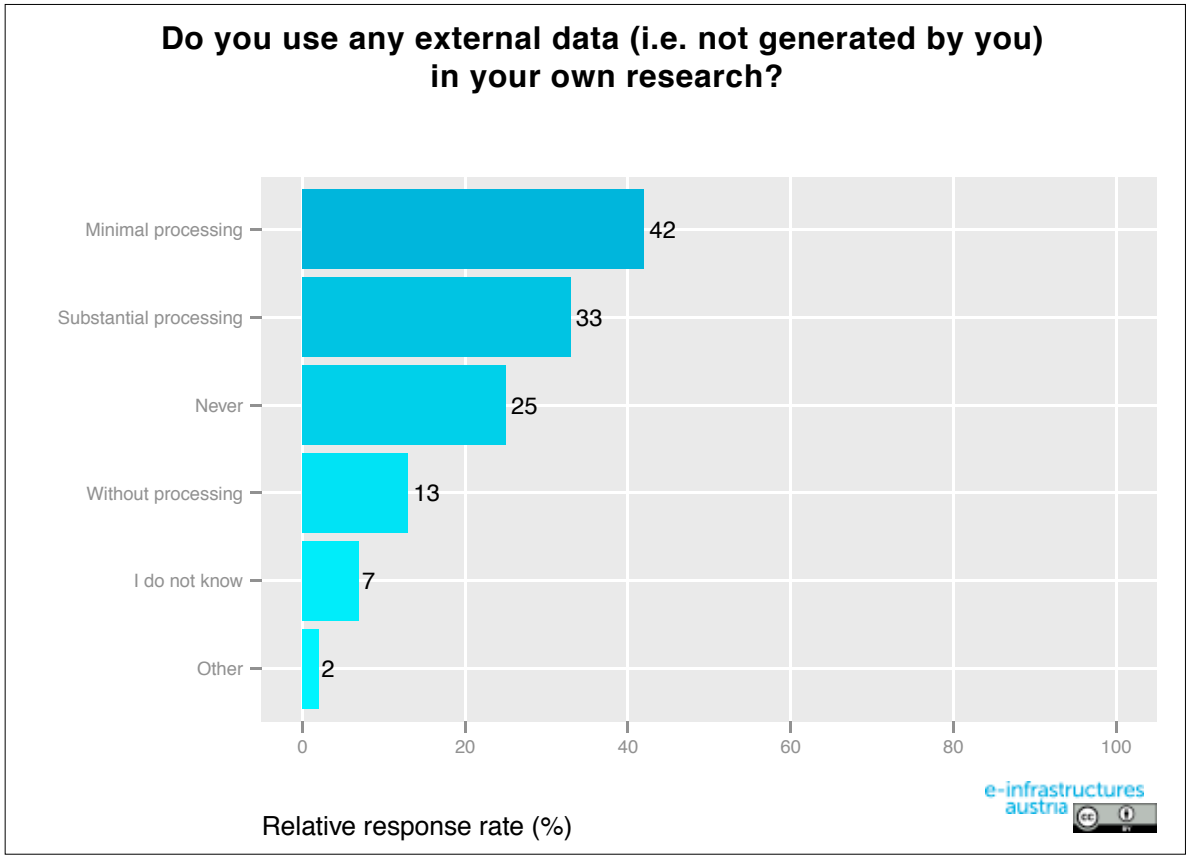



Fig. 10: External data use (overview)

The use of external data and its editing is relatively similar over the various disciplines. This same relation is repeated upon analysis of the total number of multiple answers for each question. Firstly, the immediate use of foreign data in all disciplines is almost evenly distributed, while answers showing minor and substantial editing were most prominent in all disciplines. The most striking differences in responses can be observed among researchers who do not use external data (see Figure 11).

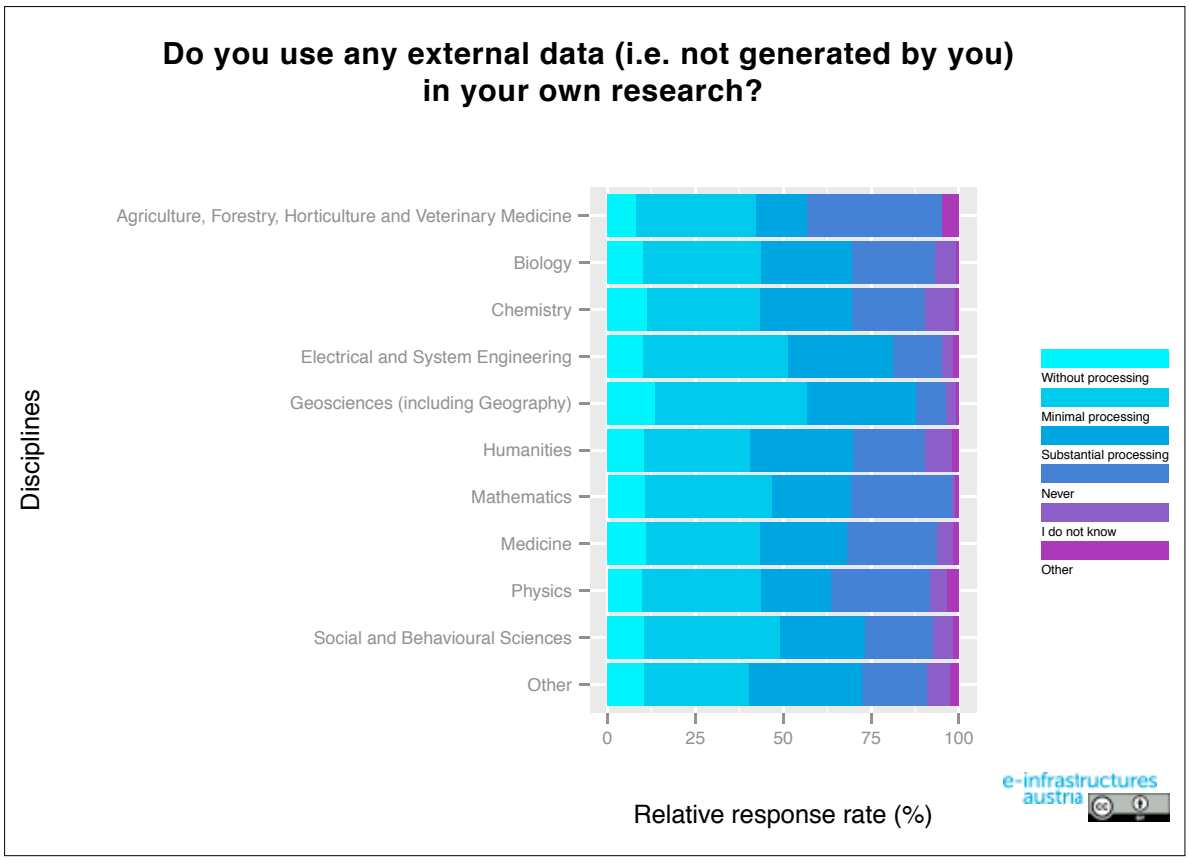



Fig. 11: External data use (by discipline)

The geosciences prove to be the most active in terms of foreign data usage, with or without editing. They stand out in three categories: 60% of researchers in the earth sciences use external data after minor editing, 43% after significant editing, and 19% use the data directly without further editing. Comparatively, at the other end of the scale are disciplines in which these options were only selected about half as often. Trailing behind are agriculture, forestry, horticulture and veterinary medicine in two categories: those who use external data without further editing (9%) and after significant editing (16%). One mentionable caveat is that there was a total of only 43 responses in this discipline. Minor editing is least likely in the humanities (35%) (see Table 41).

Considered institutionally, the Vienna Chamber of Labour had both the highest external data use without further editing (43%), as well as after minor editing (71%). The highest external data use after significant editing (43%) was obtained from the Vienna University of Economics, while the Veterinary University of Vienna was the most distinguished with 39% answering to having used no external data.

Even if some comments about external data usage are not statistically significant, the majority noted that the problem still generally relates to some kind of scientific cooperation. While only four respondents were cited, these revealed the desire for correct citations or the respect of copyright in connection with the use of external data to be of general relevance and therefore worth mentioning.

*Conclusions*

The results clearly show that external data usage is mostly common in the Austrian science and research.. Respondents consciously distinguish between internal and external data. Only a relatively small proportion of the scientific community use external data without editing it at least slightly.

The high proportion of foreign data usage in geosciences without further editing can usually be attributed to a high probability of the presence of traceability and description, as well as the comparatively uncomplicated availability of this information in national or international data archives.

In general, it can be assumed that improved availability of research data in Austria would inevitably also lead to increased reuse.

### 9. Legal ambiguities in external data usage

***"Do you have any legal concerns regarding the use of external data?"***

*Question rationale*

This question is used to elucidate how often researchers are faced with legal ambiguities when using external data for related educational and training needs. In addition, researchers should be aware of the problem of legal compliance in connection with external data usage.

This question appeared in the survey only if the respondents previously did not select the answer options "Never" or "Other" in the question about external data (single selection).

*Results*

Due to the dependence on the previous question, there were 2244 answers to this question. The following percentages therefore relate to this smaller sample size (n = 2244). According to the survey, legal ambiguities in external data use arise in scientific life either "Never" or "Rarely" at an instance of 34% for each response. In the end, 20% claim to be at least sometimes confronted with legal ambiguities (see Figure 12).

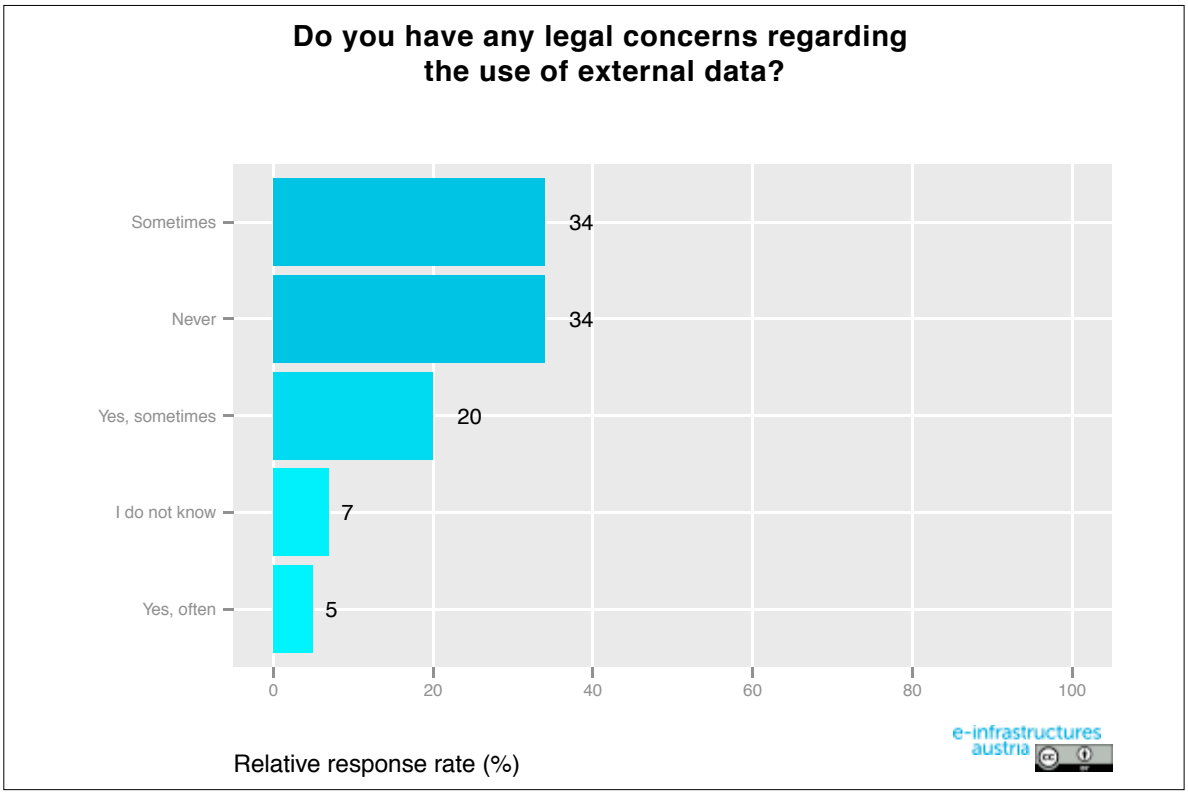



Fig. 12: Legal ambiguities in external data usage (overview)

There were no significant differences in the responses observed by discipline. The variation between the disciplines with the individual answers is usually about 10%, with a maximum of 20%. In relative terms, the Vienna Chamber of Labour has most the legal ambiguities (18%) and lack of clarity, whereas by contrast the University of Leoben has the fewest (50%).
Although not statistically significant, in the comments there are generally relevant statements, which are worth mentioning with this question. On the one hand, the necessity of licensing agreements or other user agreements is expressed, on the other hand the desire was expressed for legally trained information staff at

the institutions. Many respondents mentioned the time-consuming clarification of image rights as a special case when using external data.

*Conclusions*

It seems as though, regardless of discipline or institution, researchers are hardly faced with legal ambiguities when using external data. These results are at least surprising and must be put in a proper context in each case with the overall results of the survey.

### 10. Behavior when switching institutions

***"What normally happens with the research data you generated when you leave the institution?"***

*Question rationale*

The issue aims to elucidate how researchers behave in terms of their research data generated when switching from one institution to another. The traceability of research results is particularly at risk if research data are archived on institutional storage media with an insufficient description and thus "orphaned". Due to a change of institution by a data producer, the data context can then be reconstructed only at great expense. But data is still at risk due to transfer if archiving standards are not complied with (multiple choice).

*Results*

The relationship between transferred data (49%) and data that remains at the institution (58%) is relatively balanced (see Figure 13).

Only 7% of respondents say they delete data when leaving an institution. The disciplinary fluctuation range is 6-9% here. Only in biology as well as in agriculture, forestry, horticulture and veterinary medicine are the values significantly lower at 4% and 2% respectively (see Table 51).

A few respondents have indicated in the comments that they had never asked themselves this question, because they have either never switched institutions or are active as external lecturers and therefore do not feel they belong to any institution nor do they conduct private research.

Also, the analysis of the total number of multiple answers per question reflects the balance between "packing" data and "leaving" data, with a slight tendency towards "leaving" data. Breaking it down into disciplines gives the picture that in the scientific and medical disciplines there is rather the tendency to "leave" data, while in mathematics and the social sciences and humanities disciplines there is a slight tendency to "pack" data (see Figure 14). A similar picture emerges at the institutional level, where there is a strong tendency on the one hand to "leave" data in the technical and medical colleges, while on the other hand "packing" data is slightly more prevalent at the art universities (see Figure 15).

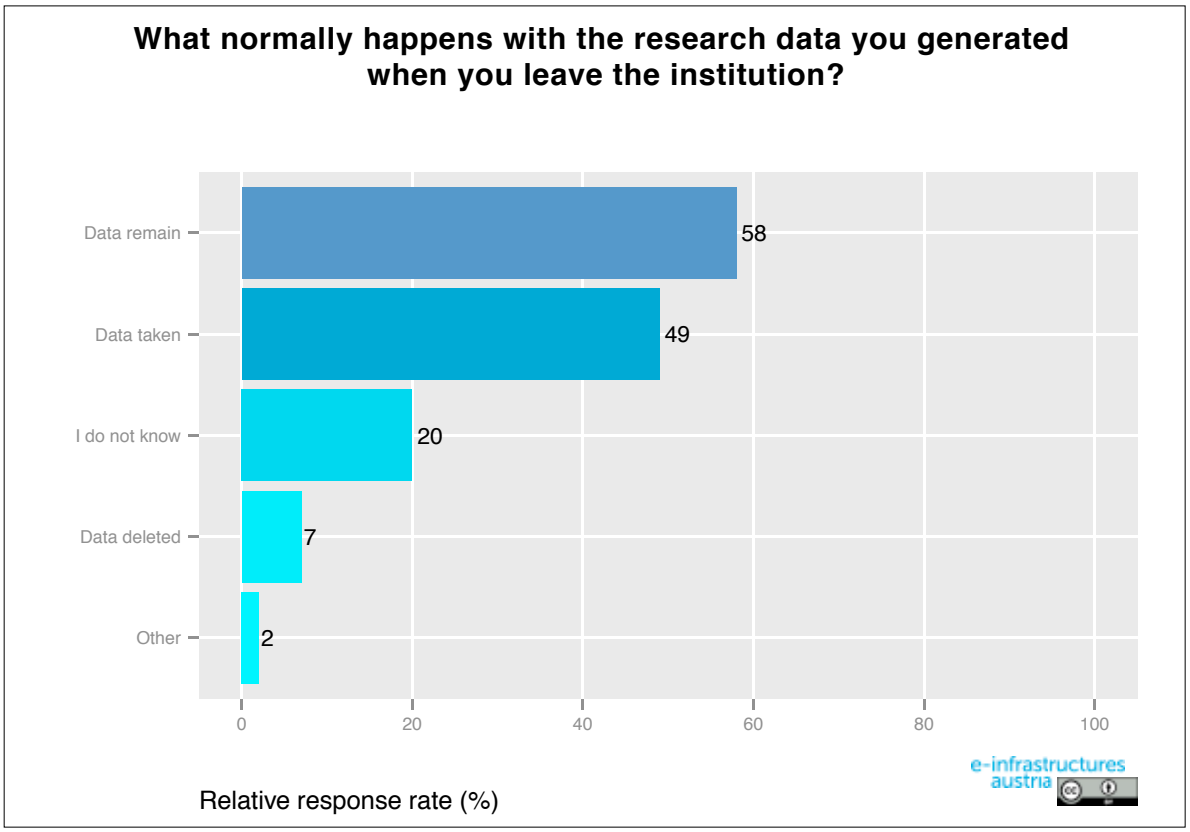



Fig. 13: Data retention when switching institutions (overview)

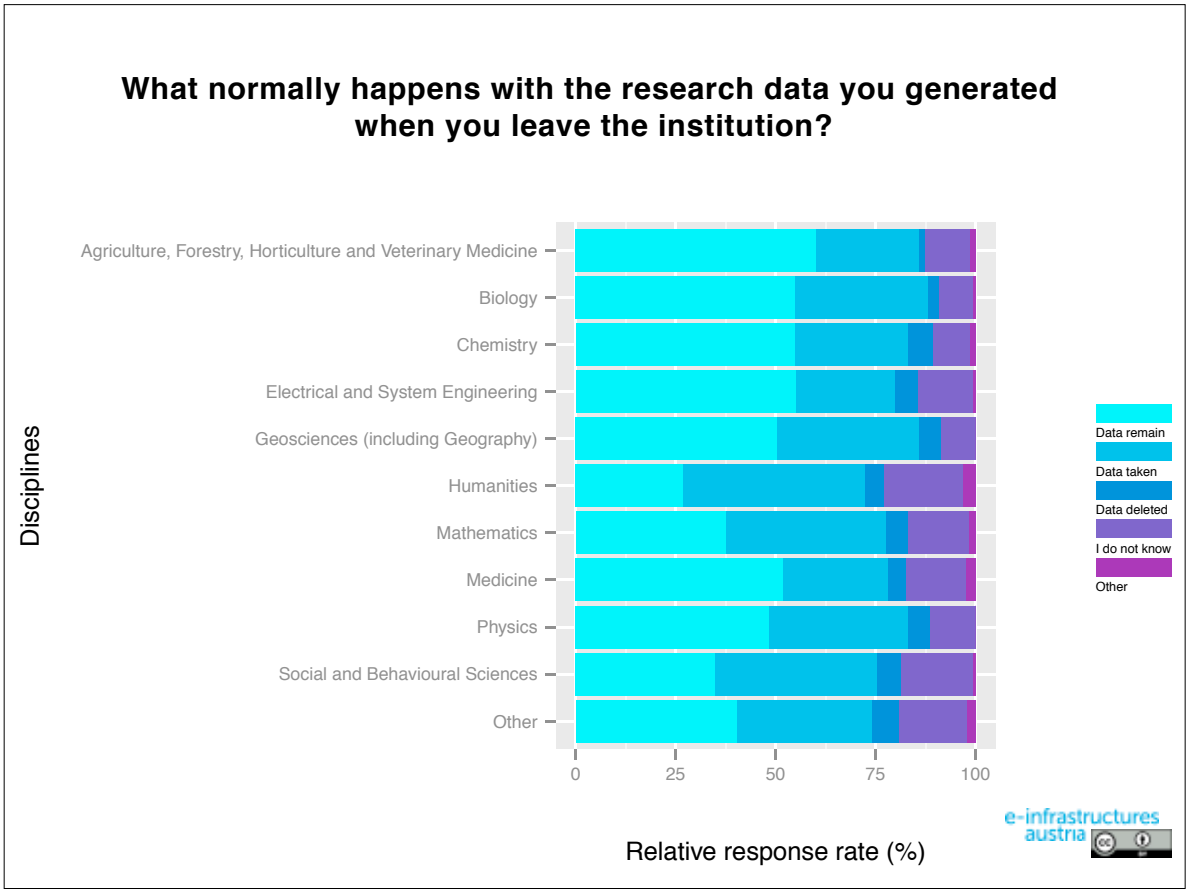



Fig. 14: Data retention when switching institutions (by discipline)

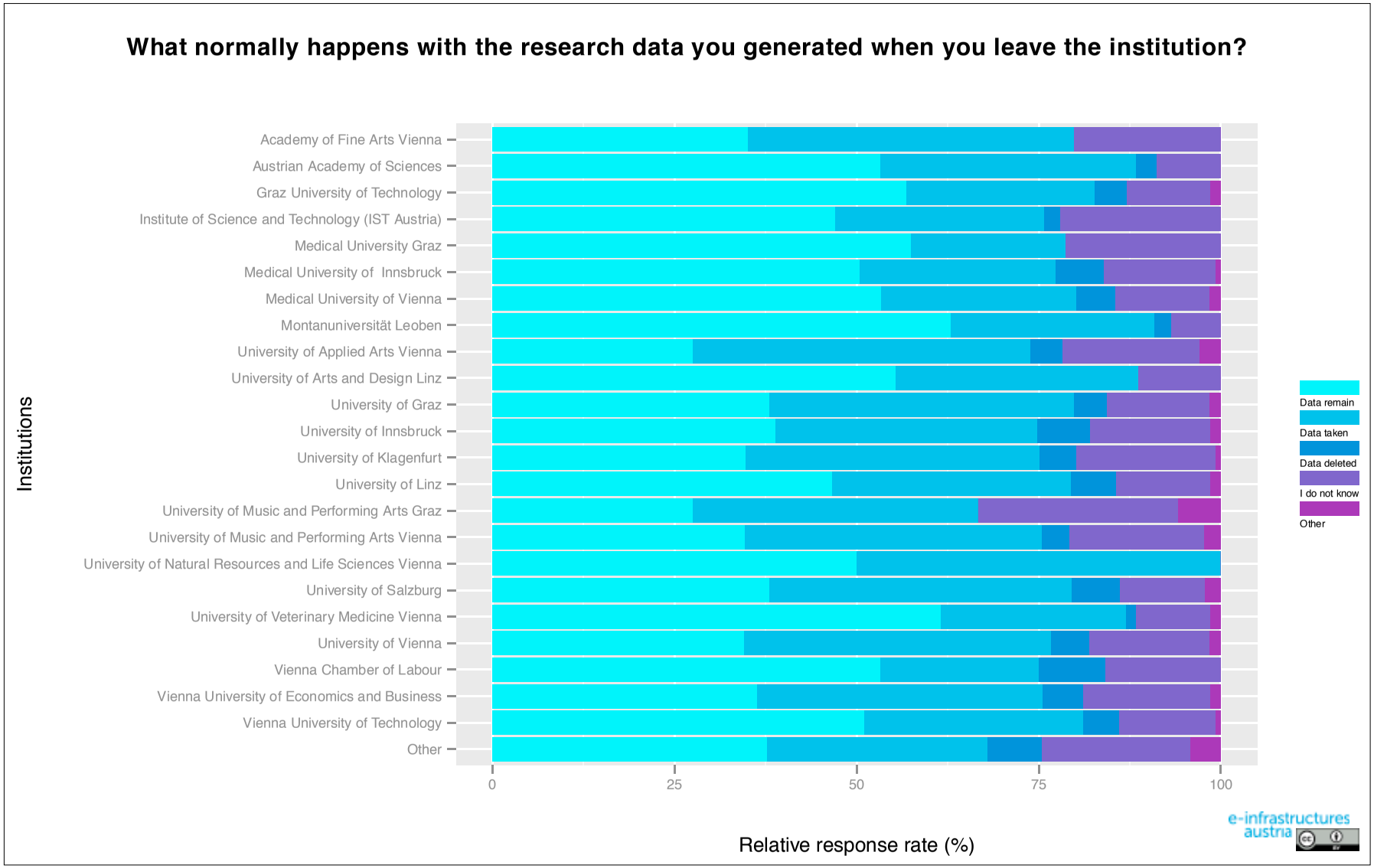



Fig. 15: Data retention when changing institution (by institution)

*Conclusions*

The majority of respondents obviously know exactly what happens with data they have generated data when switching institutions. Both leaving the data and packing the data are the main options carried out in Austria. On one side of the story, clear institutional policies would eliminate any possible uncertainty among researchers and would stop undesirable institutional data loss. Transferring versus leaving the generated data can be related to the discipline, based on the size of the generated data.

### 11. Sensitive data

***"Do you use or generate sensitive or confidential research data?"***

*Question rationale*

The question is used to elucidate the status quo as well as the awareness of this issue in order to appropriately meet educational and training needs (single selection).

*Results*

Only 15% of respondents frequently handle sensitive data. The largest group represented are the researchers who either barely (30%) or only sometimes (31%) use or generate sensitive data. Twenty-two percent indicated never using or producing such data (see Figure 16).

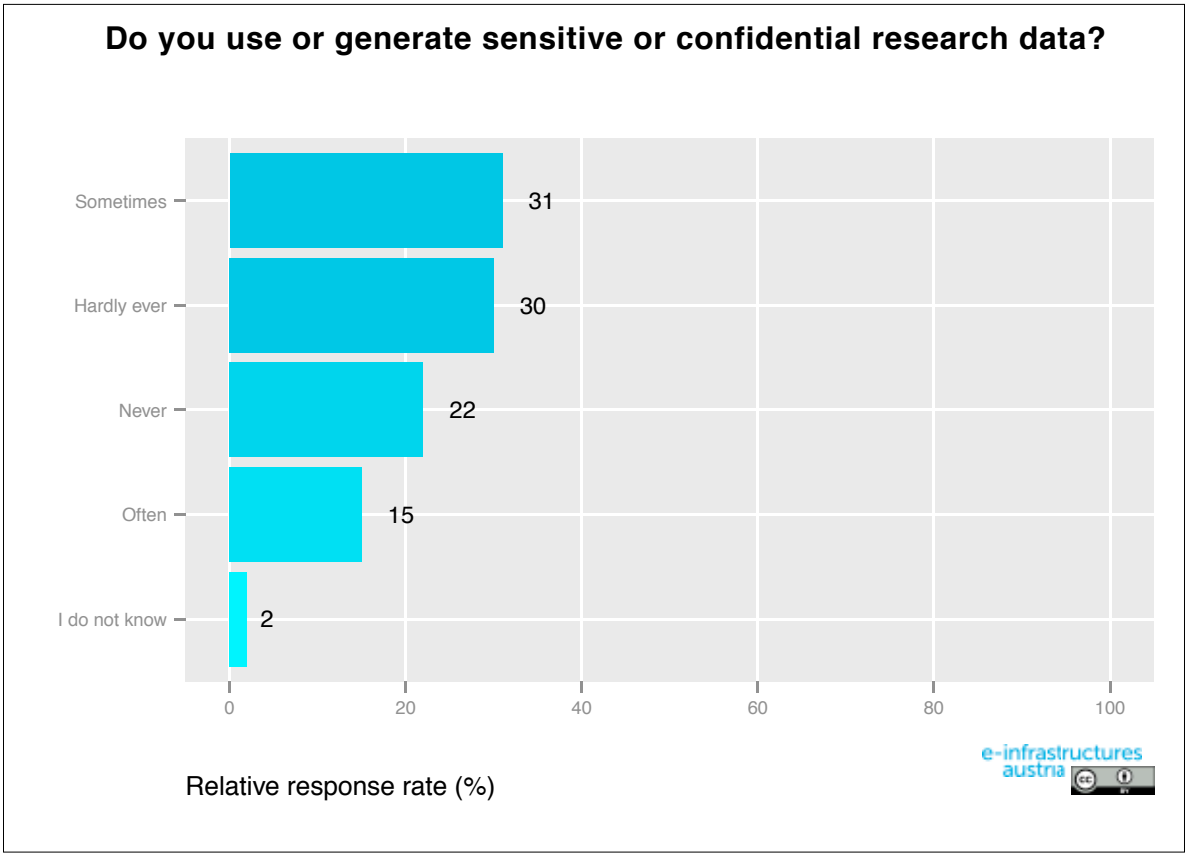



Fig. 16: Sensitive data (overview)

Unsurprisingly, the most common use of sensitive data is in medicine (40% for the answer option "often"), which also reflects the response of the medical universities at the institutional level (30-40% for the answer option "Often") (see Figure 17).

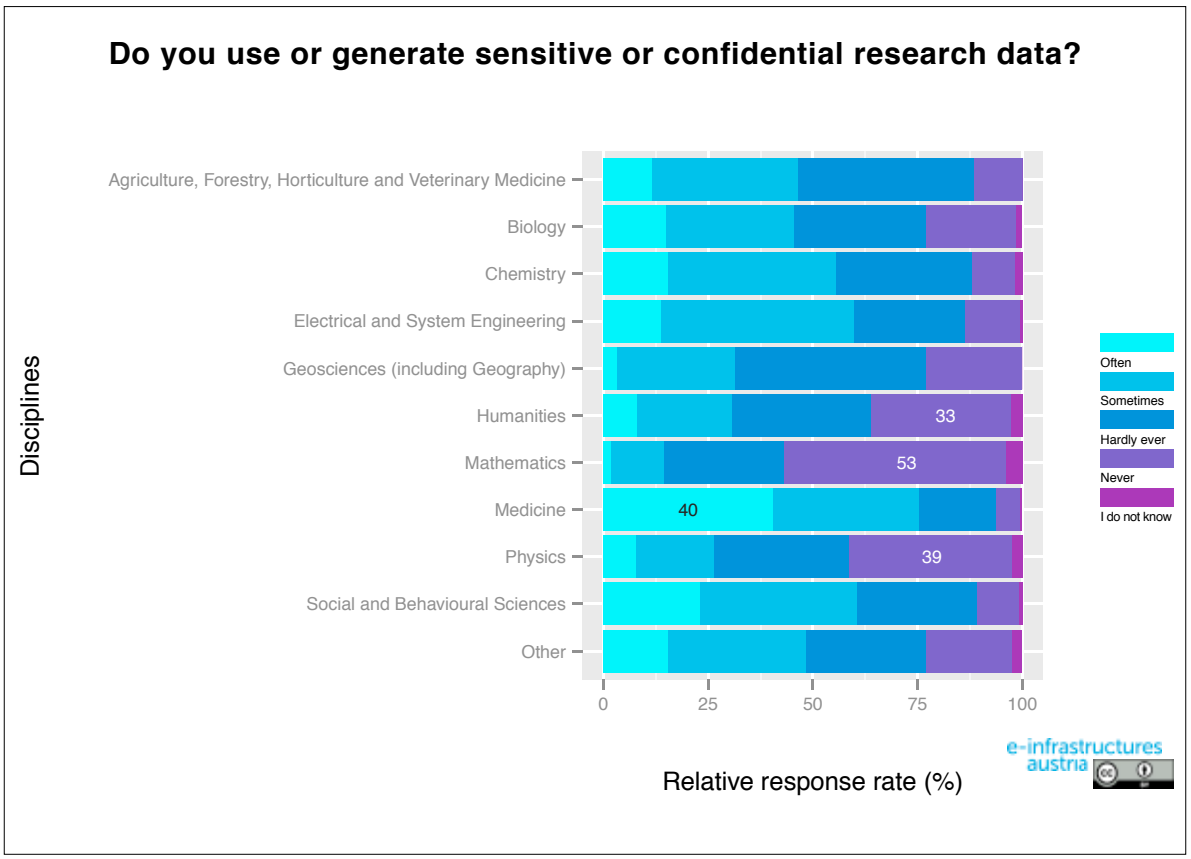



Fig. 17: Sensitive data (by discipline)

At the following institutions, sensitive data are often used or generated: Academy of Fine Arts (33%), University of Leoben (29%) and Vienna University of Economics (23%) (see Figure 18), while some departments play only a minor role (answer option “Never”): Mathematics (53%), followed by Physics (39%) and the Humanities (33%).

*Conclusions*

The majority of the disciplines and institutions have little or nothing to do with sensitive data. Nevertheless, researchers should, if necessary, be able to resort to relevant guidelines, policies or personal consultation (from a data protection supervisor or legally educated personnel) to avoid legal consequences from the outset.

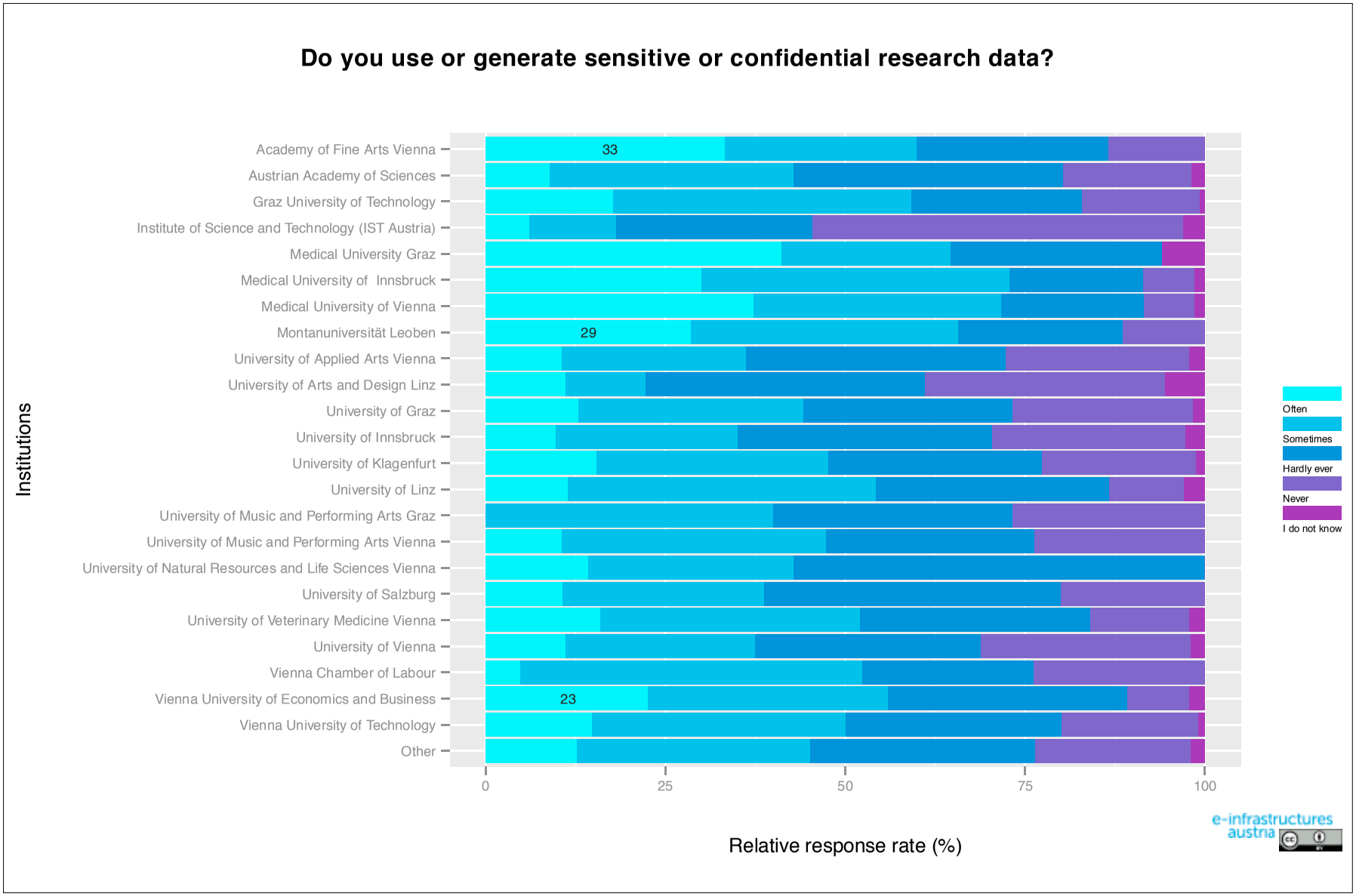



Fig. 18: Sensitive data (by institution)

## VII. Accessibility and re-use

### 12. Access to research data

***"Whom do you grant access to your research data?"***

*Question rationale*

Depending on which audiences should be given access to research data, certain technical solutions can offer them great support. This question is closely connected to the follow-up question about where data is made available (multiple choice).

*Results*

Slightly more than half of the respondents support granting access only to interested persons upon request (57%) or to selected persons at the institution (53%). The accessibility to a wider professional public is allowed by least 28% of respondents.

Only 11% actually practice Open Data, that is, offering access to the public, while a similar proportion (10%) refuse access to anyone (see Figure 19).

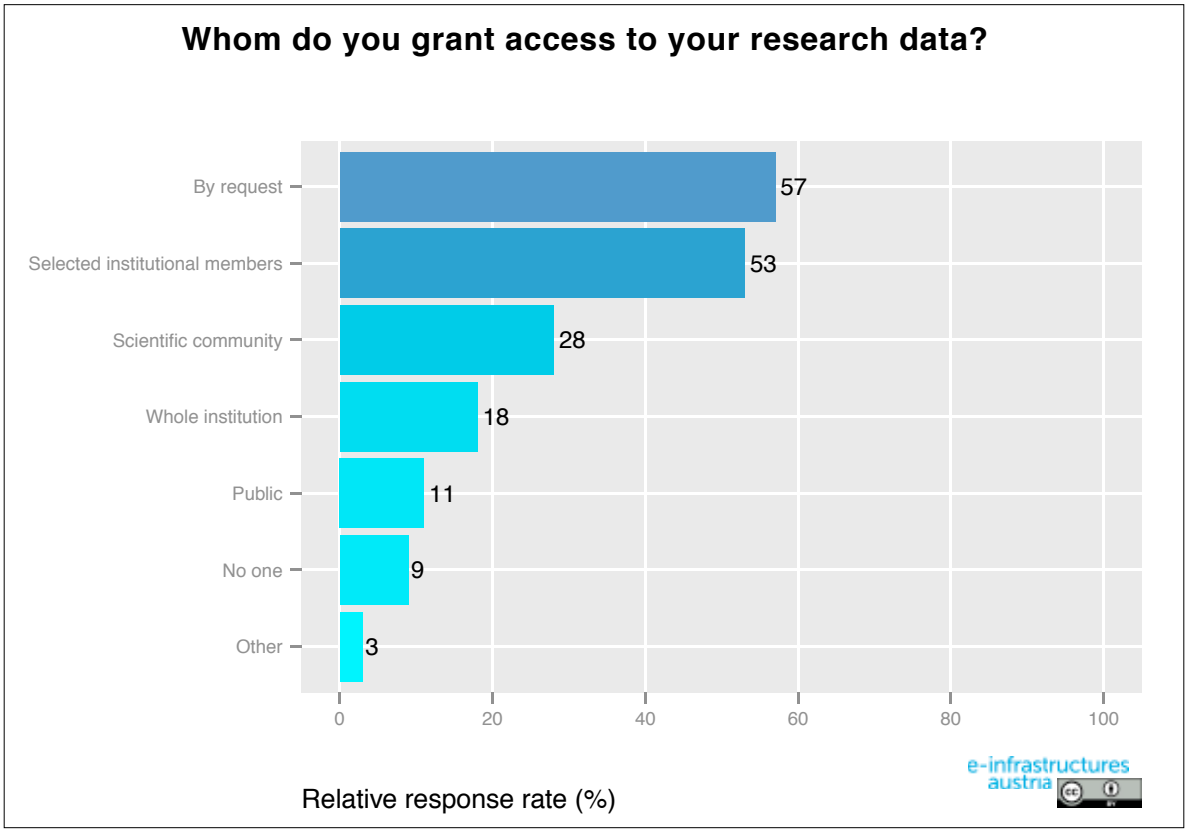



Fig. 19: Access to research data (overview)

Disciplinary differences are hardly pronounced. While researchers in the humanities and the social sciences were the most restrictive (13% each for allowing anyone access), the most open were respondents were in mathematics (15% offer their data to the public) (see Table 61).

Institutionally, the most open was the Chamber of Labor with 24% allowing public access to data (the even higher values from the University of Arts and Industrial Design Linz were intentionally disregarded due to the response rate of <5%) (see Table 64).

In the analysis of the total number of multiple answers per question, a very homogeneous picture developed both at the disciplinary as well as the institutional levels. In both cases, about two-thirds of all answers were given for the options “Those interested upon request” and “Selected people from my institution” (see Figure 20).

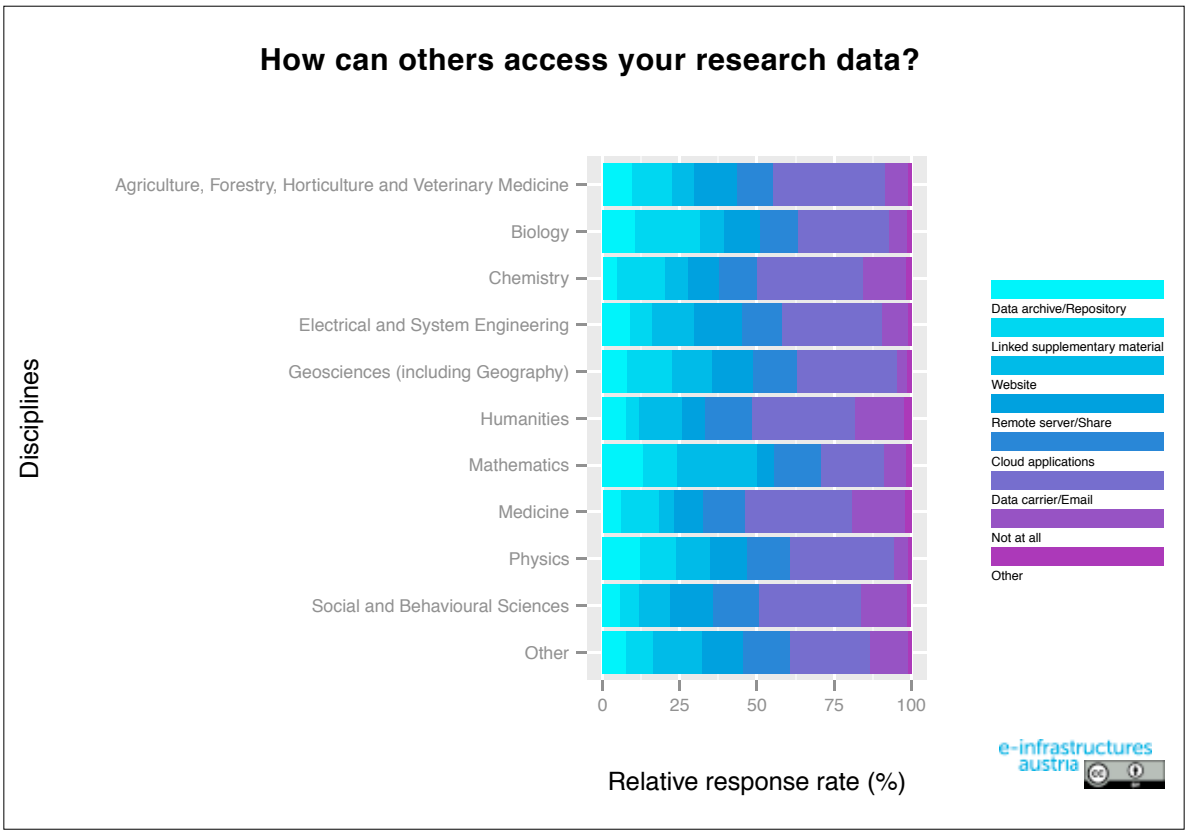



Fig. 20: Access to research data (by discipline)

In the comments, there are examples of other possible target groups mentioned, who could be specified in more detail in the “Others” text field:

- Cooperation partners
- Project employees
- Selected colleagues outside their own institution
- Students
- Clients
- Industry partners
- Funders
- Ministries
- Authorities

Individual respondents also hold that a clear distinction between publications and research data must be made. For the latter, there are often non-disclosure agreements in research projects, which are responsible for limited accessibility.

*Conclusions*

Access to Austrian research data is currently only very limited, and it is interesting that there are no notable differences between the various disciplines. Research data is obviously considered very valuable by certain individuals and preferably only offered to selected people.

## 13. Accessibility of research data

***"How can others access your research data?"***

*Question rationale*

Research data is not only valuable to those who produce data, but also to all individuals who re-use data. For this reason, access to research data should ideally be ensured by systems which are characterized by properties such as visibility, the widest possible accessibility, easy searchability, persistence and long-term archiving. This question should elucidate the status quo for access options for the research data of Austrian researchers (multiple choice).

*Results*

The majority of respondents (54%) indicated physical disks and/or email as the access options for others. Cloud applications (24%) and website (21%) are the next most frequently mentioned options. Data archive/repositories are only indicated by 14% of the respondents, whereas 17% of the respondents indicated linked supplementary material for publications (see Figure 21).

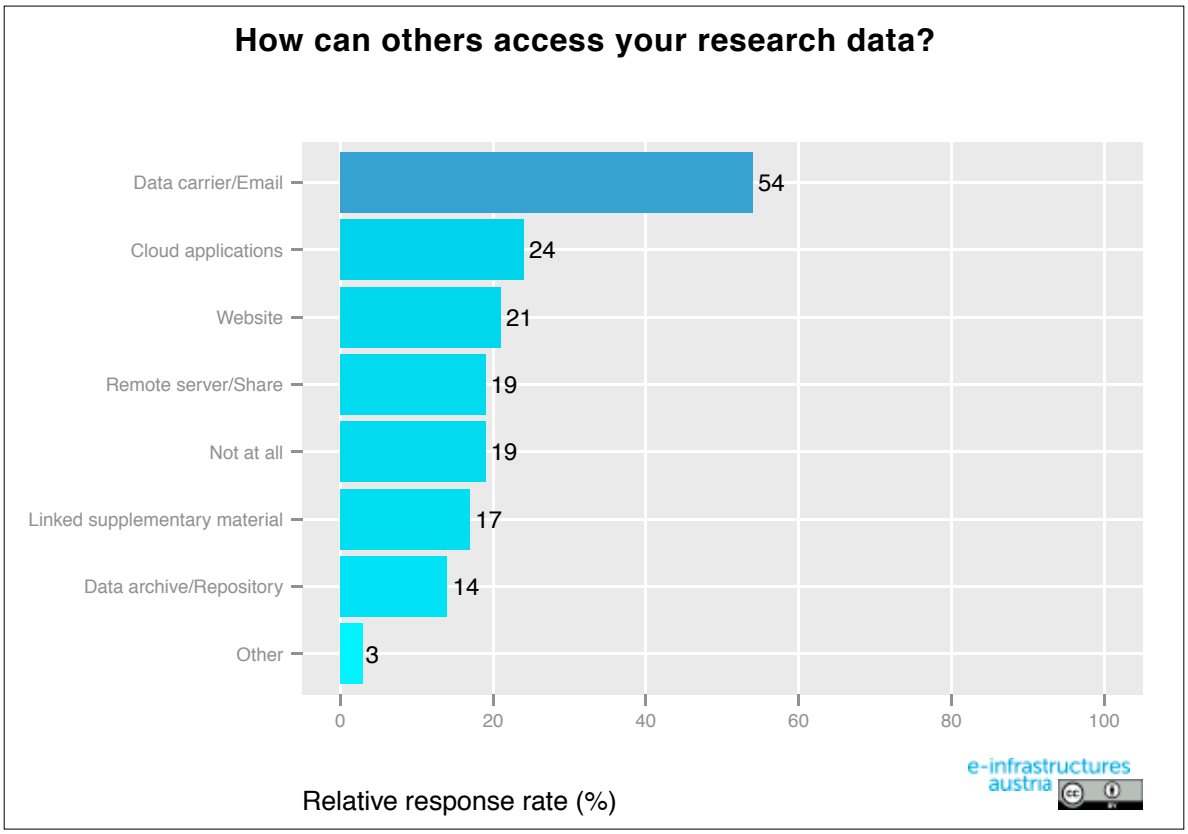



Fig. 21: Access options for research data (overview)

From a disciplinary perspective, data archives/repositories were selected most frequently in mathematics (24%), physics (24%) and biology (21%) as an access option. Linked supplementary material for publications were selected the most often in biology (41%), the earth sciences (31%) and physics (23%). Researchers denying any access were most frequent in medicine (25%), the humanities (25%) and in the social sciences (24%). Forty-seven percent preferring data access via website in mathematics is surprisingly high (see Table 67). At the institutional level, the highest instances of data archives/repositories were at the Austrian Academy of Sciences (25%) and the Institute of Science and Technology Austria (21%)(see Figure 22).

Remote servers were most frequently selected at the Vienna University of Economics and Business (39%) and the Austrian Academy of Sciences (36%) (the value at the University of Natural Resources and Life Sciences is considered not significant due to the low response rate) (see Table 70).

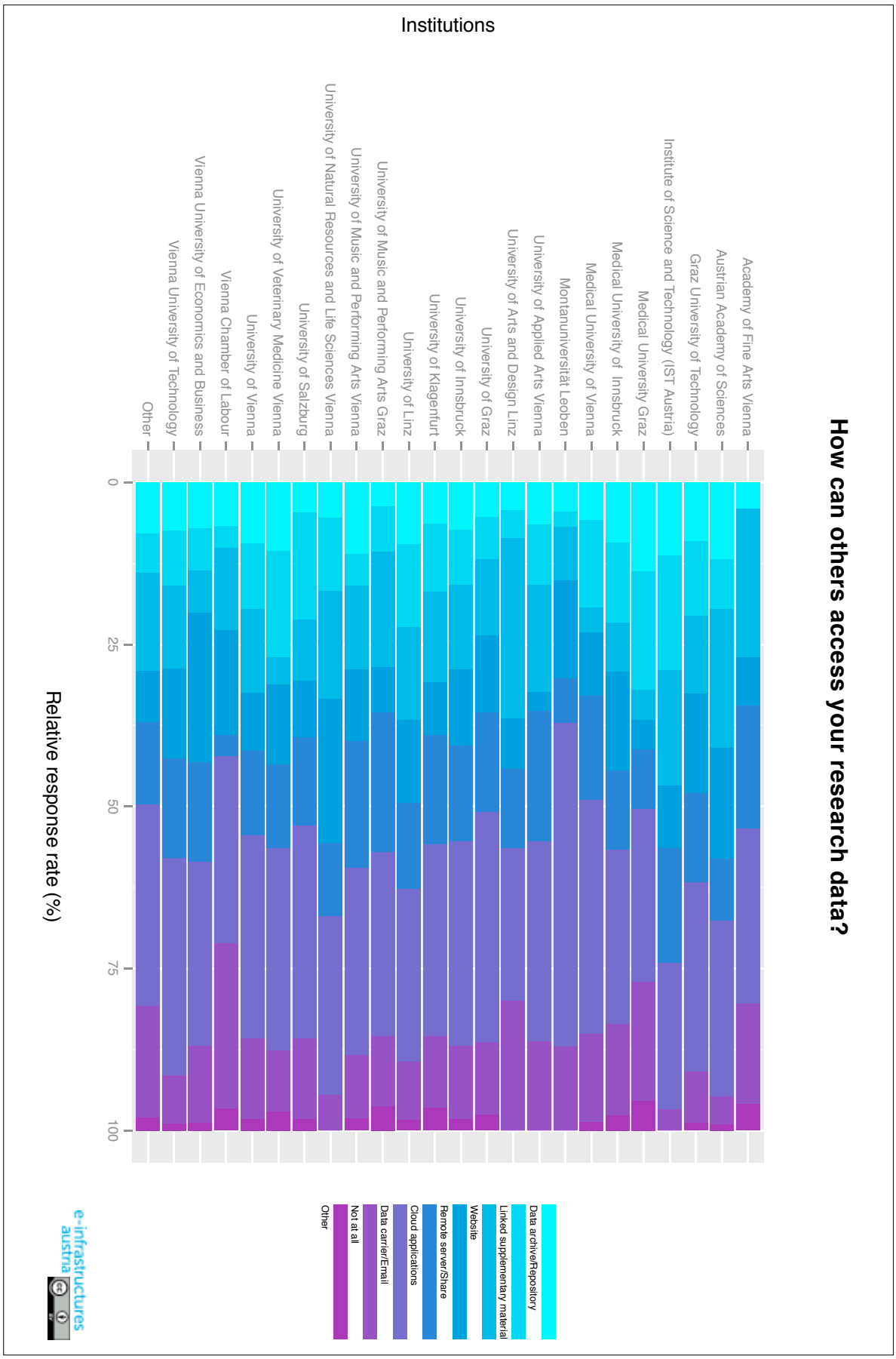



Fig. 22: Access options for research data (by institution)

In the analysis of the total number of multiple answers per question, the physical disks and/or email could also be identified as a medium of choice. Approximately one-third of all respondents indicated this medium as an option.

On a disciplinary level, it is noticeable that access via linked supplementary material plays a greater role in the natural sciences disciplines of biology, chemistry, physics and medicine, as well as in the geosciences, than in the other disciplines. As shown in Figure 23, researchers in medicine and chemistry as well as those in the humanities and social and behavioral sciences most commonly refused access to data.

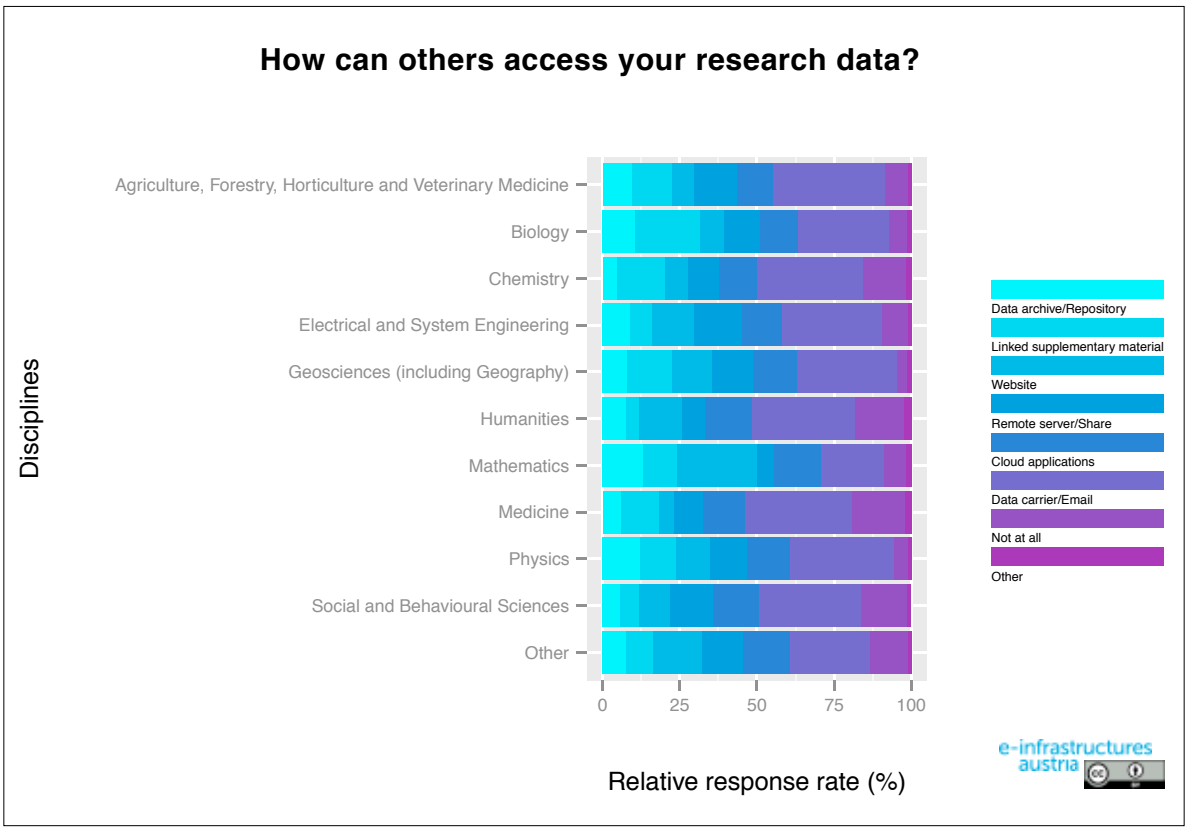



Fig. 23: Access options for research data (by discipline)

If the respondents selected “Data archive/repository” or “As linked supplementary material for publications” as an access option, they were able to enter additional comments such as the name of the data archive/repository or the journal. Corresponding lists for the repositories and journals mentioned can be found in the free text answers in the appendix. The most commonly mentioned repositories are arXiv, Pangaea, ResearchGate, GEO, Gesis, NCBI, Academia.edu, CRAN, Dryad and Phaidra, while the most commonly cited journals are PLOS, Journal of Biology, Journal of Chemistry, Nature, Physical Review Letters, Journal of Ecology and PNAS.

*Conclusions*

The use of disciplinary or central, institutional repositories for research data access is currently still less common. When enumerating the repositories used, it is noticeable that not all mentioned are actually repositories (e.g. ResearchGate and Academia.edu). Clearly, more public relations work for repositories should be carried out in order to allow researchers to realize what a repository is and what advantages there are in using a repository.

A clear preference for physical disks and e-mail as access options underscores the current practice of research data exchange within personal networks.

### 14. Reusability of research data

***"Are your research data reusable for others?"***

*Question rationale*

Reusability goes beyond accessibility. Reusable means that it is usually clearly defined whether, and possibly also how this data will be able to be further used and processed (e.g. through the use of Creative Commons licence). The question aims to capture how significant the subject of reusability is for the researchers in Austria (single selection).

*Results*

According to the respondents, 30% allow their data to be used by others, whereas 22% do not. The majority (48%) allow at least occasional reusability ("Sometimes") (see Figure 24).

Reusability is most prevalent in geography (39%), biology (38%), chemistry (38%) and in medicine (28%), and most seldom in the social sciences (28%) and the humanities (30%) (see Figure 25).

On an institutional level, there are no specific trends that are discernible.

*Conclusions*

Given the existing, largely restrictive access options and the relative lack of preference for data archives/repositories, the very high proportion of alleged reusability of research data taking place in Austria is amazing, to say the least. However, it is doubtful that all respondents actually know or have understood the exact definition of reusability, although this was displayed with this question. The significance of the results should therefore be qualified accordingly.

### 15. User agreements

***"Which type(s) of user agreements have been put in place?"***

*Question rationale*

User agreements are fundamentally important to research data since these regulate aspects such as costs, liability, privacy, copyright, exploitation rights, access permissions and access restrictions, deletion of data, linking, sharing and re-use of data. For the latter, open content licences such as Creative Commons are gaining in importance. This question is important to determine whether any and if so, which user agreements currently apply in terms of research data in Austria. This question appeared in the survey only if the respondents had previously selected "No" to the question of re-use (single selection).

*Results*

Thirty-five percent of respondents indicated that they did not have any user agreements in place. In the earth sciences (43%) and mathematics (43%), the values are slightly higher, whereas in agriculture, forestry, horticulture and veterinary medicine the values are lower (26%)(see Figure 26).

Cooperation agreements are mentioned as the most common form of agreement for 21% of the participants, whereby these occur much more frequently in engineering (38%) and in agriculture, forestry, horticulture and veterinary medicine (35%).

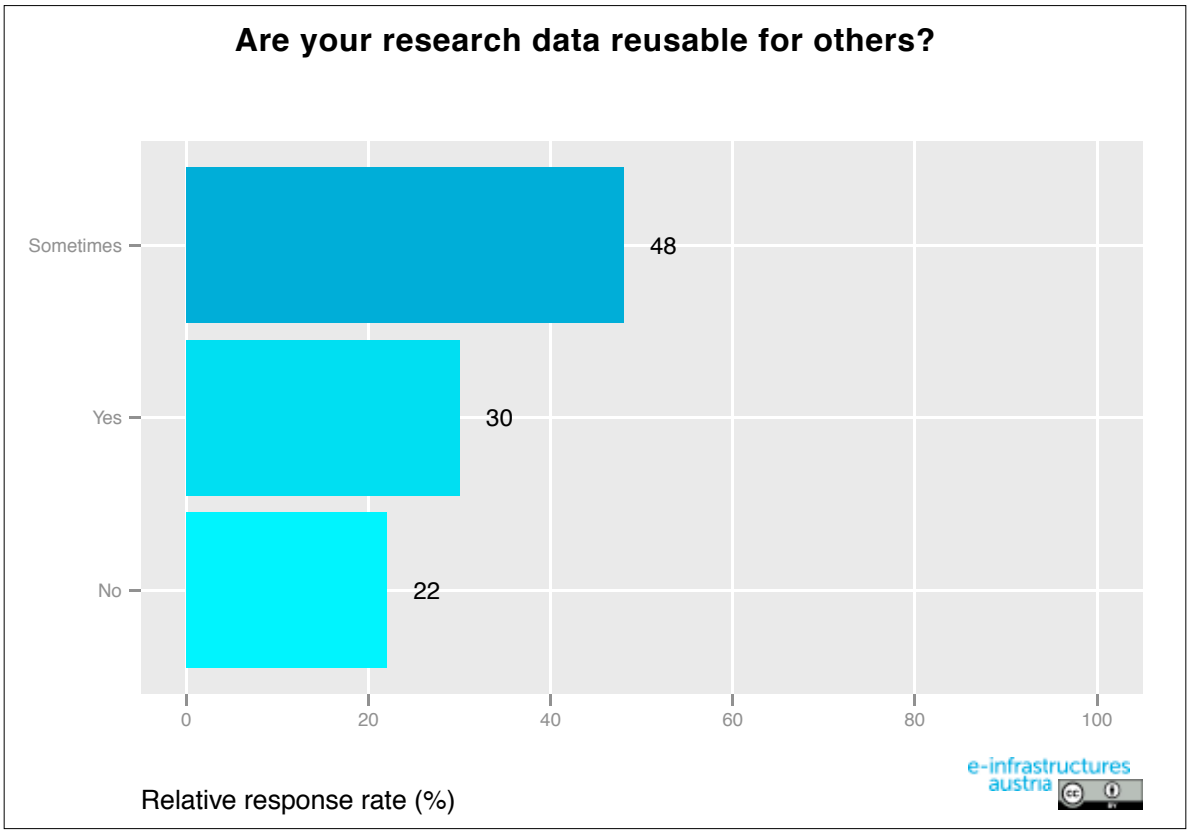



Fig. 24: Re-use of research data (overview)

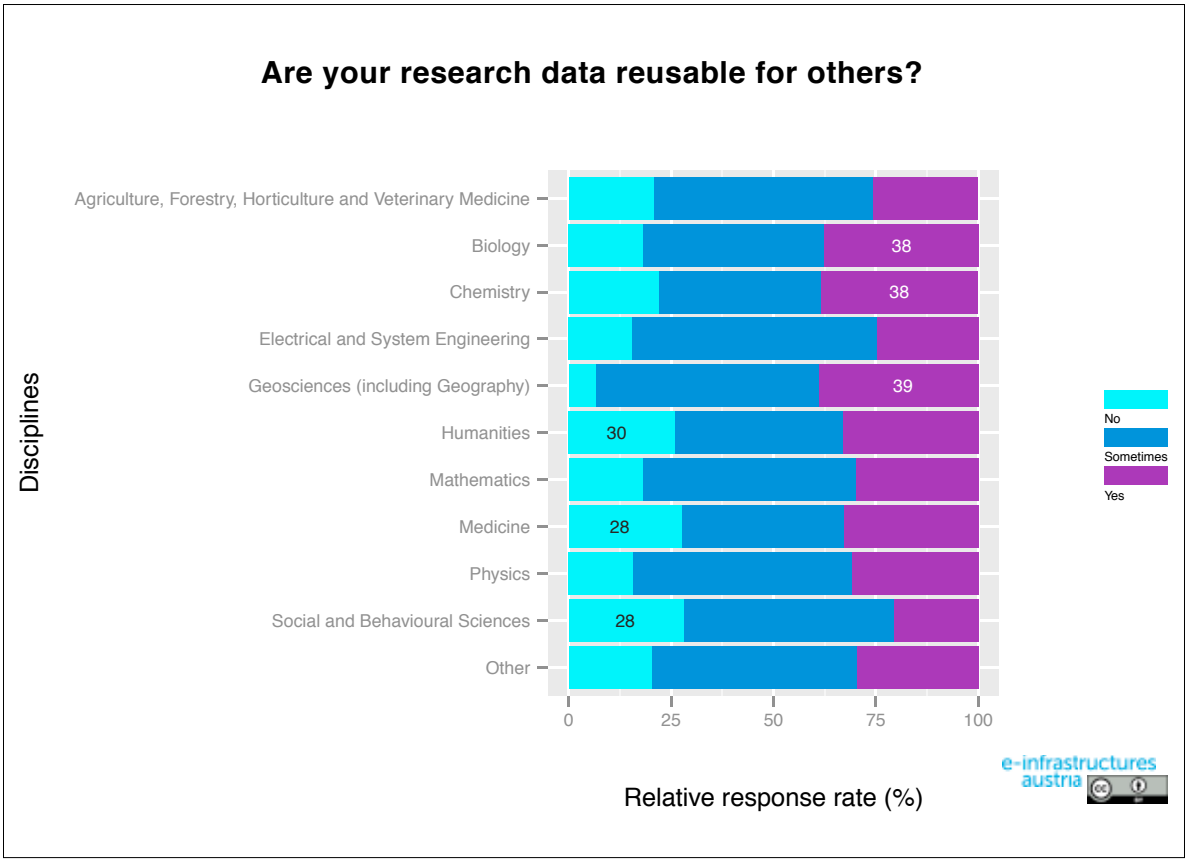



Fig. 25: Re-use of research data (by discipline)

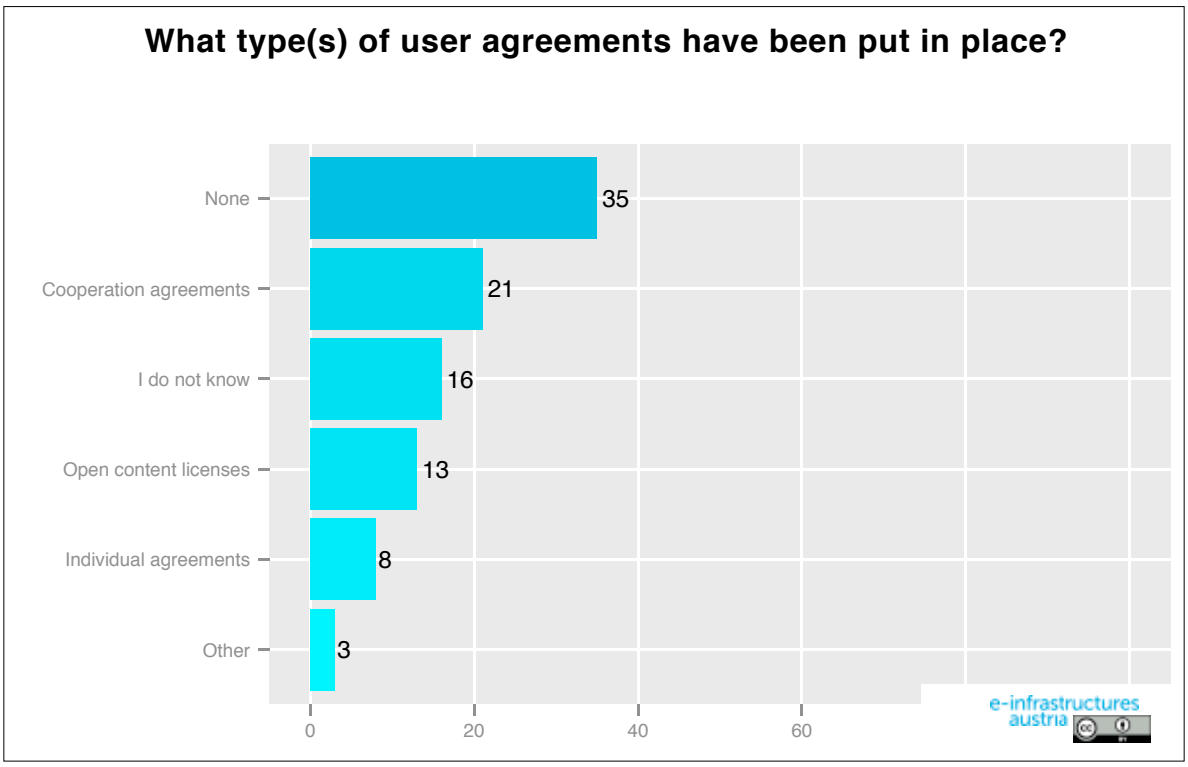



Fig. 26: Types of user agreements (overview)

Open content licences are confirmed by an average of only 13% of respondents, with peaks in mathematics (26%), physics (24%), engineering (23%) and lows in medicine (7%), agriculture, forestry, horticulture and veterinary medicine (6%), humanities (11%) and social sciences (11%) (see Table 77). 16% of all responses indicated "Do not know", ranging between 10% and 28%, depending on the discipline (see Figure 27).

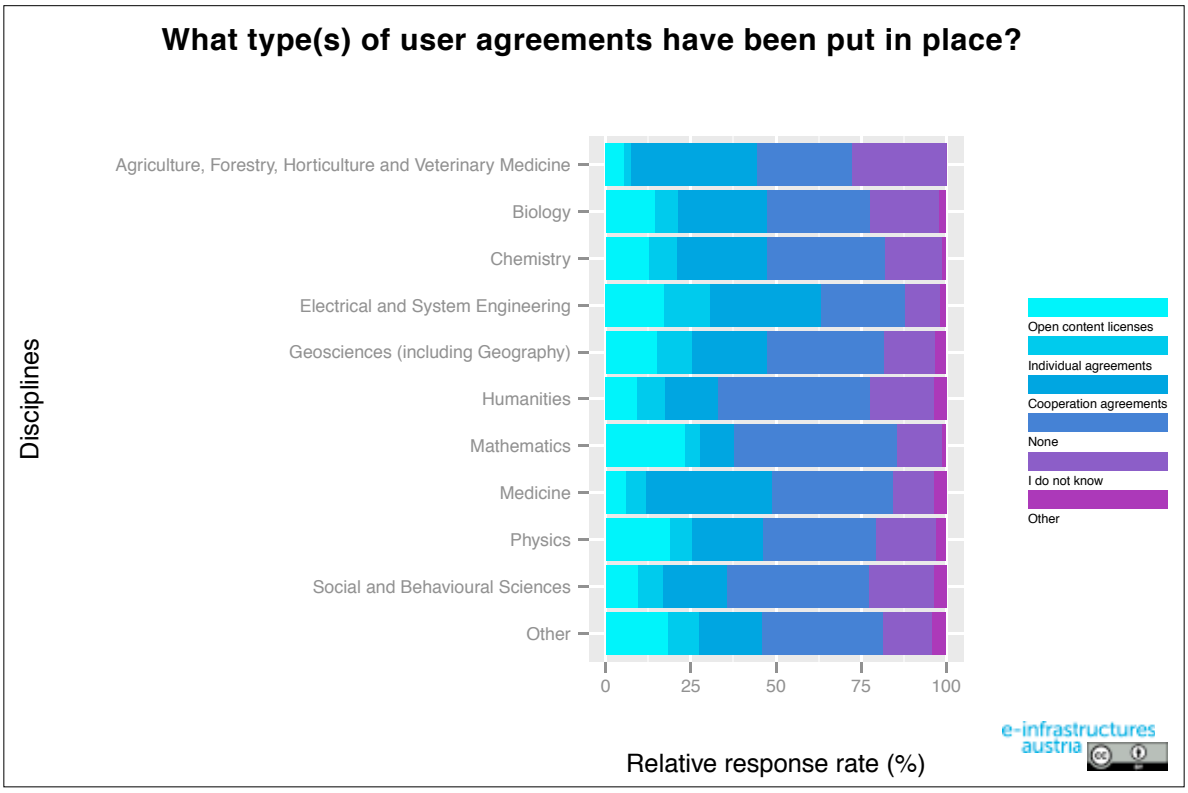



Fig. 27: Types of user agreements (by discipline)

*Conclusions*

More than three-quarters of respondents say that their research data are at least sometimes reusable.

At the same time, one-third do not complete any user agreements, in which the re-use conditions should actually be controlled. In this respect, it seems that the doubt regarding the previous question about whether the definition of reusability was in fact understood, is probably justified. It is at least surprising that disciplines such as earth sciences and mathematics stand out regarding data accessibility, but complete few licence agreements on average, while the ratio in agriculture, forestry, horticulture and veterinary medicine is exactly reversed.

Open content licences are currently used only by a minority. There is obviously great potential here for awareness. The relatively high proportion of responses in the category "Do not know" (every sixth person) suggests that a degree of uncertainty appears to be present regarding the use of user agreements. Effective educational measures should be planned and implemented in order to convey the importance of user agreements in general and open content licences in particular.

### 16. Incentives for sharing research data

***"Which kind of incentives could motivate you to share your research data and make them (openly) accessible?"***

*Question rationale*

The desires of Austrian researchers in terms of incentives for the sharing of research data are a basic prerequisite for the successful implementation of attractive systems. In addition to the positioning of predetermined incentives, respondents were also able to contribute their own suggestions (multiple choice).

*Results*

The most attractive incentives for the respondents included increased visibility and impact of their own research (66%), new contacts and/or cooperation possibilities with other researchers (64%), recognition in the scientific community (55%) and consideration of research data as relevant scientific output in research documentation, intellectual capital report and evaluations (54%).

Establishment of standards (37%), financial incentives (31%) and support for making research data available (29%) are valued as significantly less attractive, but were still chosen by about one-third of respondents (see Figure 28).

Neither disciplinary nor institutional differences are notable here. Only with a financial incentive does mathematics show a conspicuously low interest value at 17%.

In addition to the predefined response options, the following incentives were included under "Other":

- Clear and uniform ethical and legal framework
- Availability of financial and human resources (e.g. for data processing)
- Existence of mandates or guidelines
- Ensuring the quality and traceability of the re-use of data

*Conclusions*

In principle, there is affirmative feedback for all proposed incentives. Visibility, Impact, networking and recognition of research data, for example, are apparently classified as more motivating than the introduction of services to facilitate research data management, financial incentives or the establishment of standards, although these must not be ignored, of course. If research data is to be classified as a relevant source of output for research, the current evaluation criteria in the Austrian research policy itself must inevitably change, and research data must be included in future in intellectual capital. Data archives and repositories also need appropriate interfaces with the research documentation systems (CRIS) for a functioning data exchange.

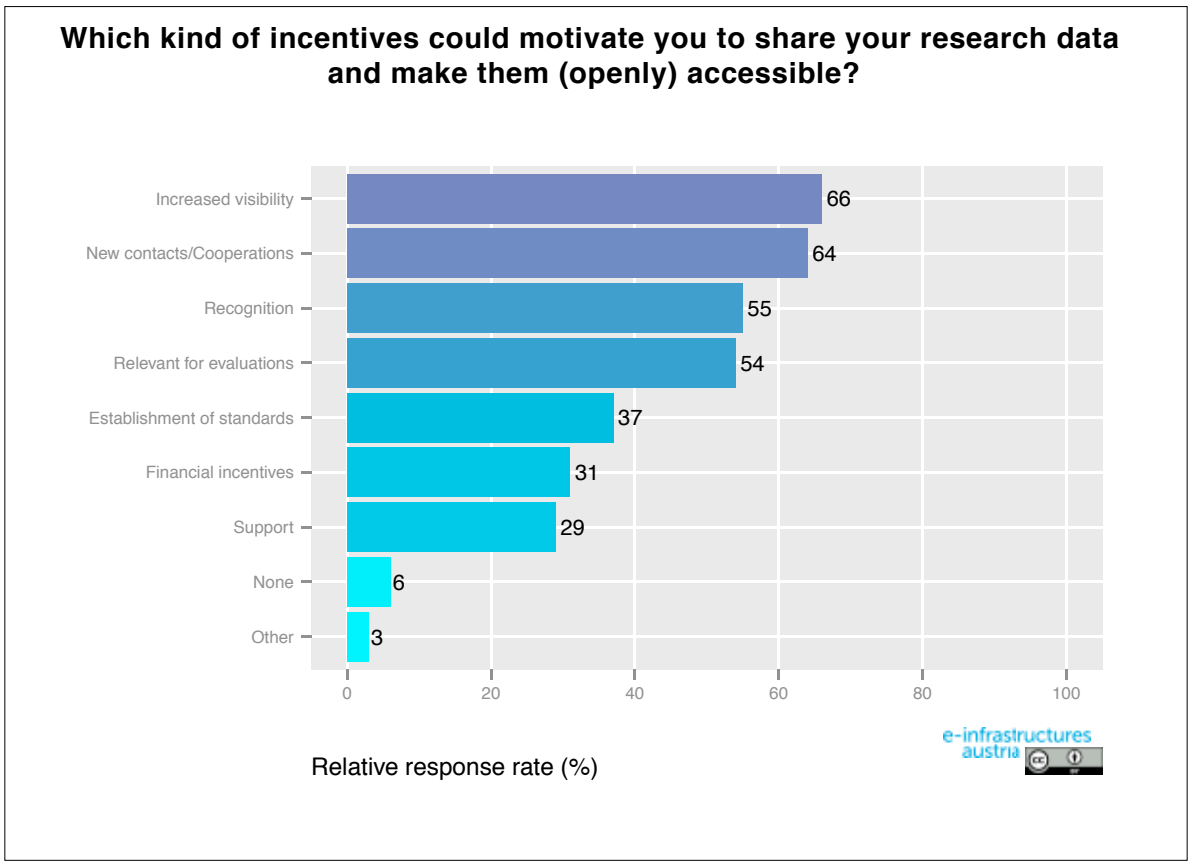



Fig. 28: Incentives for sharing of research data (overview)

### 17. Obstacles to the sharing of research data

***"What keeps you from sharing your research data with others?"***

*Question rationale*

Before supporting services can be implemented for sharing research data, the most significant obstacles to the sharing of research data must be known. Only after this has been dealt with sensitively will there be a successful outlook for the acceptance of these services. As with the incentives, the respondents were able to take a position and mention individual details about predetermined obstacles (multiple choice).

*Results*

In principle, all obstacles provided for selection were relevant.

The respondents indicated these points in this descending order of importance (all in a range between 30-40%):

- The necessary extra effort
- Data abuse
- Legal ambiquities
- Potential data corruption
- Unwanted commercialization
- Increasing the competitive pressure

A lack of standards, a lack of data preparation and the low usage of common file formats provide for comparatively rare obstacles. Eleven percent share a lack of motivation, whereas only 5% fear increased control that would potentially be associated with sharing data (see Figure 29).

From a disciplinary perspective, the fear of privacy violations appearing in medicine (60%) and in the social and behavioral sciences (48%) seem to be relatively high. Other legal restrictions dominate in engineering (51%). The fear of misinterpretation and the misuse of data is the least striking in mathematics, at 16% and 15% respectively.

The increase in competitive pressure associated with publishing is mentioned in biology as the most imporant obstacle, at 52% (see Table 89).

When analyzing the total number of multiple answers per question, the above-mentioned reasons were also identified as important factors. The increase in competitive pressure appears to play a larger role in scientific disciplines such as biology, chemistry, physics and earth sciences, than in all other disciplines (see Figure 30).

In the comments about possible answers, the following obstacles are mentioned:

- Lack of consent from third parties – e.g. funding, project group and so on
- Lack of recognition or non-existent interest on the part of the professional public
- Possible conditions of the data archive
- Lack of mandates, guidelines or agreements
- The interest to exclusively exploit the generated data further
- The rejection of the sharing principle within the discipline
- Country-specific data privacy
- Unsuitability of data (risk of misinterpretation)

*Conclusions*

The reasons not to want to share data are numerous. The most significant ones that arise in this context include the implementation of systems, the enabling of research data management that is tolerable for researchers with regard to time and effort, and the acceptance of guidelines and/or policies which create the necessary framework conditions for legal compliance.

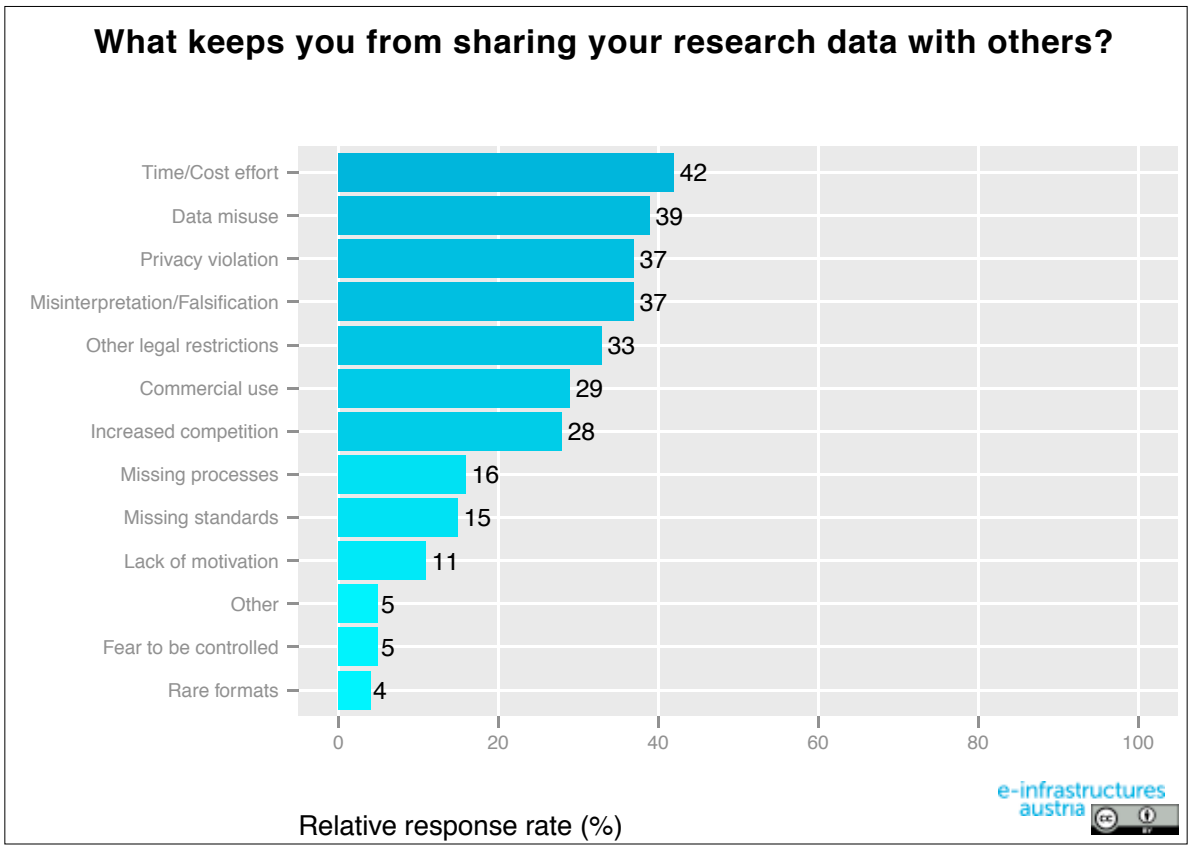



Fig. 29: Obstacles to sharing research data (overview)

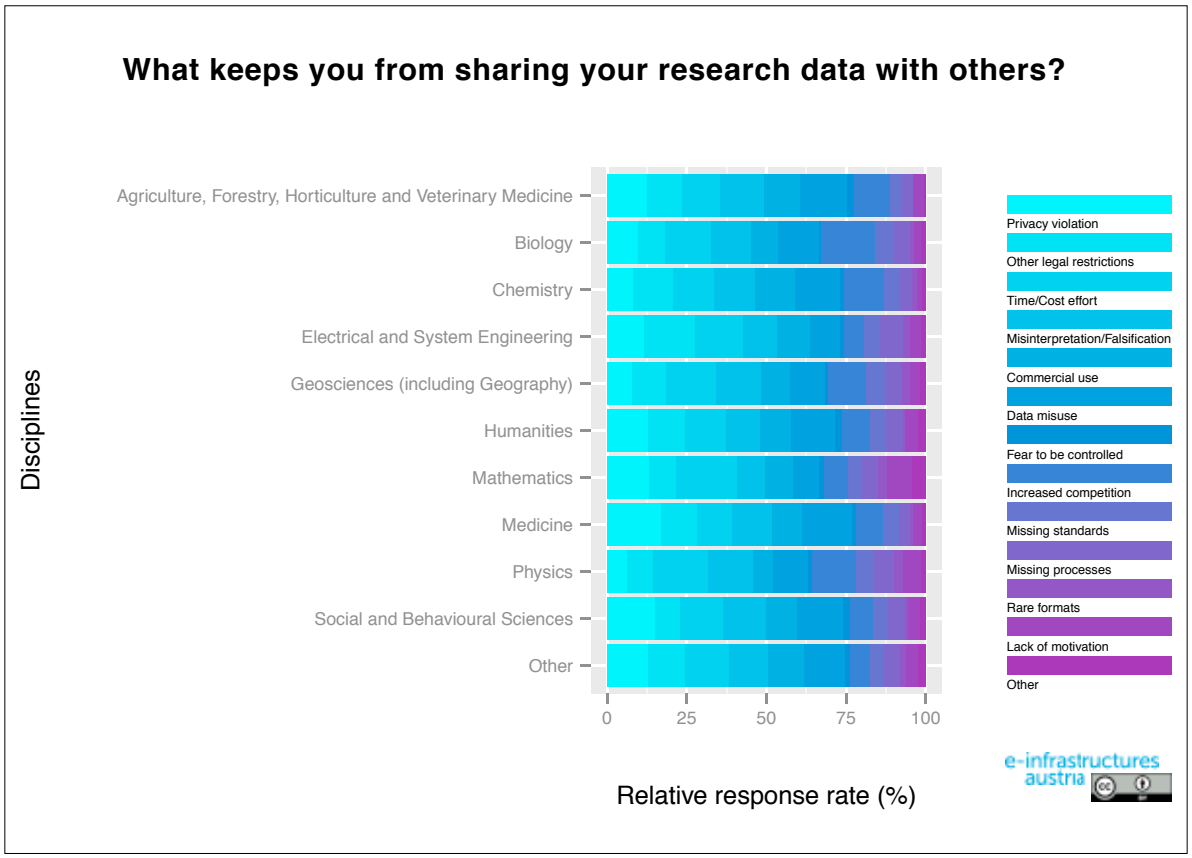



Fig. 30: Obstacles to sharing research data (by discipline)

## VIII. Infrastructure and services

### 18. Preferred range of the data archive

***"Which data archive would you preferably use?"***

*Question rationale*

Existing data archives have different ranges, and for the most part, are geared professionally. As with literature repositories, for those who provide infrastructures, the question arises of whether the audience prefers a "one-stop shop" over a customized offer (multiple choice).

*Results*

The survey participants do not all prefer the same form of data archive (see Figure 31): their preferences are very scattered and many participants chose several options. The ratio of preference for international or national data archives is relatively balanced. While 47% chose the currently most common form, the international specialized data archive, 37% consider their data to be in good hands stored centrally at their institution. Often mentioned were data archives with the broadest range, namely international and multidisciplinary ones (28%), along with the specialized national repository (21%). However, the remaining options of a decentralized institutional repository (18%) and national multidisciplinary respository (12%), do not fall far behind. 11% of respondents have no desire to use any of these archives.

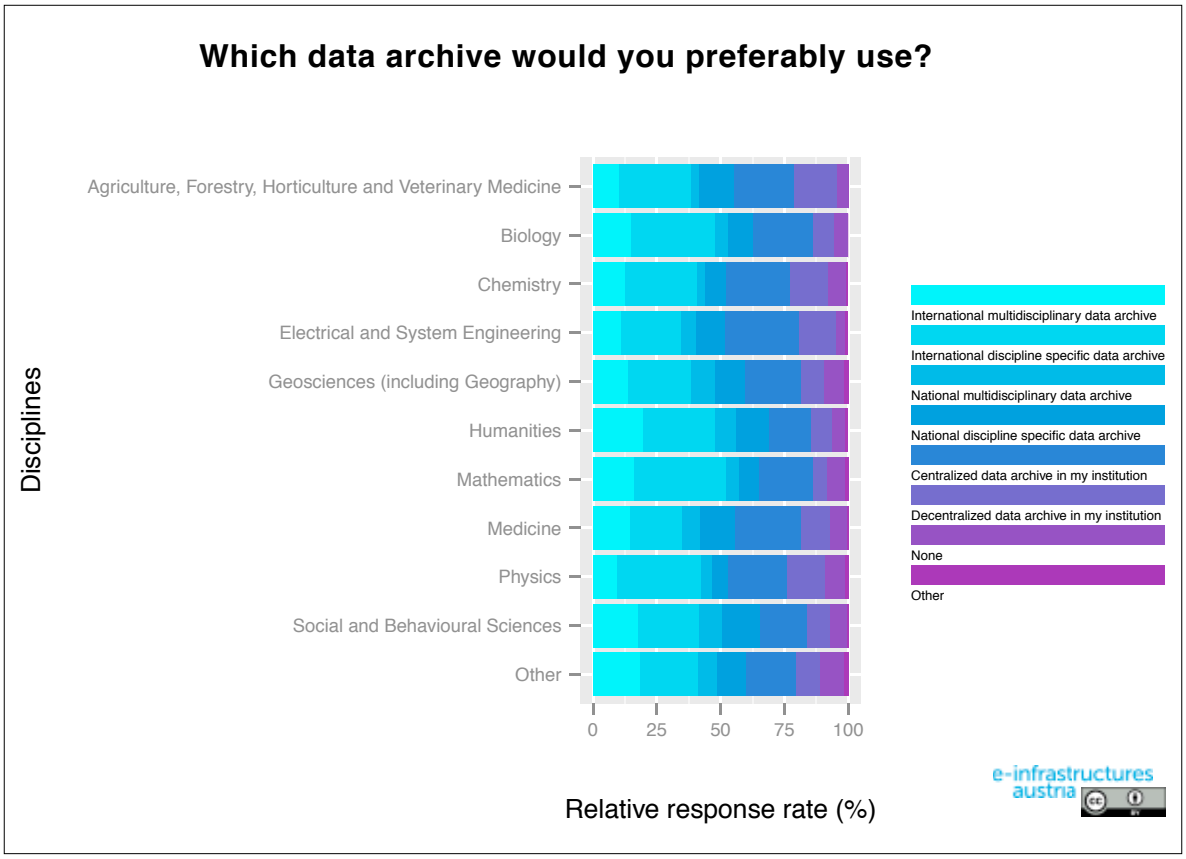



Fig. 31: Preferred data archive (by discipline)

With such a strong scattering, it is natural to look for disciplinary differences, which, however, are not very clear. The following similarities in the responses are recognizable (see also Table 95): mathematics and biology are most decidedly for an international, subject-specific data archive. Chemistry, physics, agriculture, forestry, horticulture and veterinary medicine expressed the desire to combine this international, specialized data archive with archiving, either centralized or decentralized, at their institution. In medicine and engineering,

institutional solutions are preferred, however, these responses also showed some desire for an international, specialized data archive arranged with an international, multidisciplinary data archive. Social and behavioral sciences, humanities and geosciences differ from the disciplines mentioned in this question in that they use national archives more frequently and so look for archiving options at the institutional level less frequently (see Table 96).

The comments in the free text field (50) are evidence of a certain indifference to the options. That could also explain why the distribution is so wide.

*Conclusions*

The answers of the participants to the question of what forms of data archives should receive the greatest attention from the service facilities, result in a clear preference and for interdisciplinary for international, specialized data archives, but show that institutional archiving capabilities in some subject areas are of great importance. Especially in medicine and engineering, disciplines with often sensitive patent law-relevant data, the institutions should provide either their own central infrastructure or, probably with less effort and expense, get involved in international collaborations, so that the highest safety standards also apply in archives with greater reach and that researchers will be informed of this. The desire for institutional solutions in chemistry, physics, agriculture, forestry, horticulture and veterinary medicine stems perhaps more from the fact that the raw data generated is initially stored at the institution and often decentralized. Such departments would benefit from pilot projects in which full data lifecycles would be infrastructurally managed.

The importance of national archives can be explained in the social and behavioral sciences and in the humanities with the prevailing culture in these subjects: The publication infrastructures are still oriented more or less nationally; raw data are often already available in national archives. As this gradually changes, it may be assumed that the preferences are also gradually aligning more internationally regarding the preservation of research data.

To compensate for the well-proven differences between the disciplines, multidisciplinary archives should only be promoted as a transitional or long-term objective, if the operation of a single, complex infrastructure is considered an effective solution.

### 19. Desired services

***"What supportive options for handling research data would you use at your institution?"***

*Question rationale*

This question should elicit first which services should be implemented first at Austrian research institutions. In addition, it can be used to decide, based on the answers, if the demands on the individual institutions are so similar that Austria-wide cooperative services could offer the most efficient and effective solution (multiple choice).

*Results*

The interest in support among the participants is high (see Figure 32): Only 11% would use no service. Also, the wishes of the researchers coincide with the available options, since only 1% did not find the preferred service here. Researchers (60%) mostly need technical infrastructure for research data management. Forty-nine percent need project-specific support for data management, for example, in the creation of data management plans. More than one-third of participants reported a need for legal advice (42%), a general help desk (41%) and training opportunities (37%).

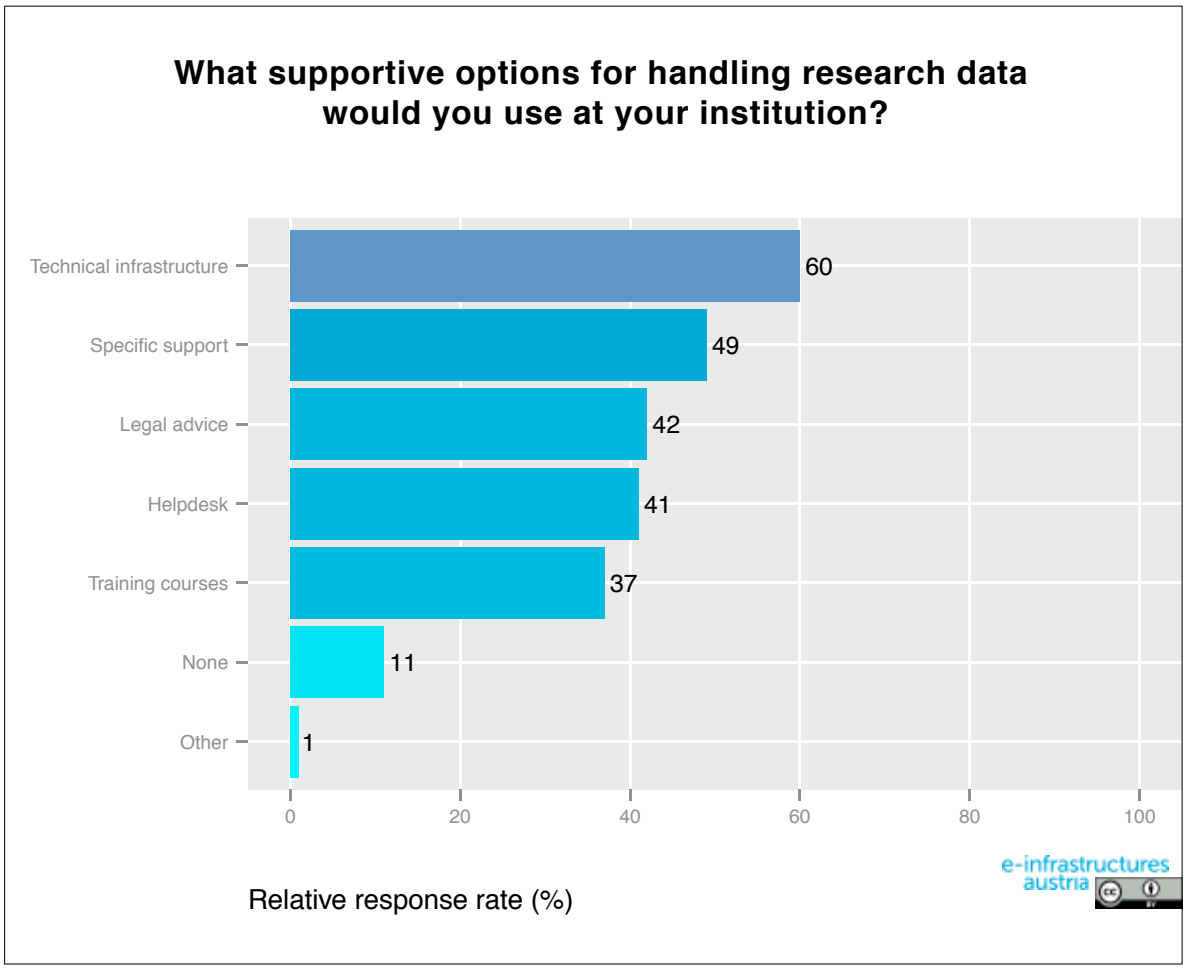



Fig. 32: Desirable offers (overview)

Moreover, the chosen options differ little in terms of the discipline or the institution affiliation of the participants. Basically, the trend is emerging that the art universities, the Austrian Academy of Sciences and the Vienna Chamber of Labour have a greater interest in support, as do the technical and medical universities, with the one exception of the Medical University of Vienna. The universities without departmental focus represent the middle of the range regarding support needs. Interestingly, in almost all cases this grouping can be traced back to infrastructural needs, whereby the Vienna Chamber of Labour is an exception here, and seems to have a strong below-average need for additional technical infrastructure, but an above-average need for specific assistance in data management. The Vienna University of Technology is an exception in the opposite direction, where the need is reversed.

In order to tailor s ervices specifically to target groups, correlations were sought between these responses and the positions of the participants. Interestingly, the need for technical infrastructure for doctoral students, lecturers and student employees is not as high as in other positions (see Figure 33). This ratio is reversed in the question of the training courses in which professors would hardly participate (see Figure 34). More surprising is that project staff would rarely consult a helpdesk, while university professors did so all the more frequently (see Figure 35).

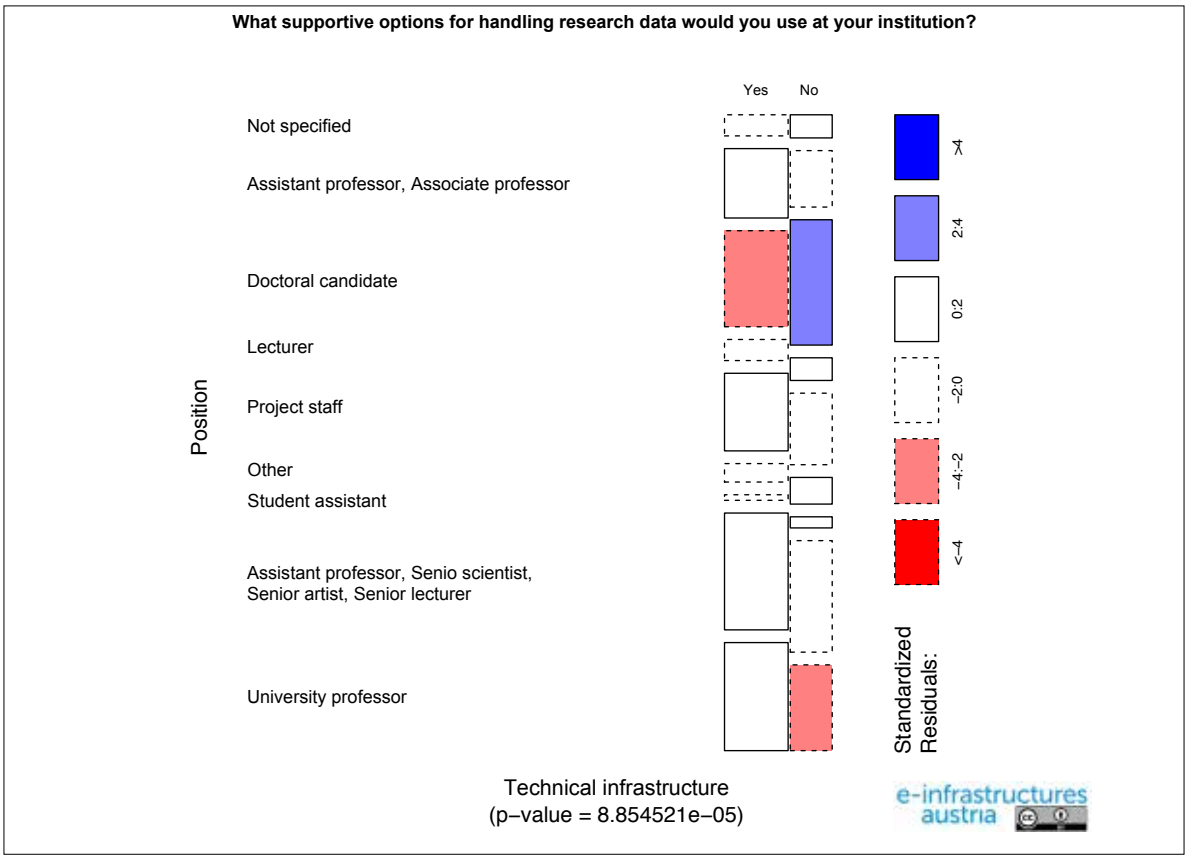



Fig. 33: Desired offers (connection between the desire for technical infrastructure and ones own position)

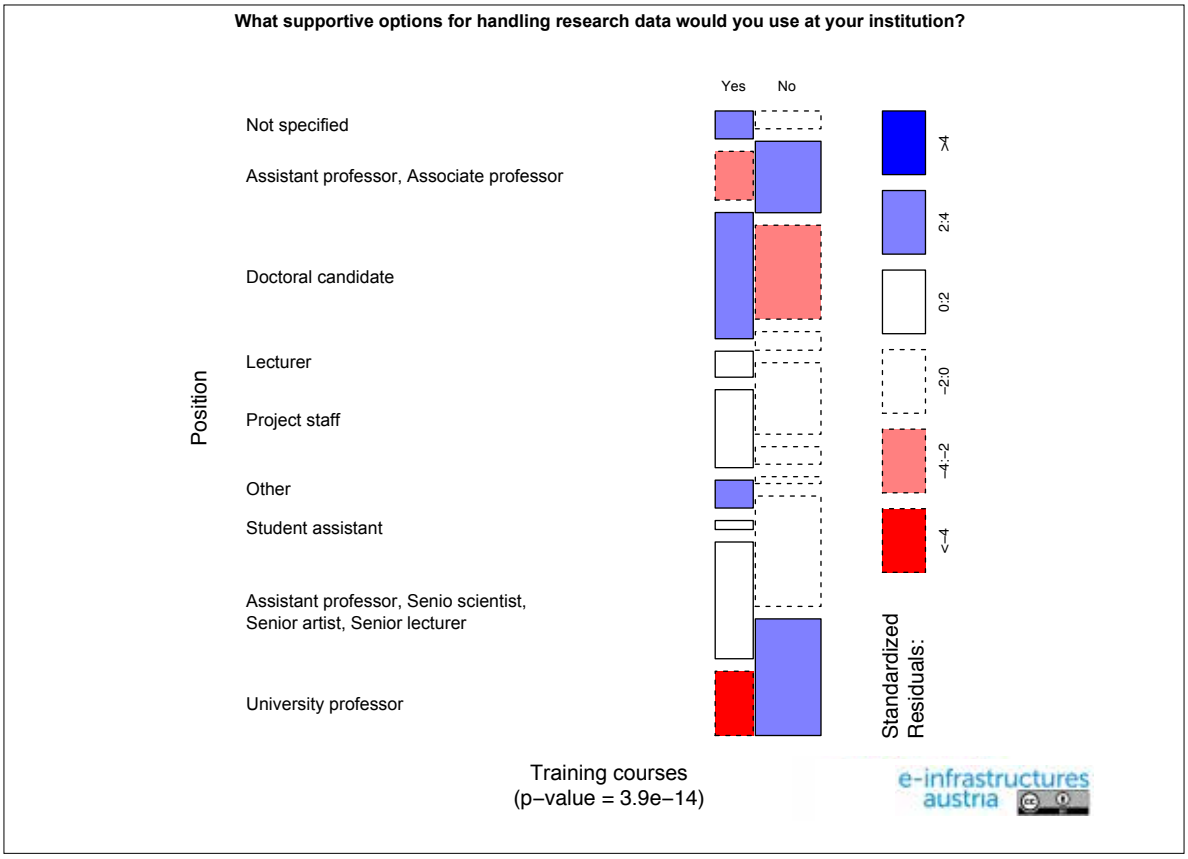



Fig. 34: Desired offers (correlation between the desire for training courses and ones own position)

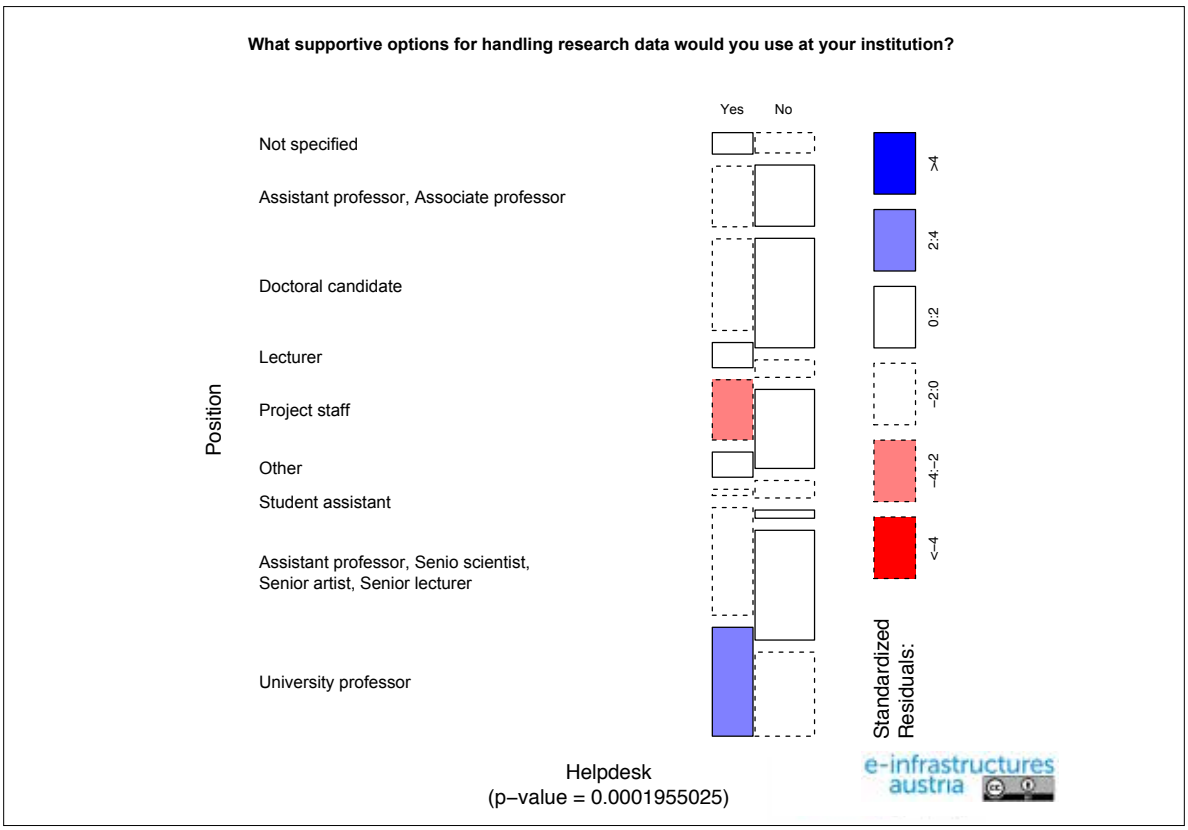



Fig. 35: Desired offers (connection between the desire for a helpdesk and ones own position)

Another correlation that has been discovered is the confidence of the participants when it comes to individual deficits in selecting their tools. When the question as to what options exist concerning access to their own data by others is answered with “Via physical disks and/or email,” the need for technical infrastructure by these questionnaire participants is also especially high (see Fig. 36).

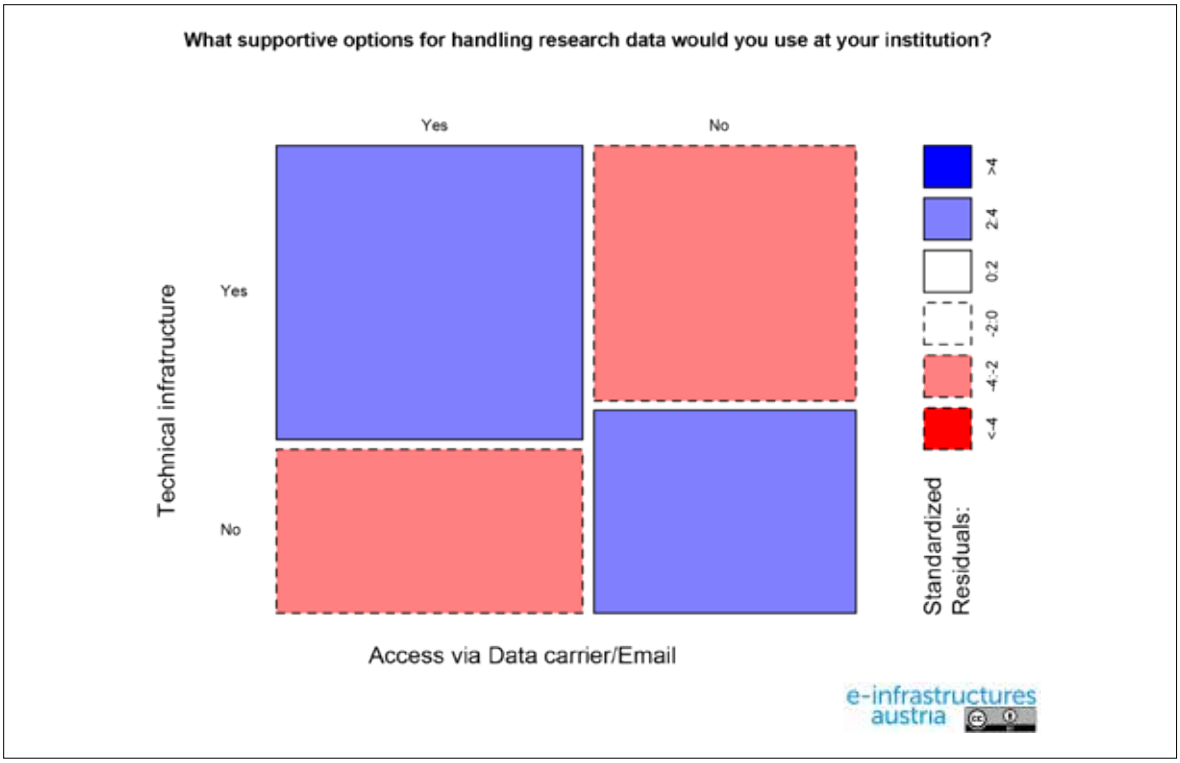



Fig. 36: Desired offers (correlation between access options used and the required infrastructure)

*Conclusions*

Since this survey was conducted in advance of the planned expansion of services for research data management at Austrian universities, the results were hardly surprising. Technical infrastructures and advisory services are required across the board, whereby project-specific support should be the focus, while all other kinds of services such as legal advice, a help desk and training services should be set up.

However, if this happens at every institution, the staffing needs for this are enormous. An acceptable level of service quality with no headcount is hardly achievable. Accordingly, the search for potential, even international, collaborations for the operation of technical infrastructures or services should be expanded to include central services that can be set up throughout Austria. A center for legal advice, a common helpdesk that presupposes a common technical infrastructure, and a joint training center which organizes workshops at the institutions could be either regionally distributed to selected research institutions or, with even less manpower requirements, similar to the Digital Curation Centre (DCC) in the UK, be established as a consortium. These key services should be linked with a contact person from each institution, enabling the transfer of knowledge and the direct supervision of the researchers.

### 20. Desired measures

***"What further action do you expect from your institution?"***

*Question rationale*

In addition to the previous question, it was also asked whether organizational, structural or strategic measures for the provision of services to the research institute should also be expected from the participants (multiple choice).

*Results*

Over half of the researchers surveyed expect the provision of additional qualified staff to meet the new tasks of their institutions (54%) and the publication of guidelines or policies for dealing with research data (53%), as shown in Figure 37. Approximately one-fifth also sees a need to anchor research data management as educational content in the curriculum (22%) and/or as a service obligation (17%). Indeed, another fifth considers no further action necessary (21%).

Similar to the previous question, response behavior is relatively homogeneous with respect to institution affiliation and the professional disciplines, whereby in mathematics the desire tends to be less toward personnel, but in medicine moreso.

Also concerning these responses, the determination of the relationship with the position of the surveyed researchers resulted in interesting results: While university professors more than average  more than average desire the recruitment of additional staff, they decidedly reject an anchoring of the issue in the curricula (see Figure 38). However, such intervention in the curricula is widely supported by doctoral students as well as lecturers, who conversely consider additional staff to be less important (see Figure 39). Regarding the anchoring of research data management in a policy (see Figure 40) and in service obligations (see Figure 41), university professors are rather unconvinced, but even more skeptical are the doctoral students and the project employees.

Also in regard to the previous question, a keen desire for legal certainty in the context of research data management was expressed in the 50 free text comments. Moreover, three people found that various collaboration and networking activities (e.g. participation in the development of a decentralized data archive on an open-source basis) should be more strongly encouraged.

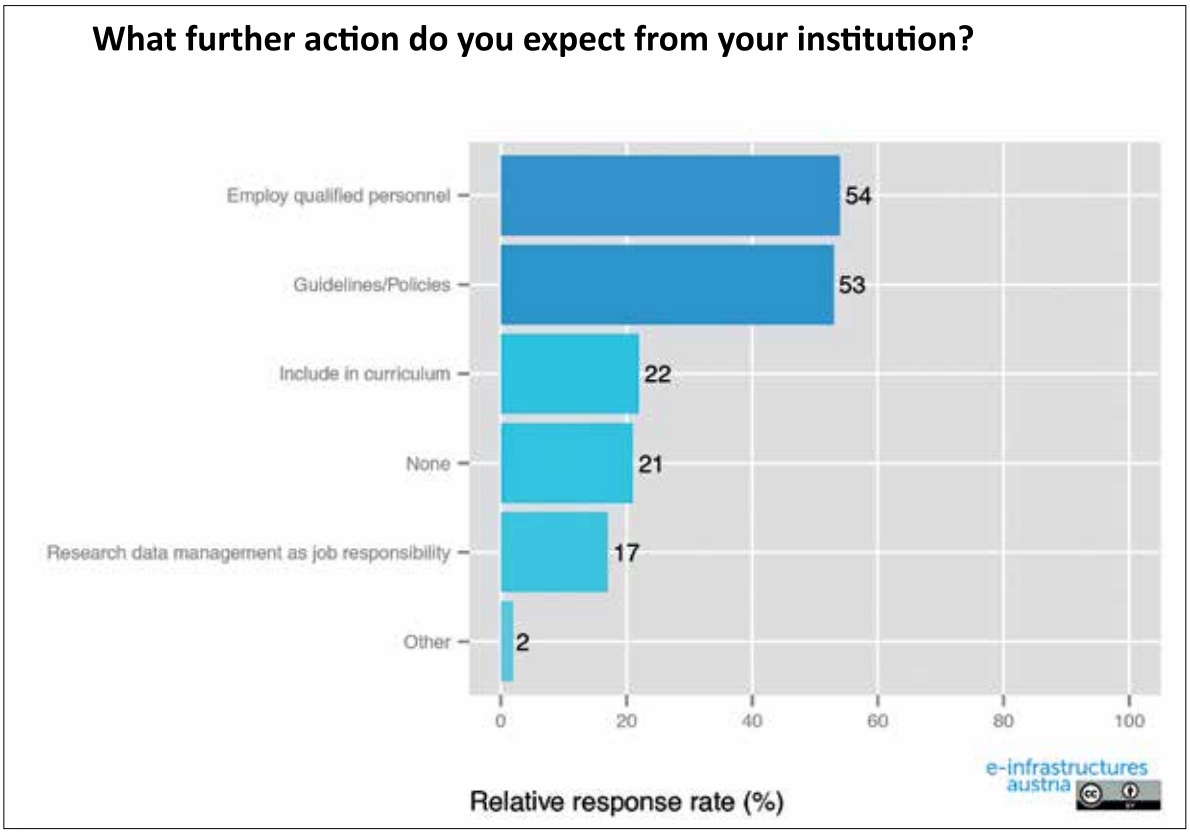



Fig. 37: Additional desired measures (overview)

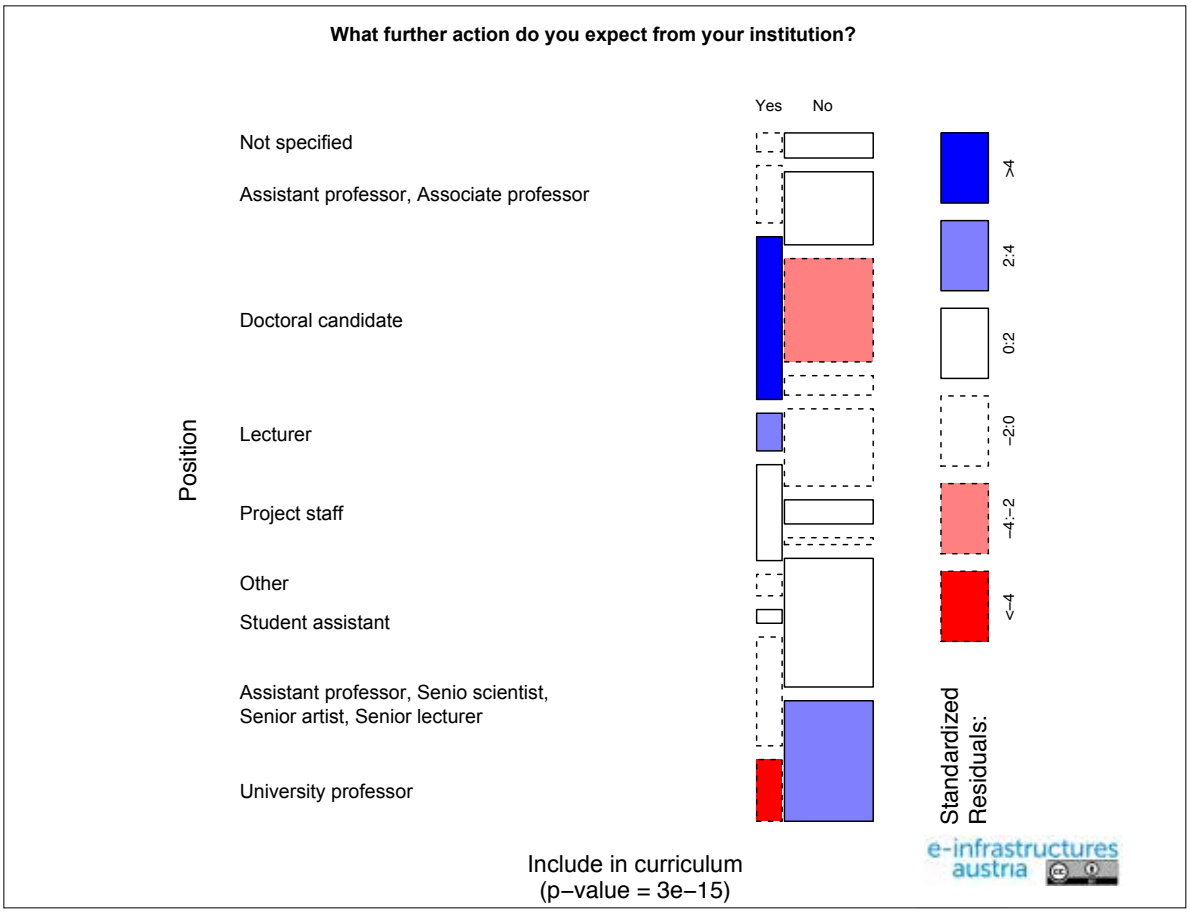



Fig. 38: Additional measures required (connection between the desire for the adaptation of curricula and own position)

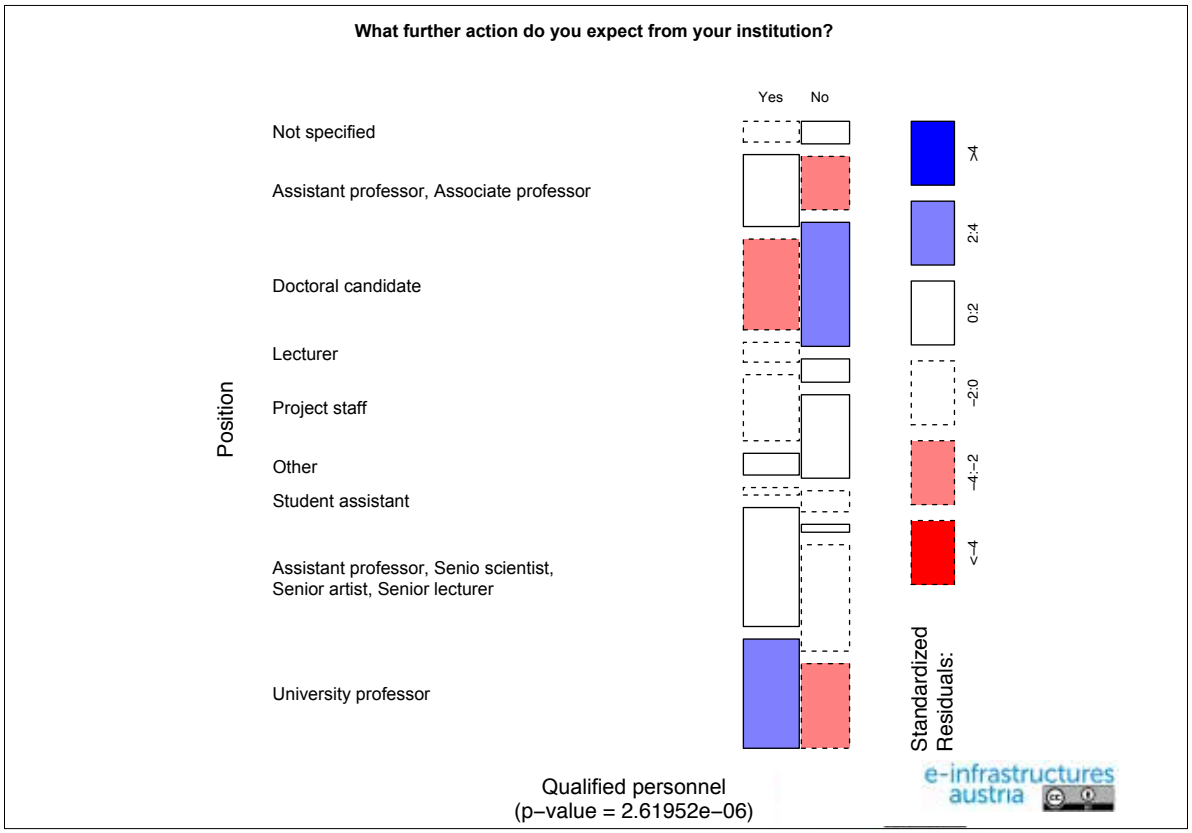



Fig. 39: Additional measures required (connection between the desire for personal gain and own position)

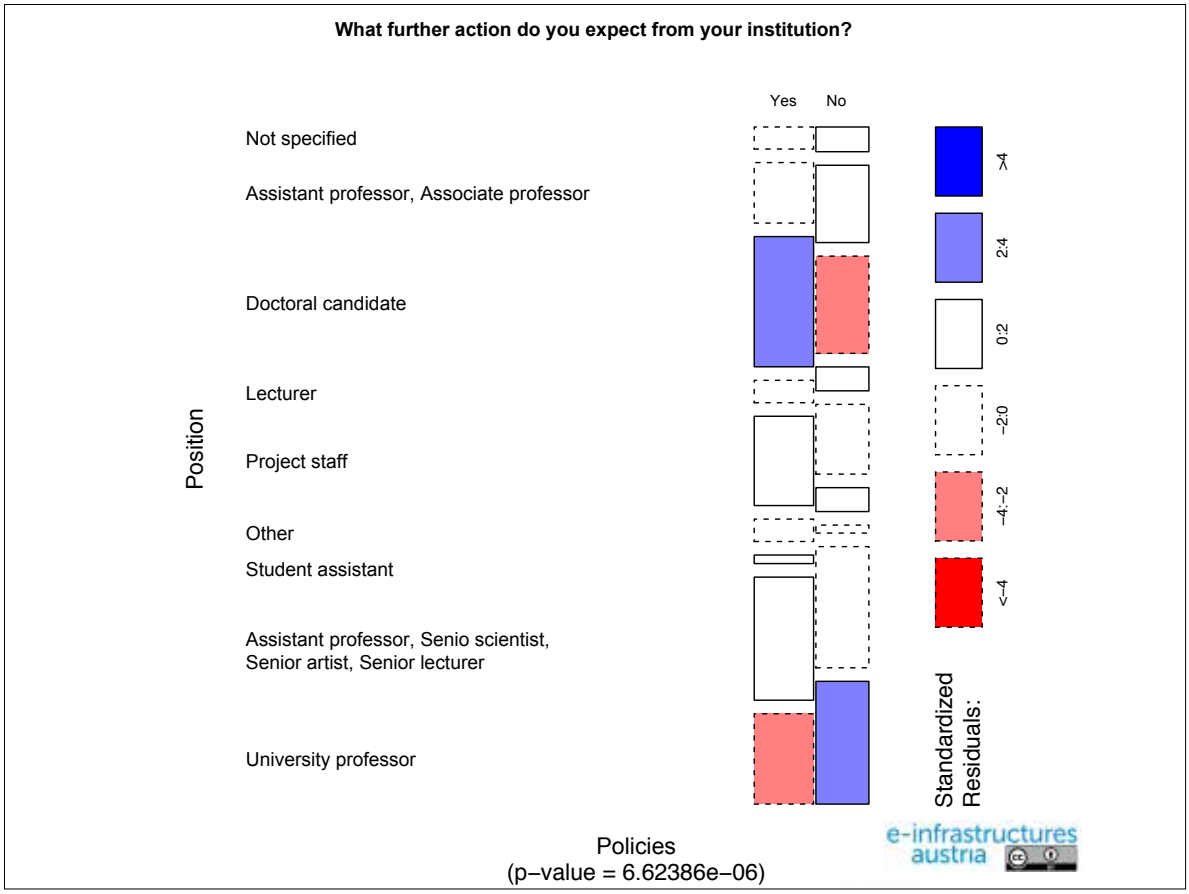



Fig. 40: Additional measures required (connection between the desire for institutional guidelines and own position)

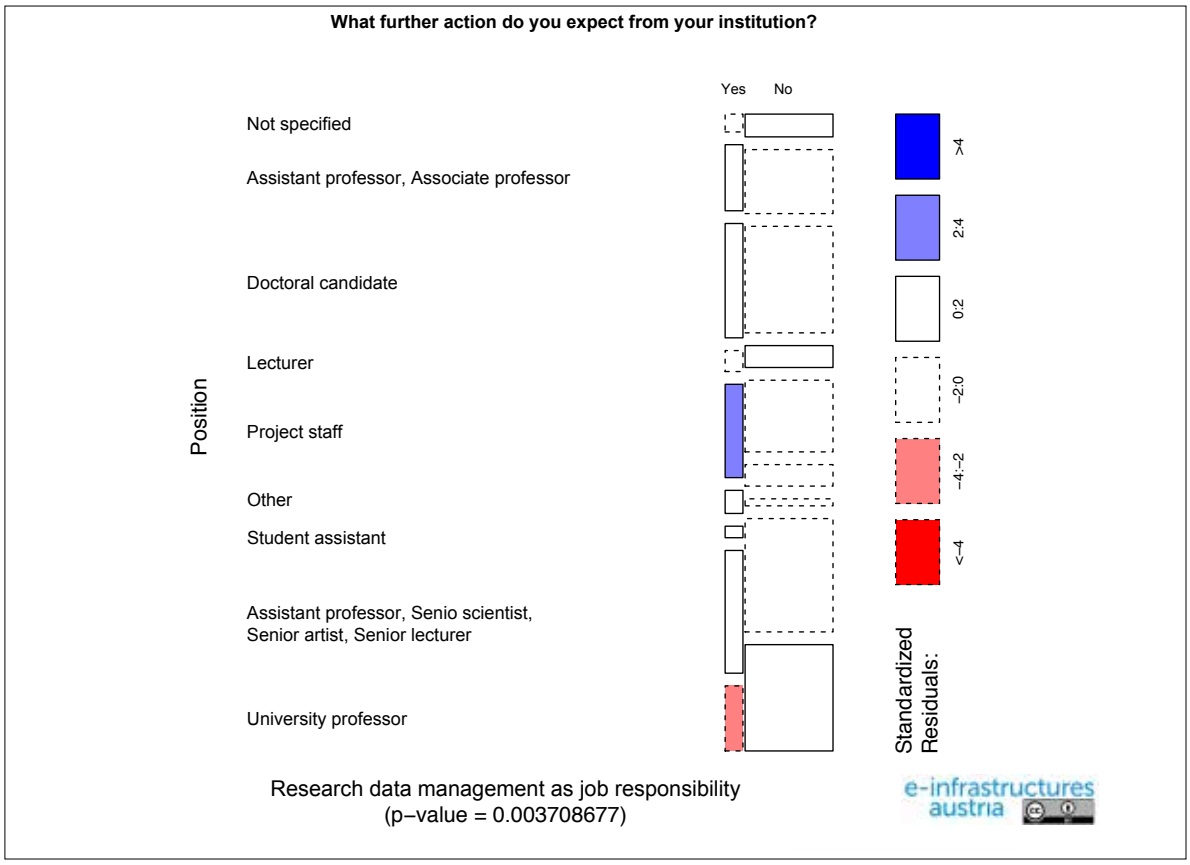



Fig. 41: Other desired measures (link between the desire for the adaptation of institutional guidelines and own position)

*Conclusions*

Without additional staff that, in direct cooperation with the researchers, cares for the research data management in accordance with the requirements of sponsors, new tasks cannot be handled with a constant research output. Different requirements from sponsors should be integrated into an institution-wide policy to facilitate requirements management for the researchers, so they do not need to rewrite applications for funding for the same project. The other two options, research data management as educational content in the curriculum and as a service obligation, are controversial and are rejected especially by members of the professor faculties, though advocated by other mid-level academic faculties. Here dialogue should be encouraged in the appropriate forums to develop mutually satisfactory concepts.

## IX. Open final question, desires, ideas

***"Optional: Do you have any further comments or suggestions relating to research data?"***

*Question rationale*

This question aims to give interested persons an opportunity for feedback and to formulate additional desires and ideas to supplement the existing questionnaire.

*Results*


Fig. 42: Additional feedback (wordcloud-assessment of free text comments)

Overall, comments were submitted by 202 persons, out of which statements could be identified in 215 categories. Positive comments in a category are generally opposite to negative feedback.

Some of the answers given could be identified as feedback to this topic, whereby both laudatory and critical words were been identified. Five comments noted that the survey is not specific enough for their own field of research.

It is striking that the term "research data" is very much associated with the natural sciences. This could be read from twelve responses which can be assigned to the fields of Arts and Humanities.

The vast majority of comments included requests and suggestions. The desire for technical support is expressed in seven answers, and in five answers, the need for human support is expressed. Four people express their desires for various kinds of training.

Regarding technical implementation, the desire for institutional solutions emerged from the feedback. Nine people would find an institutional implementation useful.

A desire for guidelines was identified in eight comments. For six persons, the aspect of individual choice in making research data available was important.

Another focus is on legal issues. Nine comments could be assigned to this category, three other more specifically to data protection. Ethical issues also play a role here; there were three feedbacks and two comments on ethics committees.

In three comments, the heavy workload of scientific personnel was discussed, and four comments mentioned the burden of administrative activity. On the other hand, three answers from researchers called for the creation of new administrative bodies.

*Conclusions*

From this feedback alone, one cannot identify any specific trends. The number of responses as compared to the total number of participants is too low to glean essential aspects from the quantitative results of the survey. The answers given may therefore solely be used as suggestions for further action.

## X. Synopsis of results

### General

The results of the study confirm and statistically establish current expectations with respect to the handling of research data. On the one hand. they show the areas in which there are differences between the research institutions and their disciplines, and on the other hand, identify interdisciplinary similarities.

Based on the sample size of the completed questionnaires, out of 3026 questionnaires, general statements concerning the entire scientific and artistic staff can be made with a high statistical certainty (fluctuation margins of approximately +/- 1.8%).

### Returned questionnaires

The average return rate per institution was 9%.

It should be noted that about two-thirds (64 %) of the completely filled-out questionnaires came from members of the five big research institutions:

- University of Vienna
- Vienna University of Technology
- University of Innsbruck
- Medical University of Vienna
- University of Graz

The remaining third (36 %) is distributed across the remaining 19 research institutions.

Most questionnaires were answered by those who themselves are associated with the humanities (23%), followed by researchers from the fields of social and behavioral sciences (16%), engineering (11%), biology (10%), medicine and physics (both 7%), chemistry (6%), earth sciences (4%), mathematics (3%) and agriculture, forestry, horticulture and veterinary medicine (1%); more than 13% of participants selected the “other” option.

In addition to academic middle management, which is by far the largest group among those addressed, even professors are well represented with a participation rate of 19%.

### Data types and formats

Almost all of the surveyed researchers generate unstructured text documents (97%) and graphics (81%). While about two-thirds identified spreadsheets (67%) as the format of choice for their research data, all other options are much less common. Apart from the configuration files hardly mentioned, structured text is used by every third respondent, videos, databases and source code by about every fourth, and audio and software by every fifth respondent. The distribution of data among the disciplines corresponds to the general expectations. For example, all the technical disciplines have a higher proportion of source code and configuration data, whereas in the humanities one notices the comparatively frequent creation of databases, only narrowly edged out by medicine (35% or 36% in the respective discipline).

Seventy-three percent of researchers stated that more than three-fourths of their research data volume is created digitally. Only 18% estimate a digital share of their research data between 50% and 75%. An above-average number of 6% of the survey participants, whose data are mainly not generated in digital form, belongs to the humanities.

### Data archiving, storage and loss

The majority of respondents use multiple storage options, with a recognizable preference for the use of “personal IT infrastructure.” The personal work computer (71%) is the most widely used, whereas an external hard drive or USB drive yielded 64% and storage “locally on the private computer” was at 54%. Significantly lower numbers correspond to storage on a server at the university (33%) or an institution (39%) and the use of cloud services (21%). All other options were mentioned by less than 20% of the participants.

As for memory, the majority (66%) of respondents required up to 100 GB per year. Fifty-five percent say that they need more than 50 GB of memory per year on average, and 27% say they need more than 100 GB of storage per year. Art universities showed that the cause of this is often generated audio and video data requiring more memory. Moreover, it could be found that some of the medical universities generated large, above-average amounts of data, and this data is also most frequently stored pro-rata using appropriate standards. Otherwise, it appears that this is indeed mostly (85% answered with "yes") stored with descriptive metadata, but that this usually happens on a very inconsistent basis.

The researchers themselves (93%) are responsible for storing their data. Much less often, archiving is performed by scientific (17%) or non-scientific colleagues (8%), project/group leaders (12%) or a central computer science service/IT department (9%).

Although the majority denied the question concerning any experience with data loss (65%), the positive responses from a good third (35%) of the participants show that the issue of data loss for many researchers certainly represents a problem not to be underestimated.

**Ethical and legal aspects**

The respondents use mostly external data: 13% immediately, 42% after minor processing, 33% only after significant processing. Disciplinary differences are low. Nearly 70% of respondents reported being faced with usage of outside data either rarely or never with legal ambiguities.

When people leave their institutions, their research data tends to remain at the institutions. This behavior is relatively homogeneous with respect to the distribution of the institutions. One exception is the staff of artistic universities, which tend more often to take their data with them.

Fifteen percent and 31% of respondents, resepectively, often or at least sometimes generate sensitive data. This issue is most relevant for medicine, corresponding to the medical universities. The least-sensitive data is present in mathematics, physics and the humanities.

**Access and re-use**

In principle, there is an increasing willingness to share data. The majority of respondents grant access on request (57%) or for selected people in the institution (53%). Only 11% grant the general public access to their data. In most cases, the data is made available via physical media or mail (54%). Data archives/repositories are used by only 14% of respondents. Of note is Vienna University of Economics and Business which makes available a relatively high proportion of data on a remote server.

The clear majority of respondents indicate that their research data is either fully (30%) or at least occasionally (48%) re-usable. 35%, however, have not entered into licence agreements; open content licences see only rather low utilization (13%) in this context.

The most attractive incentives for data sharing are associated with potentially increasing visibility and impact (66%), options for gaining new contacts and/or cooperations (64%), appropriate recognition by professionals (55% ) and consideration of research data as scientific output (54%).

The increased time and expense, a possible misuse of data, legal uncertainties, potential data corruption, unwanted commercialization and increasing competitive pressure are, with 30-40%, the most frequently mentioned reasons given for not sharing research data with others. Legal restrictions make up the main obstacles, especially in medicine (60%), social and behavioral sciences (48%) and engineering (51%).

**Infrastructure and services**

Desires concerning the preferred form of data archival are varied. The ratio of preference for international or national data archives is relatively balanced. While 47% choose the currently prevalent version, the international specialized data archive, 37% see their data in good hands centrally at their own institution. The data

archive with the greatest scope, namely international and multidisciplinary (28%), and the nationwide specialized repository (21%), are also frequently requested. However, the remaining options do not fall far behind: a decentralized institutional solution yielded 18% and national multidisciplinary solution. Eleven percent would not want to use any of these archives. Disciplinary differences are discernible, though not very clear.

Interest in support among the participants is high: Only 11% would use no services at all. Also, the wishes of researchers coincide with the available options, since only 1% did not find a preferred service. Those most in need of technical infrastructure for research data management are researchers (60%). Forty-nine percent need project-specific support in data management, for example in the creation of data management plans. More than one-third of participants reported a need for legal advice (42%), a general help desk (41%) and training opportunities (37%). Project collaborators, in particular, would rarely consult a helpdesk; university professors, by contrast, frequently.

It should be noted that there is relatively high interest in supportive services in this area. Primarily, the provision of qualified personnel for research data management is desired, followed by the desire for guidelines or policies for dealing with research data.

To meet the new tasks of their institutions, about half of the surveyed researchers, especially university professors, expect the provision of additional qualified staff (54%). Fifty-three percent are in favor of the publication of guidelines or policies for dealing with research data. Approximately one-fifth additionally see the need to anchor research data management as educational content in the curriculum (22%) and/or as a service obligation (17%), which university professors criticize. By contrast, another fifth consider no further action necessary (21%).

## XI. Recommendations

In an international context, it can be ascertained that research data has increasingly become a central topic of research policy and research funding. Of special mention are the requirements of the European Commission that call for open access for publications and research data in the Framework Programme for Research and Innovation Horizon 2020 (2014-2020).[16] Many renowned universities and research institutions have already adopted open-access policies;[17] recommendations for dealing with research data have been submitted by the League of European Research Universities.[18]

This development also has an impact on Austria, not only due to the European Commission and Horizon 2020, but also the FWF with their Application Guidelines[19] for research data, have made funding policy an essential criterium. All research institutions in Austria are increasingly faced with the challenges of effective data management. Accordingly, a shift in consciousness must take place among Austrian researchers that will enable a new approach for sustainable archiving and use of research data. The opportunities that arise from a new approach to research data should also be used for other research in Austria, in particular that which is enabled through public funding.

With regard to the Austria-wide survey on research data, the following measures should be initiated and implemented as soon as possible:

1. Creation of a comprehensive technological infrastructure in Austria, including any discipline-specific requirements
2. Adoption of institutional policies
3. Establishment of support services for researchers
4. Appointment of data professionals
5. Implementation of suitable incentive schemes
6. Promotion of international and interdisciplinary cooperation

**1. Creation of a comprehensive technological infrastructure in Austria, including any discipline-specific requirements**

The presence of suitable data archives and repositories is the basic requirement for a functioning research data management programme. New data archives and repositories must be implemented to integrate existing systems into newly created infrastructures. Institutional repositories are useful from the viewpoint of research managers, because the entire institutional research output can be deposited and made available to the outside world. They are also in great demand in disciplines dealing with sensitive data, such as medicine and the social sciences. The results of the survey determined the greatest preference among respondents, namely, international specialized data archives and repositories. When creating the required comprehensive infrastructure, the inclusion of already-established channels should be considered. For this reason, the development of an Austria-wide interdisciplinary and centralized system does not make sense and is not recommended. Rather,

16 Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020. Online at: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf (Access: 30.09.2015).

17 One example is worth mentioning in this context, namely the development in the UK whereby more than 30 universities have institutional data policies. Horton, Laurence and DCC (2014): Overview of UK Institution RDM Policies, Digital Curation Centre. Online at: http://www.dcc.ac.uk/resources/policy-and-legal/institutional-data-policies – More: http://www.dcc.ac.uk/resources/policy-and-legal/institutional-data-policies#sthash.1BTPU6oj.dpuf. Also at some German universities there are already pioneering policies for dealing with research data, such as at the Humboldt University of Berlin ("Grundsätze zum Umgang mit Forschungsdaten an der Humboldt-Universität zu Berlin" online at: https://www.cms.hu-berlin.de/de/ueberblick/projekte/dataman/policy), Bielefeld University ("Principles and Guidelines on handling research data at Bielefeld University" online at: https://data.uni-bielefeld.de/policy), Göttingen University ("Forschungsdaten-Leitlinie der Universität Göttingen" online at: http://www.uni-goettingen.de/de/01-juli-2014-forschungsdaten-leitlinie-der-universitaet-goettingen-einschl-umg/488918.html) and Heidelberg University ("Richtlinien für das Management von Forschungsdaten" online at: http://www.uni-heidelberg.de/universitaet/profil/researchdata/). Collectively, the recommendation of these guidelines is to make research data accessible to the public as soon as possible (status Sept. 30, 2015).

18 LERU Roadmap for Research Data. Online at: http://www.leru.org/files/publications/AP14_LERU_Roadmap_for_Research_data_final.pdf (Access Sept. 30, 2015).

19 Open Access Policy FWF-funded projects. Online at: https://www.fwf.ac.at/de/forschungsfoerderung/open-access-policy (Access Sept. 30, 2015)

the challenge is to cope with configuring the various existing or yet-to-be-implemented systems to take into account established standards as interoperably and persistently as possible.

To increase the acceptance of established research data infrastructure solutions and to meet the need for consideration of research data in intellectual capital and in evaluations, integration with existing publication servers and Research Information Systems (CRIS) and a central searchability of the entire offer should be pursued.

Even if usability was not directly addressed in the survey, special attention should of course be paid to this in the creation of infrastructures. The implemented solutions should be intuitive and time-saving for researchers to use. They should by no means have to enter their data several times into various systems, but only once in their preferred channel, from which the data can be easily harvested using established interfaces from other systems.

Sensitive data in institutional or collaborative solutions also require the highest safety standards. International repositories are also often located in another legal jurisdiction.

**2. Adoption of institutional policies**

Research Data Management can be anchored as an integral part of scientific work, as long as the relevant institutions follow clear guidelines in this regard. These specifications can be published either in the form of guidelines or mandates. Their purpose is to create the necessary conditions for all parties and to enable strategic concept development and resource planning.

According to these specifications, the following points should be dealt with in relation to Research Data Management:

- Clear definition of roles, skills and responsibilities of all stakeholders (researchers, research managers, research funders, libraries and IT service provider as a supplier of infrastructure and services, and legal staff) in research data management
- Basic selection of archival research data for short-, medium- or long-term archiving (What should be kept? Is everything worth archiving? For how long? Even data on which no publication is based on? Also, data of negative and non-meaningful results?)
- Desired location in order to ensure the fullest and most sustainable archiving of institutional research outputs and data in order to counteract an institutional data loss in case researchers change their institution
- Description of the data in accordance with predefined and internationally-proven standards to ensure the traceability of the data and interoperability of data archives, and thus to increase the attractiveness for data re-use
- Recommendation on the re-use of research data including a range of different licence models to facilitate the sharing of research data by researchers
- Commitment to offering various templates for data management plans in order to make research data management more efficient (different requirements depending on the institution or sponsor)
- Incentive systems to encourage researchers to use professional research data management.

The adoption of policies alone is of course not very productive if not actually implemented. International experience clearly shows that mandatory policies are more successful than those with a purely recommendatory character.

**3. Establishment of support services for researchers**

Research Data Management is associated with a considerable amount of time. The constant maintenance of data for publication and beyond is regarded by the researchers as an important part in the research process. In addition to providing the necessary infrastructure research data management can be made more efficient through the implementation of appropriate supportive services as follows:

Establishment of a superordinate national helpdesk for research data management as first-level support, from which refers specific queries to the respective experts.

Setup of supporting organizational units at each institution which are known to researchers as competent centers for research data management and are ideally staffed with IT service providers, library staff and with legally-trained personnel able to answer a full range of technical, non-technical and especially legal questions.[20] Of particular importance is any project-specific advice and assistance in the development and implementation of data management plans, assistance with funding applications and contact persons for metadata standards in the various disciplines via supporting services.

Implementation of an Austria-wide training program for researchers would represent an attractive offer to research data management within the various disciplinary requirements.

**4. Appointment of data professionals**

Both the implemented infrastructure and the associated support services can only be functional and relieve the researchers optimally if they are operated by personnel available in sufficient quality and quantity. Unfortunately, it is often common practice that after the completion of infrastructure projects, such as e-Infrastructures Austria, against better knowledge and or due to budgetary reasons, the necessary personnel resources are not made available.

As research data management is a highly complex matter that requires a most diverse range of qualifications, an urgent recommendation to all science policy makers can be made to employ the required number of experts. The corresponding job positions must be created and filled with experts in the fields of IT, librarianship (data librarians) and law. As research data management is a relatively new and growing field, suitably-trained staff exists only in small numbers. Therefore, it is important to simultaneously develop and implement the necessary education and training in Austria.[20]

20 This is also particularly important as experience has shown that hard sciences (often Big Data producer) tend to contact IT services, whereas soft sciences tend to contact libraries for support.

Developing a certain core competence for research data management in the researchers themselves presupposes the initiation of a dialogue between all stakeholders.

**5. Implementation of suitable incentive schemes**

As already mentioned, policies are a necessity, but also a sophisticated incentive system can contribute considerably to the success of institutional requirements. Since it is obvious that Austrian researchers consider visibility, recognition, impact and networking as the most attractive in this context, one must pay particular attention to these incentives in the implementation of infrastructures.

As concerns science policy, it will be important to expand existing evaluation criteria to the effect that research data is also considered an important research output in ICRs, evaluations, application procedures and project applications. This output must then also be consistently displayed and be made available for re-use in data archives, repositories and research information systems.

**6. Promotion of international and interdisciplinary cooperation**

In the specific implementation and development of these infrastructures, rapid international changes taking place in this area should also be taken into account. Therefore, the broadest possible participation by Austrian research institutions with international and interdisciplinary organizations and networks, such as re3data.org, DataCite, COAR, OpenAIRE, LIBER etc., is desirable. International cooperation could contribute to contentious issues in the context of research data, such as open access to work in a larger context and, where appropriate, to take advantage of relevant experience in Austria.

[20] This is also particularly important as experience has shown that hard sciences (often big producers of data) tend to contact IT services, whereas soft sciences tend to contact libraries for support.

**Further recommendations**

In addition to these six main recommendations, it should also be pointed out that for this Austrian survey, the widest possible participation was sought, with the aim of involving all disciplines. Of course, it was not possible to compile very detailed data on any one discipline. In some disciplines, therefore, it might be useful to conduct further surveys or interviews in order to better respond to specific needs.

Although the majority of research data produced in Austria right now is digital, there is still a minority of researchers that produce data in analog formats. Here it would be useful to offer digitization training and, where appropriate, to seek partnerships with institutional archives.

# Appendix

## A1. List of figures

## A2. List of Tables

## A3. Coded result tables for all questions

### Response and participants

Table 1: Participants and Answers per institution, n=3026

| Institution | Persons | Rate of return | Institution total |
|---|---|---|---|
| University of Vienna | 888 | 12.88 | 6892 |
| Vienna University of Technology | 352 | 10.75 | 3273 |
| University of Innsbruck | 257 | 8.26 | 3112 |
| Medical University of Vienna | 212 | 7.09 | 2992 |
| University of Graz | 240 | 8.71 | 2755 |
| Graz University of Technology | 152 | 6.90 | 2202 |
| University of Salzburg | 75 | 4.08 | 1840 |
| University of Natural Resources and Life Sciences Vienna | 7 | 0.38 | 1839 |
| University of Linz | 105 | 5.89 | 1782 |
| Vienna University of Economics and Business | 93 | 6.18 | 1506 |
| Medical University Graz | 17 | 1.40 | 1210 |
| University of Klagenfurt | 84 | 8.37 | 1004 |
| Medical University of Innsbruck | 70 | 7.58 | 923 |
| University of Music and Performing Arts Vienna | 38 | 4.41 | 862 |
| Montanuniversität Leoben | 35 | 4.08 | 857 |
| University of Veterinary Medicine Vienna | 94 | 13.76 | 683 |
| University of Applied Arts Vienna | 47 | 9.61 | 489 |
| University of Music and Performing Arts Graz | 15 | 3.25 | 461 |
| University of Arts and Design Linz | 18 | 4.76 | 378 |
| Academy of Fine Arts Vienna | 15 | 5.45 | 275 |
| Vienna Chamber of Labour | 21 | 24.70 | 85 |
| Institute of Science and Technology (IST Austria) | 33 | 12.22 | 270 |
| Austrian Academy of Sciences | 56 | 7.35 | 762 |
| Other | 102 | – | – |

Table 2: Participants per discipline, n=3026

| Diszipline | Persons absolute | Persons relative |
|---|---|---|
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 43 | 1.42 |
| Biology | 287 | 9.48 |
| Chemistry | 167 | 5.52 |
| Humanities | 685 | 22.64 |
| Geoscience (including Geography) | 118 | 3.90 |
| Electrical and System Engineering | 324 | 10.71 |
| Mathematics | 104 | 3.44 |
| Medicine | 220 | 7.27 |
| Not specified | 2 | 0.07 |
| Physics | 204 | 6.74 |
| Social and Behavioural Sciences | 491 | 16.23 |
| Other | 381 | 12.59 |

Table 3: Participants per Position, n=2902

| Position | Absolute | Relative |
|---|---|---|
| University Professor | 562 | 19.37 |
| Assistant Professor | 650 | 22.40 |
| Associate Professor | 364 | 12.54 |
| Project staff | 426 | 14.70 |
| Lecturer | 123 | 4.24 |
| Doctoral candidate | 610 | 21.02 |
| Student assistant | 44 | 1.52 |
| Other | 123 | 4.24 |

Table 4: Participants per gender, n=3026

| Gender | Absolute | Relative |
|---|---|---|
| Male | 1801 | 59.52 |
| Female | 1171 | 38.70 |
| Other | 54 | 1.79 |

Table 5: Participants per age interval, n=3026

| Age interval | Absolute | Relative |
|---|---|---|
| <30 years | 610 | 20.16 |
| 30-50 years | 1661 | 54.89 |
| >50 years | 755 | 24.95 |

Table 6: Which types of digital content do you create when generating research data? Answers per discipline, absolute, n=3026

| Discipline | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/ Film | Source code | Configuration data | Software applications | Other | Number of Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 2 | 0 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 7 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 43 | 6 | 38 | 11 | 40 | 2 | 14 | 3 | 1 | 7 | 0 | 43 | 165 |
| Biology | 274 | 65 | 256 | 87 | 276 | 23 | 102 | 45 | 17 | 54 | 31 | 287 | 1230 |
| Chemistry | 165 | 47 | 138 | 32 | 147 | 6 | 31 | 23 | 10 | 33 | 22 | 167 | 654 |
| Humanities | 674 | 218 | 280 | 243 | 489 | 222 | 199 | 45 | 14 | 48 | 25 | 685 | 2457 |
| Geoscience (including Geography) | 116 | 38 | 94 | 36 | 110 | 10 | 19 | 32 | 10 | 32 | 9 | 118 | 506 |
| Electrical and System Engineering | 315 | 154 | 250 | 82 | 290 | 37 | 117 | 184 | 76 | 149 | 38 | 324 | 1692 |
| Mathematics | 94 | 68 | 37 | 4 | 72 | 8 | 13 | 50 | 6 | 30 | 4 | 104 | 386 |
| Medicine | 211 | 55 | 192 | 79 | 194 | 22 | 72 | 27 | 7 | 38 | 12 | 220 | 909 |
| Physics | 194 | 109 | 129 | 25 | 193 | 13 | 49 | 113 | 37 | 60 | 25 | 204 | 947 |
| Other | 368 | 134 | 235 | 95 | 301 | 94 | 114 | 110 | 35 | 105 | 32 | 381 | 1623 |
| Social and Behavioural Sciences | 477 | 132 | 369 | 112 | 325 | 187 | 120 | 49 | 14 | 64 | 14 | 491 | 1863 |
| **Sum of answers** | **2933** | **1026** | **2019** | **808** | **2437** | **625** | **851** | **681** | **227** | **620** | **212** | **3026** | **12439** |

Table 7: Which types of digital content do you create when generating research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/Film | Source code | Configuration data | Software applications | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 1.00 | 0.00 | 0.50 | 1.00 | 0.00 | 0.50 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 1.00 | 0.14 | 0.88 | 0.26 | 0.93 | 0.05 | 0.33 | 0.07 | 0.02 | 0.16 | 0.00 |
| Biology | 0.95 | 0.23 | 0.89 | 0.30 | 0.96 | 0.08 | 0.36 | 0.16 | 0.06 | 0.19 | 0.11 |
| Chemistry | 0.99 | 0.28 | 0.83 | 0.19 | 0.88 | 0.04 | 0.19 | 0.14 | 0.06 | 0.20 | 0.13 |
| Humanities | 0.98 | 0.32 | 0.41 | 0.35 | 0.71 | 0.32 | 0.29 | 0.07 | 0.02 | 0.07 | 0.04 |
| Geoscience (including Geography) | 0.98 | 0.32 | 0.80 | 0.31 | 0.93 | 0.08 | 0.16 | 0.27 | 0.08 | 0.27 | 0.08 |
| Electrical and System Engineering | 0.97 | 0.48 | 0.77 | 0.25 | 0.90 | 0.11 | 0.36 | 0.57 | 0.23 | 0.46 | 0.12 |
| Mathematics | 0.90 | 0.65 | 0.36 | 0.04 | 0.69 | 0.08 | 0.13 | 0.48 | 0.06 | 0.29 | 0.04 |
| Medicine | 0.96 | 0.25 | 0.87 | 0.36 | 0.88 | 0.10 | 0.33 | 0.12 | 0.03 | 0.17 | 0.05 |
| Physics | 0.95 | 0.53 | 0.63 | 0.12 | 0.95 | 0.06 | 0.24 | 0.55 | 0.18 | 0.29 | 0.12 |
| Other | 0.97 | 0.35 | 0.62 | 0.25 | 0.79 | 0.25 | 0.30 | 0.29 | 0.09 | 0.28 | 0.08 |
| Social and Behavioural Sciences | 0.97 | 0.27 | 0.75 | 0.23 | 0.66 | 0.38 | 0.24 | 0.10 | 0.03 | 0.13 | 0.03 |
| **Sum of answers** | 0.97 | 0.34 | 0.67 | 0.27 | 0.81 | 0.21 | 0.28 | 0.23 | 0.08 | 0.20 | 0.07 |

Table 8: Which types of digital content do you create when generating research data? Answers per option, relative distribution per discipline, n=12439

| Discipline | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/Film | Source code | Configuration data | Software applications | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0.29 | 0.00 | 0.14 | 0.29 | 0.00 | 0.14 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.26 | 0.04 | 0.23 | 0.07 | 0.24 | 0.01 | 0.08 | 0.02 | 0.01 | 0.04 | 0.00 |
| Biology | 0.22 | 0.05 | 0.21 | 0.07 | 0.22 | 0.02 | 0.08 | 0.04 | 0.01 | 0.04 | 0.03 |
| Chemistry | 0.25 | 0.07 | 0.21 | 0.05 | 0.22 | 0.01 | 0.05 | 0.04 | 0.02 | 0.05 | 0.03 |
| Humanities | 0.27 | 0.09 | 0.11 | 0.10 | 0.20 | 0.09 | 0.08 | 0.02 | 0.01 | 0.02 | 0.01 |
| Geoscience (including Geography) | 0.23 | 0.08 | 0.19 | 0.07 | 0.22 | 0.02 | 0.04 | 0.06 | 0.02 | 0.06 | 0.02 |
| Electrical and System Engineering | 0.19 | 0.09 | 0.15 | 0.05 | 0.17 | 0.02 | 0.07 | 0.11 | 0.04 | 0.09 | 0.02 |
| Mathematics | 0.24 | 0.18 | 0.10 | 0.01 | 0.19 | 0.02 | 0.03 | 0.13 | 0.02 | 0.08 | 0.01 |
| Medicine | 0.23 | 0.06 | 0.21 | 0.09 | 0.21 | 0.02 | 0.08 | 0.03 | 0.01 | 0.04 | 0.01 |
| Physics | 0.20 | 0.12 | 0.14 | 0.03 | 0.20 | 0.01 | 0.05 | 0.12 | 0.04 | 0.06 | 0.03 |
| Other | 0.23 | 0.08 | 0.14 | 0.06 | 0.19 | 0.06 | 0.07 | 0.07 | 0.02 | 0.06 | 0.02 |
| Social and Behavioural Sciences | 0.26 | 0.07 | 0.20 | 0.06 | 0.17 | 0.10 | 0.06 | 0.03 | 0.01 | 0.03 | 0.01 |
| **Sum of answers** | 0.24 | 0.08 | 0.16 | 0.06 | 0.20 | 0.05 | 0.07 | 0.05 | 0.02 | 0.05 | 0.02 |

Table 9: Which types of digital content do you create when generating research data? Answers per institution, absolute, n=3026

| Institution | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/ Film | Source code | Configuration data | Software applications | Other | Number of Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 14 | 4 | 11 | 3 | 14 | 9 | 7 | 1 | 0 | 0 | 2 | 15 | 65 |
| Vienna Chamber of Labour | 21 | 5 | 14 | 2 | 12 | 3 | 4 | 2 | 0 | 1 | 0 | 21 | 64 |
| Institute of Science and Technology (IST Austria) | 31 | 11 | 19 | 1 | 27 | 0 | 11 | 15 | 2 | 9 | 3 | 33 | 129 |
| Medical University Graz | 15 | 3 | 12 | 5 | 12 | 3 | 5 | 4 | 2 | 3 | 2 | 17 | 66 |
| Medical University of Innsbruck | 70 | 21 | 58 | 23 | 67 | 5 | 27 | 13 | 8 | 20 | 4 | 70 | 316 |
| Medical University of Vienna | 201 | 47 | 191 | 75 | 191 | 19 | 66 | 32 | 6 | 39 | 10 | 212 | 877 |
| Montanuniversität Leoben | 34 | 14 | 31 | 8 | 32 | 3 | 17 | 13 | 2 | 9 | 2 | 35 | 165 |
| Other | 98 | 30 | 71 | 35 | 75 | 26 | 26 | 16 | 3 | 17 | 6 | 102 | 403 |
| Graz University of Technology | 150 | 58 | 114 | 28 | 140 | 8 | 50 | 69 | 24 | 60 | 19 | 152 | 720 |
| Vienna University of Technology | 342 | 149 | 254 | 85 | 303 | 27 | 74 | 152 | 57 | 114 | 34 | 352 | 1591 |
| University of Graz | 234 | 77 | 154 | 61 | 185 | 60 | 55 | 35 | 8 | 37 | 20 | 240 | 926 |
| University of Innsbruck | 249 | 98 | 163 | 81 | 205 | 51 | 72 | 61 | 30 | 53 | 17 | 257 | 1080 |
| University of Klagenfurt | 80 | 32 | 53 | 24 | 66 | 41 | 28 | 18 | 5 | 19 | 4 | 84 | 370 |
| University of Linz | 102 | 37 | 67 | 12 | 86 | 20 | 26 | 37 | 13 | 32 | 10 | 105 | 442 |
| University of Salzburg | 74 | 23 | 53 | 26 | 55 | 16 | 14 | 10 | 7 | 11 | 5 | 75 | 294 |
| University of Vienna | 861 | 311 | 509 | 247 | 675 | 220 | 232 | 143 | 44 | 131 | 49 | 888 | 3422 |
| University of Natural Res. and Life Sciences Vienna | 7 | 1 | 4 | 2 | 5 | 0 | 1 | 1 | 0 | 1 | 2 | 7 | 24 |
| University of Music and Performing Arts Graz | 15 | 3 | 5 | 3 | 13 | 14 | 9 | 3 | 2 | 6 | 1 | 15 | 74 |
| University of Music and Performing Arts Vienna | 37 | 14 | 13 | 11 | 29 | 27 | 24 | 6 | 2 | 6 | 4 | 38 | 173 |
| University of Applied Arts Vienna | 46 | 10 | 16 | 9 | 40 | 20 | 26 | 5 | 2 | 5 | 3 | 47 | 182 |
| University of Arts and Design Linz | 18 | 4 | 6 | 1 | 17 | 10 | 11 | 6 | 1 | 6 | 4 | 18 | 84 |
| University of Veterinary Medicine Vienna | 93 | 18 | 85 | 19 | 86 | 5 | 33 | 8 | 2 | 13 | 2 | 94 | 364 |
| Vienna University of Economics and Business | 87 | 30 | 82 | 27 | 56 | 23 | 14 | 17 | 3 | 17 | 7 | 93 | 363 |
| Austrian Academy of Sciences | 54 | 26 | 34 | 20 | 46 | 15 | 19 | 14 | 4 | 11 | 2 | 56 | 245 |
| **Sum of answers** | 2933 | 1026 | 2019 | 808 | 2437 | 625 | 851 | 681 | 227 | 620 | 212 | 3026 | 12439 |

Table 10: Which types of digital content do you create when generating research data? Answers per person, relative distribution per institution, n=3026

| Institution | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/Film | Source code | Configuration data | Software applications | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.93 | 0.27 | 0.73 | 0.20 | 0.93 | 0.60 | 0.47 | 0.07 | 0.00 | 0.00 | 0.13 |
| Vienna Chamber of Labour | 1.00 | 0.24 | 0.67 | 0.10 | 0.57 | 0.14 | 0.19 | 0.10 | 0.00 | 0.05 | 0.00 |
| Inst. of Science and Techn. (IST Austria) | 0.94 | 0.33 | 0.58 | 0.03 | 0.82 | 0.00 | 0.33 | 0.45 | 0.06 | 0.27 | 0.09 |
| Medical University Graz | 0.88 | 0.18 | 0.71 | 0.29 | 0.71 | 0.18 | 0.29 | 0.24 | 0.12 | 0.18 | 0.12 |
| Medical University of Innsbruck | 1.00 | 0.30 | 0.83 | 0.33 | 0.96 | 0.07 | 0.39 | 0.19 | 0.11 | 0.29 | 0.06 |
| Medical University of Vienna | 0.95 | 0.22 | 0.90 | 0.35 | 0.90 | 0.09 | 0.31 | 0.15 | 0.03 | 0.18 | 0.05 |
| Montanuniversität Leoben | 0.97 | 0.40 | 0.89 | 0.23 | 0.91 | 0.09 | 0.49 | 0.37 | 0.06 | 0.26 | 0.06 |
| Other | 0.96 | 0.29 | 0.70 | 0.34 | 0.74 | 0.25 | 0.25 | 0.16 | 0.03 | 0.17 | 0.06 |
| Graz University of Technology | 0.99 | 0.38 | 0.75 | 0.18 | 0.92 | 0.05 | 0.33 | 0.45 | 0.16 | 0.39 | 0.13 |
| Vienna University of Technology | 0.97 | 0.42 | 0.72 | 0.24 | 0.86 | 0.08 | 0.21 | 0.43 | 0.16 | 0.32 | 0.10 |
| University of Graz | 0.98 | 0.32 | 0.64 | 0.25 | 0.77 | 0.25 | 0.23 | 0.15 | 0.03 | 0.15 | 0.08 |
| University of Innsbruck | 0.97 | 0.38 | 0.63 | 0.32 | 0.80 | 0.20 | 0.28 | 0.24 | 0.12 | 0.21 | 0.07 |
| University of Klagenfurt | 0.95 | 0.38 | 0.63 | 0.29 | 0.79 | 0.49 | 0.33 | 0.21 | 0.06 | 0.23 | 0.05 |
| University of Linz | 0.97 | 0.35 | 0.64 | 0.11 | 0.82 | 0.19 | 0.25 | 0.35 | 0.12 | 0.30 | 0.10 |
| University of Salzburg | 0.99 | 0.31 | 0.71 | 0.35 | 0.73 | 0.21 | 0.19 | 0.13 | 0.09 | 0.15 | 0.07 |
| University of Vienna | 0.97 | 0.35 | 0.57 | 0.28 | 0.76 | 0.25 | 0.26 | 0.16 | 0.05 | 0.15 | 0.06 |
| Univ.of Natural Resour. and Life Sciences Vienna | 1.00 | 0.14 | 0.57 | 0.29 | 0.71 | 0.00 | 0.14 | 0.14 | 0.00 | 0.14 | 0.29 |
| Univ. of Music and Performing Arts Graz | 1.00 | 0.20 | 0.33 | 0.20 | 0.87 | 0.93 | 0.60 | 0.20 | 0.13 | 0.40 | 0.07 |
| Univ. of Music and Perf. Arts Vienna | 0.97 | 0.37 | 0.34 | 0.29 | 0.76 | 0.71 | 0.63 | 0.16 | 0.05 | 0.16 | 0.11 |
| University of Applied Arts Vienna | 0.98 | 0.21 | 0.34 | 0.19 | 0.85 | 0.43 | 0.55 | 0.11 | 0.04 | 0.11 | 0.06 |
| University of Arts and Design Linz | 1.00 | 0.22 | 0.33 | 0.06 | 0.94 | 0.56 | 0.61 | 0.33 | 0.06 | 0.33 | 0.22 |
| Univ. of Veterinary Medicine Vienna | 0.99 | 0.19 | 0.90 | 0.20 | 0.91 | 0.05 | 0.35 | 0.09 | 0.02 | 0.14 | 0.02 |
| Vienna Univ. of Economics and Business | 0.94 | 0.32 | 0.88 | 0.29 | 0.60 | 0.25 | 0.15 | 0.18 | 0.03 | 0.18 | 0.08 |
| Austrian Academy of Sciences | 0.96 | 0.46 | 0.61 | 0.36 | 0.82 | 0.27 | 0.34 | 0.25 | 0.07 | 0.20 | 0.04 |
| **Sum of answers** | 0.97 | 0.34 | 0.67 | 0.27 | 0.81 | 0.21 | 0.28 | 0.23 | 0.08 | 0.20 | 0.07 |

Table 11: Which types of digital content do you create when generating research data? Answers per option, relative distribution per institution, n=12439

| Institution | Text documents | Structured text | Spreadsheets | Databases | Graphics/ Images | Audio | Video/Film | Source code | Configuration data | Software applications | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.22 | 0.06 | 0.17 | 0.05 | 0.22 | 0.14 | 0.11 | 0.02 | 0.00 | 0.00 | 0.03 |
| Vienna Chamber of Labour | 0.33 | 0.08 | 0.22 | 0.03 | 0.19 | 0.05 | 0.06 | 0.03 | 0.00 | 0.02 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.24 | 0.09 | 0.15 | 0.01 | 0.21 | 0.00 | 0.09 | 0.12 | 0.02 | 0.07 | 0.02 |
| Medical University Graz | 0.23 | 0.05 | 0.18 | 0.08 | 0.18 | 0.05 | 0.08 | 0.06 | 0.03 | 0.05 | 0.03 |
| Medical University of Innsbruck | 0.22 | 0.07 | 0.18 | 0.07 | 0.21 | 0.02 | 0.09 | 0.04 | 0.03 | 0.06 | 0.01 |
| Medical University of Vienna | 0.23 | 0.05 | 0.22 | 0.09 | 0.22 | 0.02 | 0.08 | 0.04 | 0.01 | 0.04 | 0.01 |
| Montanuniversität Leoben | 0.21 | 0.08 | 0.19 | 0.05 | 0.19 | 0.02 | 0.10 | 0.08 | 0.01 | 0.05 | 0.01 |
| Other | 0.24 | 0.07 | 0.18 | 0.09 | 0.19 | 0.06 | 0.06 | 0.04 | 0.01 | 0.04 | 0.01 |
| Graz University of Technology | 0.21 | 0.08 | 0.16 | 0.04 | 0.19 | 0.01 | 0.07 | 0.10 | 0.03 | 0.08 | 0.03 |
| Vienna University of Technology | 0.21 | 0.09 | 0.16 | 0.05 | 0.19 | 0.02 | 0.05 | 0.10 | 0.04 | 0.07 | 0.02 |
| University of Graz | 0.25 | 0.08 | 0.17 | 0.07 | 0.20 | 0.06 | 0.06 | 0.04 | 0.01 | 0.04 | 0.02 |
| University of Innsbruck | 0.23 | 0.09 | 0.15 | 0.08 | 0.19 | 0.05 | 0.07 | 0.06 | 0.03 | 0.05 | 0.02 |
| University of Klagenfurt | 0.22 | 0.09 | 0.14 | 0.06 | 0.18 | 0.11 | 0.08 | 0.05 | 0.01 | 0.05 | 0.01 |
| University of Linz | 0.23 | 0.08 | 0.15 | 0.03 | 0.19 | 0.05 | 0.06 | 0.08 | 0.03 | 0.07 | 0.02 |
| University of Salzburg | 0.25 | 0.08 | 0.18 | 0.09 | 0.19 | 0.05 | 0.05 | 0.03 | 0.02 | 0.04 | 0.02 |
| University of Vienna | 0.25 | 0.09 | 0.15 | 0.07 | 0.20 | 0.06 | 0.07 | 0.04 | 0.01 | 0.04 | 0.01 |
| Univ. of Natural Resources and Life Sciences Vienna | 0.29 | 0.04 | 0.17 | 0.08 | 0.21 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.08 |
| University of Music and Performing Arts Graz | 0.20 | 0.04 | 0.07 | 0.04 | 0.18 | 0.19 | 0.12 | 0.04 | 0.03 | 0.08 | 0.01 |
| University of Music and Performing Arts Vienna | 0.21 | 0.08 | 0.08 | 0.06 | 0.17 | 0.16 | 0.14 | 0.03 | 0.01 | 0.03 | 0.02 |
| University of Applied Arts Vienna | 0.25 | 0.05 | 0.09 | 0.05 | 0.22 | 0.11 | 0.14 | 0.03 | 0.01 | 0.03 | 0.02 |
| University of Arts and Design Linz | 0.21 | 0.05 | 0.07 | 0.01 | 0.20 | 0.12 | 0.13 | 0.07 | 0.01 | 0.07 | 0.05 |
| University of Veterinary Medicine Vienna | 0.26 | 0.05 | 0.23 | 0.05 | 0.24 | 0.01 | 0.09 | 0.02 | 0.01 | 0.04 | 0.01 |
| Vienna University of Economics and Business | 0.24 | 0.08 | 0.23 | 0.07 | 0.15 | 0.06 | 0.04 | 0.05 | 0.01 | 0.05 | 0.02 |
| Austrian Academy of Sciences | 0.22 | 0.11 | 0.14 | 0.08 | 0.19 | 0.06 | 0.08 | 0.06 | 0.02 | 0.04 | 0.01 |
| **Sum of answers** | 0.24 | 0.08 | 0.16 | 0.06 | 0.20 | 0.05 | 0.07 | 0.05 | 0.02 | 0.05 | 0.02 |

Table 12: What percentage of your research data volume do you generate (estimated) in a digital format? Answers per institution, absolute, n=3026

| Institution | <50% | 50–75% | >75% | I am not sure | Persons | Sum of answers |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 1 | 5 | 9 | 0 | 15 | 15 |
| Vienna Chamber of Labour | 1 | 3 | 16 | 1 | 21 | 21 |
| Institute of Science and Technology (IST Austria) | 1 | 4 | 26 | 2 | 33 | 33 |
| Medical University Graz | 1 | 6 | 10 | 0 | 17 | 17 |
| Medical University of Innsbruck | 2 | 14 | 54 | 0 | 70 | 70 |
| Medical University of Vienna | 11 | 48 | 146 | 7 | 212 | 212 |
| Montanuniversität Leoben | 1 | 7 | 26 | 1 | 35 | 35 |
| Other | 11 | 20 | 64 | 7 | 102 | 102 |
| Graz University of Technology | 1 | 26 | 119 | 6 | 152 | 152 |
| Vienna University of Technology | 11 | 49 | 288 | 4 | 352 | 352 |
| University of Graz | 6 | 31 | 190 | 13 | 240 | 240 |
| University of Innsbruck | 11 | 49 | 191 | 6 | 257 | 257 |
| University of Klagenfurt | 6 | 15 | 59 | 4 | 84 | 84 |
| University of Linz | 3 | 20 | 78 | 4 | 105 | 105 |
| University of Salzburg | 1 | 17 | 55 | 2 | 75 | 75 |
| University of Vienna | 70 | 169 | 616 | 33 | 888 | 888 |
| University of Natural Resources and Life Sciences Vienna | 1 | 3 | 2 | 1 | 7 | 7 |
| University of Music and Performing Arts Graz | 3 | 1 | 9 | 2 | 15 | 15 |
| University of Music and Performing Arts Vienna | 3 | 9 | 24 | 2 | 38 | 38 |
| University of Applied Arts Vienna | 9 | 11 | 23 | 4 | 47 | 47 |
| University of Arts and Design Linz | 1 | 4 | 12 | 1 | 18 | 18 |
| University of Veterinary Medicine Vienna | 6 | 20 | 67 | 1 | 94 | 94 |
| Vienna University of Economics and Business | 6 | 6 | 78 | 3 | 93 | 93 |
| Austrian Academy of Sciences | 2 | 8 | 45 | 1 | 56 | 56 |
| **Sum of answers** | 169 | 545 | 2207 | 105 | 3026 | 3026 |

Table 13: What percentage of your research data volume do you generate (estimated) in a digital format? Answers per person, relative distribution per institution, n=3026

| Institution | <50% | 50-75% | >75% | I am not sure |
|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.07 | 0.33 | 0.60 | 0.00 |
| Vienna Chamber of Labour | 0.05 | 0.14 | 0.76 | 0.05 |
| Institute of Science and Technology (IST Austria) | 0.03 | 0.12 | 0.79 | 0.06 |
| Medical University Graz | 0.06 | 0.35 | 0.59 | 0.00 |
| Medical University of Innsbruck | 0.03 | 0.20 | 0.77 | 0.00 |
| Medical University of Vienna | 0.05 | 0.23 | 0.69 | 0.03 |
| Montanuniversität Leoben | 0.03 | 0.20 | 0.74 | 0.03 |
| Other | 0.11 | 0.20 | 0.63 | 0.07 |
| Graz University of Technology | 0.01 | 0.17 | 0.78 | 0.04 |
| Vienna University of Technology | 0.03 | 0.14 | 0.82 | 0.01 |
| University of Graz | 0.03 | 0.13 | 0.79 | 0.05 |
| University of Innsbruck | 0.04 | 0.19 | 0.74 | 0.02 |
| University of Klagenfurt | 0.07 | 0.18 | 0.70 | 0.05 |
| University of Linz | 0.03 | 0.19 | 0.74 | 0.04 |
| University of Salzburg | 0.01 | 0.23 | 0.73 | 0.03 |
| University of Vienna | 0.08 | 0.19 | 0.69 | 0.04 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.43 | 0.29 | 0.14 |
| University of Music and Performing Arts Graz | 0.20 | 0.07 | 0.60 | 0.13 |
| University of Music and Performing Arts Vienna | 0.08 | 0.24 | 0.63 | 0.05 |
| University of Applied Arts Vienna | 0.19 | 0.23 | 0.49 | 0.09 |
| University of Arts and Design Linz | 0.06 | 0.22 | 0.67 | 0.06 |
| University of Veterinary Medicine Vienna | 0.06 | 0.21 | 0.71 | 0.01 |
| Vienna University of Economics and Business | 0.06 | 0.06 | 0.84 | 0.03 |
| Austrian Academy of Sciences | 0.04 | 0.14 | 0.80 | 0.02 |
| **Sum of answers** | 0.06 | 0.18 | 0.73 | 0.03 |

No multiple choice answers possible.

Table 14: Where do you usually store your research data? Answers per discipline, absolute, n=3026

| Discipline | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/DVD's | On magnetic tapes | Directly on the machine or instrument | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 5 |
| Agriculture, Forestry, Hortic. and Veterinary Medicine | 2 | 5 | 18 | 24 | 34 | 17 | 29 | 6 | 0 | 9 | 0 | 43 | 144 |
| Biology | 15 | 38 | 107 | 138 | 238 | 111 | 207 | 37 | 3 | 72 | 5 | 287 | 971 |
| Chemistry | 6 | 30 | 46 | 69 | 139 | 80 | 105 | 21 | 1 | 72 | 3 | 167 | 572 |
| Humanities | 41 | 169 | 202 | 113 | 375 | 529 | 537 | 100 | 7 | 81 | 22 | 685 | 2176 |
| Geoscience (including Geography) | 5 | 15 | 42 | 50 | 95 | 50 | 77 | 9 | 5 | 25 | 2 | 118 | 375 |
| Electrical and System Engineering | 9 | 60 | 98 | 248 | 278 | 99 | 164 | 24 | 11 | 46 | 3 | 324 | 1040 |
| Mathematics | 4 | 32 | 23 | 51 | 79 | 49 | 46 | 1 | 1 | 1 | 2 | 104 | 289 |
| Medicine | 11 | 33 | 77 | 79 | 162 | 112 | 149 | 28 | 3 | 50 | 3 | 220 | 707 |
| Physics | 14 | 43 | 60 | 105 | 176 | 101 | 124 | 27 | 2 | 52 | 5 | 204 | 709 |
| Other | 27 | 93 | 120 | 145 | 257 | 209 | 223 | 40 | 5 | 52 | 7 | 381 | 1178 |
| Social and Behavioural Sciences | 22 | 130 | 194 | 155 | 306 | 266 | 284 | 45 | 3 | 53 | 2 | 491 | 1460 |
| **Sum of answers** | 156 | 648 | 988 | 1179 | 2140 | 1623 | 1945 | 338 | 41 | 513 | 55 | 3026 | 9626 |

Table 15: Where do you usually store your research data? Answers per person, relative distribution per discipline, n=3026

| Fachdisziplin | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/DVD's | On magnetic tapes | Directly on the machine or instrument | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 1.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.05 | 0.12 | 0.42 | 0.56 | 0.79 | 0.40 | 0.67 | 0.14 | 0.00 | 0.21 | 0.00 |
| Biology | 0.05 | 0.13 | 0.37 | 0.48 | 0.83 | 0.39 | 0.72 | 0.13 | 0.01 | 0.25 | 0.02 |
| Chemistry | 0.04 | 0.18 | 0.28 | 0.41 | 0.83 | 0.48 | 0.63 | 0.13 | 0.01 | 0.43 | 0.02 |
| Humanities | 0.06 | 0.25 | 0.29 | 0.16 | 0.55 | 0.77 | 0.78 | 0.15 | 0.01 | 0.12 | 0.03 |
| Geoscience (including Geography) | 0.04 | 0.13 | 0.36 | 0.42 | 0.81 | 0.42 | 0.65 | 0.08 | 0.04 | 0.21 | 0.02 |
| Electrical and System Engineering | 0.03 | 0.19 | 0.30 | 0.77 | 0.86 | 0.31 | 0.51 | 0.07 | 0.03 | 0.14 | 0.01 |
| Mathematics | 0.04 | 0.31 | 0.22 | 0.49 | 0.76 | 0.47 | 0.44 | 0.01 | 0.01 | 0.01 | 0.02 |
| Medicine | 0.05 | 0.15 | 0.35 | 0.36 | 0.74 | 0.51 | 0.68 | 0.13 | 0.01 | 0.23 | 0.01 |
| Physics | 0.07 | 0.21 | 0.29 | 0.51 | 0.86 | 0.50 | 0.61 | 0.13 | 0.01 | 0.25 | 0.02 |
| Other | 0.07 | 0.24 | 0.31 | 0.38 | 0.67 | 0.55 | 0.59 | 0.10 | 0.01 | 0.14 | 0.02 |
| Social and Behavioural Sciences | 0.04 | 0.26 | 0.40 | 0.32 | 0.62 | 0.54 | 0.58 | 0.09 | 0.01 | 0.11 | 0.00 |
| **Sum of answers** | 0.05 | 0.21 | 0.33 | 0.39 | 0.71 | 0.54 | 0.64 | 0.11 | 0.01 | 0.17 | 0.02 |

Table 16: Where do you usually store your research data? Answers per option, relative distribution per discipline, n=9626

| Discipline | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/ DVD's | On magnetic tapes | Directly on the machine or instrument | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.20 | 0.40 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.01 | 0.03 | 0.13 | 0.17 | 0.24 | 0.12 | 0.20 | 0.04 | 0.00 | 0.06 | 0.00 |
| Biology | 0.02 | 0.04 | 0.11 | 0.14 | 0.25 | 0.11 | 0.21 | 0.04 | 0.00 | 0.07 | 0.01 |
| Chemistry | 0.01 | 0.05 | 0.08 | 0.12 | 0.24 | 0.14 | 0.18 | 0.04 | 0.00 | 0.13 | 0.01 |
| Humanities | 0.02 | 0.08 | 0.09 | 0.05 | 0.17 | 0.24 | 0.25 | 0.05 | 0.00 | 0.04 | 0.01 |
| Geoscience (incl. Geography) | 0.01 | 0.04 | 0.11 | 0.13 | 0.25 | 0.13 | 0.21 | 0.02 | 0.01 | 0.07 | 0.01 |
| Electrical and System Engineering | 0.01 | 0.06 | 0.09 | 0.24 | 0.27 | 0.10 | 0.16 | 0.02 | 0.01 | 0.04 | 0.00 |
| Mathematics | 0.01 | 0.11 | 0.08 | 0.18 | 0.27 | 0.17 | 0.16 | 0.00 | 0.00 | 0.00 | 0.01 |
| Medicine | 0.02 | 0.05 | 0.11 | 0.11 | 0.23 | 0.16 | 0.21 | 0.04 | 0.00 | 0.07 | 0.00 |
| Physics | 0.02 | 0.06 | 0.08 | 0.15 | 0.25 | 0.14 | 0.17 | 0.04 | 0.00 | 0.07 | 0.01 |
| Other | 0.02 | 0.08 | 0.10 | 0.12 | 0.22 | 0.18 | 0.19 | 0.03 | 0.00 | 0.04 | 0.01 |
| Social and Behavioural Sciences | 0.02 | 0.09 | 0.13 | 0.11 | 0.21 | 0.18 | 0.19 | 0.03 | 0.00 | 0.04 | 0.00 |
| **Sum of answers** | 0.02 | 0.07 | 0.10 | 0.12 | 0.22 | 0.17 | 0.20 | 0.04 | 0.00 | 0.05 | 0.01 |

Table 17: Where do you usually store your research data? Answers per discipline, absolute, n=3026

| Institution | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/ DVD's | On magnetic tapes | Directly on the machine or instrument | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0 | 3 | 5 | 3 | 10 | 9 | 9 | 2 | 1 | 3 | 0 | 15 | 45 |
| Vienna Chamber of Labour | 1 | 1 | 2 | 8 | 15 | 10 | 9 | 1 | 0 | 2 | 0 | 21 | 49 |
| Inst. of Science a. Techn. (IST Austria) | 2 | 9 | 6 | 21 | 28 | 12 | 17 | 2 | 1 | 4 | 0 | 33 | 102 |
| Medical University Graz | 0 | 3 | 8 | 9 | 9 | 5 | 10 | 1 | 0 | 3 | 1 | 17 | 49 |
| Medical University of Innsbruck | 3 | 6 | 33 | 27 | 63 | 24 | 53 | 12 | 2 | 16 | 1 | 70 | 240 |
| Medical University of Vienna | 9 | 38 | 59 | 87 | 161 | 102 | 139 | 26 | 2 | 45 | 0 | 212 | 668 |
| Montanuniversität Leoben | 0 | 2 | 3 | 26 | 33 | 11 | 25 | 1 | 2 | 13 | 0 | 35 | 116 |
| Other | 10 | 28 | 15 | 31 | 43 | 67 | 64 | 12 | 1 | 16 | 5 | 102 | 292 |
| Graz University of Technology | 4 | 30 | 53 | 95 | 126 | 47 | 79 | 18 | 1 | 29 | 0 | 152 | 482 |
| Vienna University of Technology | 19 | 76 | 73 | 234 | 292 | 160 | 176 | 20 | 10 | 74 | 6 | 352 | 1140 |
| University of Graz | 9 | 59 | 82 | 83 | 185 | 145 | 175 | 41 | 2 | 37 | 6 | 240 | 824 |
| University of Innsbruck | 12 | 51 | 119 | 87 | 210 | 123 | 157 | 27 | 9 | 38 | 3 | 257 | 836 |
| University of Klagenfurt | 2 | 28 | 39 | 25 | 51 | 53 | 60 | 8 | 1 | 14 | 0 | 84 | 281 |
| University of Linz | 5 | 17 | 45 | 55 | 86 | 41 | 70 | 20 | 0 | 24 | 0 | 105 | 363 |
| University of Salzburg | 3 | 15 | 31 | 18 | 59 | 39 | 54 | 8 | 0 | 11 | 0 | 75 | 238 |
| University of Vienna | 60 | 204 | 272 | 231 | 524 | 601 | 622 | 102 | 4 | 133 | 27 | 888 | 2780 |
| University of Natural Resources and Life Sciences Vienna | 0 | 0 | 2 | 4 | 5 | 3 | 5 | 1 | 1 | 4 | 0 | 7 | 25 |
| Univ. of Music and Performing Arts Graz | 0 | 5 | 6 | 4 | 10 | 13 | 9 | 3 | 0 | 1 | 0 | 15 | 51 |
| Univ. of Music and Perf. Arts Vienna | 3 | 12 | 16 | 4 | 16 | 24 | 23 | 6 | 0 | 5 | 2 | 38 | 111 |
| University of Applied Arts Vienna | 2 | 9 | 13 | 4 | 24 | 32 | 34 | 9 | 1 | 7 | 2 | 47 | 137 |
| University of Arts and Design Linz | 0 | 5 | 8 | 4 | 13 | 9 | 12 | 2 | 0 | 1 | 0 | 18 | 54 |
| University of Veterinary Medicine Vienna | 3 | 13 | 35 | 52 | 75 | 35 | 64 | 7 | 0 | 24 | 0 | 94 | 308 |
| Vienna Univ. of Economics and Business | 5 | 24 | 53 | 31 | 61 | 36 | 47 | 5 | 2 | 5 | 1 | 93 | 270 |
| Austrian Academy of Sciences | 4 | 10 | 10 | 36 | 41 | 22 | 32 | 4 | 1 | 4 | 1 | 56 | 165 |
| **Sum of answers** | 156 | 648 | 988 | 1179 | 2140 | 1623 | 1945 | 338 | 41 | 513 | 55 | 3026 | 9626 |

Table 18: Where do you usually store your research data? Answers per person, relative distribution per institution, n=3026

| Institution | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/DVD's | On magnetic tapes | Directly on the machine or instrument | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.00 | 0.20 | 0.33 | 0.20 | 0.67 | 0.60 | 0.60 | 0.13 | 0.07 | 0.20 | 0.00 |
| Vienna Chamber of Labour | 0.05 | 0.05 | 0.10 | 0.38 | 0.71 | 0.48 | 0.43 | 0.05 | 0.00 | 0.10 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.06 | 0.27 | 0.18 | 0.64 | 0.85 | 0.36 | 0.52 | 0.06 | 0.03 | 0.12 | 0.00 |
| Medical University Graz | 0.00 | 0.18 | 0.47 | 0.53 | 0.53 | 0.29 | 0.59 | 0.06 | 0.00 | 0.18 | 0.06 |
| Medical University of Innsbruck | 0.04 | 0.09 | 0.47 | 0.39 | 0.90 | 0.34 | 0.76 | 0.17 | 0.03 | 0.23 | 0.01 |
| Medical University of Vienna | 0.04 | 0.18 | 0.28 | 0.41 | 0.76 | 0.48 | 0.66 | 0.12 | 0.01 | 0.21 | 0.00 |
| Montanuniversität Leoben | 0.00 | 0.06 | 0.09 | 0.74 | 0.94 | 0.31 | 0.71 | 0.03 | 0.06 | 0.37 | 0.00 |
| Other | 0.10 | 0.27 | 0.15 | 0.30 | 0.42 | 0.66 | 0.63 | 0.12 | 0.01 | 0.16 | 0.05 |
| Graz University of Technology | 0.03 | 0.20 | 0.35 | 0.63 | 0.83 | 0.31 | 0.52 | 0.12 | 0.01 | 0.19 | 0.00 |
| Vienna University of Technology | 0.05 | 0.22 | 0.21 | 0.66 | 0.83 | 0.45 | 0.50 | 0.06 | 0.03 | 0.21 | 0.02 |
| University of Graz | 0.04 | 0.25 | 0.34 | 0.35 | 0.77 | 0.60 | 0.73 | 0.17 | 0.01 | 0.15 | 0.03 |
| University of Innsbruck | 0.05 | 0.20 | 0.46 | 0.34 | 0.82 | 0.48 | 0.61 | 0.11 | 0.04 | 0.15 | 0.01 |
| University of Klagenfurt | 0.02 | 0.33 | 0.46 | 0.30 | 0.61 | 0.63 | 0.71 | 0.10 | 0.01 | 0.17 | 0.00 |
| University of Linz | 0.05 | 0.16 | 0.43 | 0.52 | 0.82 | 0.39 | 0.67 | 0.19 | 0.00 | 0.23 | 0.00 |
| University of Salzburg | 0.04 | 0.20 | 0.41 | 0.24 | 0.79 | 0.52 | 0.72 | 0.11 | 0.00 | 0.15 | 0.00 |
| University of Vienna | 0.07 | 0.23 | 0.31 | 0.26 | 0.59 | 0.68 | 0.70 | 0.11 | 0.00 | 0.15 | 0.03 |
| University of Natural Resources and Life Sciences Vienna | 0.00 | 0.00 | 0.29 | 0.57 | 0.71 | 0.43 | 0.71 | 0.14 | 0.14 | 0.57 | 0.00 |
| University of Music and Performing Arts Graz | 0.00 | 0.33 | 0.40 | 0.27 | 0.67 | 0.87 | 0.60 | 0.20 | 0.00 | 0.07 | 0.00 |
| University of Music and Performing Arts Vienna | 0.08 | 0.32 | 0.42 | 0.11 | 0.42 | 0.63 | 0.61 | 0.16 | 0.00 | 0.13 | 0.05 |
| University of Applied Arts Vienna | 0.04 | 0.19 | 0.28 | 0.09 | 0.51 | 0.68 | 0.72 | 0.19 | 0.02 | 0.15 | 0.04 |
| University of Arts and Design Linz | 0.00 | 0.28 | 0.44 | 0.22 | 0.72 | 0.50 | 0.67 | 0.11 | 0.00 | 0.06 | 0.00 |
| University of Veterinary Medicine Vienna | 0.03 | 0.14 | 0.37 | 0.55 | 0.80 | 0.37 | 0.68 | 0.07 | 0.00 | 0.26 | 0.00 |
| Vienna University of Economics and Business | 0.05 | 0.26 | 0.57 | 0.33 | 0.66 | 0.39 | 0.51 | 0.05 | 0.02 | 0.05 | 0.01 |
| Austrian Academy of Sciences | 0.07 | 0.18 | 0.18 | 0.64 | 0.73 | 0.39 | 0.57 | 0.07 | 0.02 | 0.07 | 0.02 |
| **Sum of answers** | 0.05 | 0.21 | 0.33 | 0.39 | 0.71 | 0.54 | 0.64 | 0.11 | 0.01 | 0.17 | 0.02 |

Table 19: Where do you usually store your research data? Answers per option, relative distribution per institution, n=9626

| Institution | At an external data center | In a cloud service | Centrally on a server of the university | Centrally on a server of the institute | Locally on my work computer | Locally on my private computer | On an external hard drive | CD's/DVD's | On magnetic tapes | Directly on the machine or instrument | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.00 | 0.07 | 0.11 | 0.07 | 0.22 | 0.20 | 0.20 | 0.04 | 0.02 | 0.07 | 0.00 |
| Vienna Chamber of Labour | 0.02 | 0.02 | 0.04 | 0.16 | 0.31 | 0.20 | 0.18 | 0.02 | 0.00 | 0.04 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.02 | 0.09 | 0.06 | 0.21 | 0.27 | 0.12 | 0.17 | 0.02 | 0.01 | 0.04 | 0.00 |
| Medical University Graz | 0.00 | 0.06 | 0.16 | 0.18 | 0.18 | 0.10 | 0.20 | 0.02 | 0.00 | 0.06 | 0.02 |
| Medical University of Innsbruck | 0.01 | 0.03 | 0.14 | 0.11 | 0.26 | 0.10 | 0.22 | 0.05 | 0.01 | 0.07 | 0.00 |
| Medical University of Vienna | 0.01 | 0.06 | 0.09 | 0.13 | 0.24 | 0.15 | 0.21 | 0.04 | 0.00 | 0.07 | 0.00 |
| Montanuniversität Leoben | 0.00 | 0.02 | 0.03 | 0.22 | 0.28 | 0.09 | 0.22 | 0.01 | 0.02 | 0.11 | 0.00 |
| Other | 0.03 | 0.10 | 0.05 | 0.11 | 0.15 | 0.23 | 0.22 | 0.04 | 0.00 | 0.05 | 0.02 |
| Graz University of Technology | 0.01 | 0.06 | 0.11 | 0.20 | 0.26 | 0.10 | 0.16 | 0.04 | 0.00 | 0.06 | 0.00 |
| Vienna University of Technology | 0.02 | 0.07 | 0.06 | 0.21 | 0.26 | 0.14 | 0.15 | 0.02 | 0.01 | 0.06 | 0.01 |
| University of Graz | 0.01 | 0.07 | 0.10 | 0.10 | 0.22 | 0.18 | 0.21 | 0.05 | 0.00 | 0.04 | 0.01 |
| University of Innsbruck | 0.01 | 0.06 | 0.14 | 0.10 | 0.25 | 0.15 | 0.19 | 0.03 | 0.01 | 0.05 | 0.00 |
| University of Klagenfurt | 0.01 | 0.10 | 0.14 | 0.09 | 0.18 | 0.19 | 0.21 | 0.03 | 0.00 | 0.05 | 0.00 |
| University of Linz | 0.01 | 0.05 | 0.12 | 0.15 | 0.24 | 0.11 | 0.19 | 0.06 | 0.00 | 0.07 | 0.00 |
| University of Salzburg | 0.01 | 0.06 | 0.13 | 0.08 | 0.25 | 0.16 | 0.23 | 0.03 | 0.00 | 0.05 | 0.00 |
| University of Vienna | 0.02 | 0.07 | 0.10 | 0.08 | 0.19 | 0.22 | 0.22 | 0.04 | 0.00 | 0.05 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.00 | 0.00 | 0.08 | 0.16 | 0.20 | 0.12 | 0.20 | 0.04 | 0.04 | 0.16 | 0.00 |
| University of Music and Performing Arts Graz | 0.00 | 0.10 | 0.12 | 0.08 | 0.20 | 0.25 | 0.18 | 0.06 | 0.00 | 0.02 | 0.00 |
| University of Music and Performing Arts Vienna | 0.03 | 0.11 | 0.14 | 0.04 | 0.14 | 0.22 | 0.21 | 0.05 | 0.00 | 0.05 | 0.02 |
| University of Applied Arts Vienna | 0.01 | 0.07 | 0.09 | 0.03 | 0.18 | 0.23 | 0.25 | 0.07 | 0.01 | 0.05 | 0.01 |
| University of Arts and Design Linz | 0.00 | 0.09 | 0.15 | 0.07 | 0.24 | 0.17 | 0.22 | 0.04 | 0.00 | 0.02 | 0.00 |
| University of Veterinary Medicine Vienna | 0.01 | 0.04 | 0.11 | 0.17 | 0.24 | 0.11 | 0.21 | 0.02 | 0.00 | 0.08 | 0.00 |
| Vienna University of Economics and Business | 0.02 | 0.09 | 0.20 | 0.11 | 0.23 | 0.13 | 0.17 | 0.02 | 0.01 | 0.02 | 0.00 |
| Austrian Academy of Sciences | 0.02 | 0.06 | 0.06 | 0.22 | 0.25 | 0.13 | 0.19 | 0.02 | 0.01 | 0.02 | 0.01 |
| **Sum of answers** | 0.02 | 0.07 | 0.10 | 0.12 | 0.22 | 0.17 | 0.20 | 0.04 | 0.00 | 0.05 | 0.01 |

Table 20: Please estimate the total volume of your research data based on the storage space you require (your estimated average per year). Answers per discipline, absolute, n=3026

| Discipline | Large (101 GB - 1 TB) | I am not sure | Small (< 50 GB) | Medium (50 - 100 GB) | Massive (> 1 PB) | Very large (1 TB - 1PB) | Persons | sum of answers |
|---|---|---|---|---|---|---|---|---|
| Not specified | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 7 | 6 | 14 | 15 | 0 | 1 | 43 | 43 |
| Biology | 77 | 6 | 70 | 96 | 3 | 35 | 287 | 287 |
| Chemistry | 34 | 9 | 72 | 38 | 0 | 14 | 167 | 167 |
| Humanities | 122 | 70 | 276 | 193 | 2 | 22 | 685 | 685 |
| Geoscience (including Geography) | 29 | 1 | 30 | 39 | 1 | 18 | 118 | 118 |
| Electrical and System Engineering | 78 | 8 | 126 | 95 | 1 | 16 | 324 | 324 |
| Mathematics | 10 | 3 | 76 | 13 | 0 | 2 | 104 | 104 |
| Medicine | 36 | 20 | 75 | 63 | 1 | 25 | 220 | 220 |
| Physics | 70 | 6 | 47 | 52 | 0 | 29 | 204 | 204 |
| Other | 81 | 27 | 132 | 114 | 1 | 26 | 381 | 381 |
| Social and Behavioural Sciences | 74 | 54 | 226 | 125 | 1 | 11 | 491 | 491 |
| **Sum of answers** | 619 | 210 | 1144 | 844 | 10 | 199 | 3026 | 3026 |

Table 21: Please estimate the total volume of your research data based on the storage space you require (your estimated average per year). Answers per person, relative distribution per discipline, n=3026

| **Discipline** | **Large (101 GB - 1 TB)** | **I am not sure** | **Small (< 50 GB)** | **Medium (50 - 100 GB)** | **Massive (> 1 PB)** | **Very large (1 TB - 1PB)** |
|---|---|---|---|---|---|---|
| Not specified | 0.50 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.16 | 0.14 | 0.33 | 0.35 | 0.00 | 0.02 |
| Biology | 0.27 | 0.02 | 0.24 | 0.33 | 0.01 | 0.12 |
| Chemistry | 0.20 | 0.05 | 0.43 | 0.23 | 0.00 | 0.08 |
| Humanities | 0.18 | 0.10 | 0.40 | 0.28 | 0.00 | 0.03 |
| Geoscience (including Geography) | 0.25 | 0.01 | 0.25 | 0.33 | 0.01 | 0.15 |
| Electrical and System Engineering | 0.24 | 0.02 | 0.39 | 0.29 | 0.00 | 0.05 |
| Mathematics | 0.10 | 0.03 | 0.73 | 0.13 | 0.00 | 0.02 |
| Medicine | 0.16 | 0.09 | 0.34 | 0.29 | 0.00 | 0.11 |
| Physics | 0.34 | 0.03 | 0.23 | 0.25 | 0.00 | 0.14 |
| Other | 0.21 | 0.07 | 0.35 | 0.30 | 0.00 | 0.07 |
| Social and Behavioural Sciences | 0.15 | 0.11 | 0.46 | 0.25 | 0.00 | 0.02 |
| **Sum of answers** | 0.20 | 0.07 | 0.38 | 0.28 | 0.00 | 0.07 |

Table 22: Please estimate the total volume of your research data based on the storage space you require (your estimated average per year). Answers per institution, absolute, n=3026

| Institution | Large (101 GB - 1 TB) | I am not sure | Small (< 50 GB) | Medium (50 - 100 GB) | Massive (> 1 PB) | Very large (1 TB - 1PB) | Persons | sum of answers |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 3 | 0 | 4 | 7 | 0 | 1 | 15 | 15 |
| Vienna Chamber of Labour | 3 | 2 | 12 | 4 | 0 | 0 | 21 | 21 |
| Institute of Science and Technology (IST Austria) | 7 | 1 | 10 | 12 | 1 | 2 | 33 | 33 |
| Medical University Graz | 3 | 0 | 8 | 3 | 0 | 3 | 17 | 17 |
| Medical University of Innsbruck | 18 | 4 | 13 | 25 | 0 | 10 | 70 | 70 |
| Medical University of Vienna | 45 | 18 | 73 | 56 | 1 | 19 | 212 | 212 |
| Montanuniversität Leoben | 5 | 1 | 14 | 13 | 0 | 2 | 35 | 35 |
| Other | 21 | 13 | 35 | 30 | 0 | 3 | 102 | 102 |
| Graz University of Technology | 33 | 4 | 65 | 39 | 0 | 11 | 152 | 152 |
| Vienna University of Technology | 90 | 14 | 134 | 92 | 3 | 19 | 352 | 352 |
| University of Graz | 51 | 17 | 99 | 57 | 1 | 15 | 240 | 240 |
| University of Innsbruck | 57 | 17 | 92 | 72 | 1 | 18 | 257 | 257 |
| University of Klagenfurt | 15 | 3 | 32 | 31 | 0 | 3 | 84 | 84 |
| University of Linz | 21 | 8 | 46 | 26 | 0 | 4 | 105 | 105 |
| University of Salzburg | 11 | 3 | 29 | 27 | 0 | 5 | 75 | 75 |
| University of Vienna | 172 | 67 | 350 | 242 | 1 | 56 | 888 | 888 |
| University of Natural Resources and Life Sciences Vienna | 1 | 0 | 3 | 3 | 0 | 0 | 7 | 7 |
| University of Music and Performing Arts Graz | 3 | 3 | 7 | 2 | 0 | 0 | 15 | 15 |
| University of Music and Performing Arts Vienna | 6 | 1 | 16 | 11 | 0 | 4 | 38 | 38 |
| University of Applied Arts Vienna | 10 | 6 | 17 | 8 | 1 | 5 | 47 | 47 |
| University of Arts and Design Linz | 4 | 3 | 5 | 5 | 0 | 1 | 18 | 18 |
| University of Veterinary Medicine Vienna | 14 | 9 | 21 | 43 | 0 | 7 | 94 | 94 |
| Vienna University of Economics and Business | 17 | 11 | 35 | 26 | 0 | 4 | 93 | 93 |
| Austrian Academy of Sciences | 9 | 5 | 24 | 10 | 1 | 7 | 56 | 56 |
| **Sum of answers** | 619 | 210 | 1144 | 844 | 10 | 199 | 3026 | 3026 |

Table 23: Please estimate the total volume of your research data based on the storage space you require (your estimated average per year). Answers per person, relative distribution per institution, n=3026

| Institution | Large (101 GB - 1 TB) | I am not sure | Small (< 50 GB) | Medium (50 - 100 GB) | Massive (> 1 PB) | Very large (1 TB - 1PB) |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.20 | 0.00 | 0.27 | 0.47 | 0.00 | 0.07 |
| Vienna Chamber of Labour | 0.14 | 0.10 | 0.57 | 0.19 | 0.00 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.21 | 0.03 | 0.30 | 0.36 | 0.03 | 0.06 |
| Medical University Graz | 0.18 | 0.00 | 0.47 | 0.18 | 0.00 | 0.18 |
| Medical University of Innsbruck | 0.26 | 0.06 | 0.19 | 0.36 | 0.00 | 0.14 |
| Medical University of Vienna | 0.21 | 0.08 | 0.34 | 0.26 | 0.00 | 0.09 |
| Montanuniversität Leoben | 0.14 | 0.03 | 0.40 | 0.37 | 0.00 | 0.06 |
| Other | 0.21 | 0.13 | 0.34 | 0.29 | 0.00 | 0.03 |
| Graz University of Technology | 0.22 | 0.03 | 0.43 | 0.26 | 0.00 | 0.07 |
| Vienna University of Technology | 0.26 | 0.04 | 0.38 | 0.26 | 0.01 | 0.05 |
| University of Graz | 0.21 | 0.07 | 0.41 | 0.24 | 0.00 | 0.06 |
| University of Innsbruck | 0.22 | 0.07 | 0.36 | 0.28 | 0.00 | 0.07 |
| University of Klagenfurt | 0.18 | 0.04 | 0.38 | 0.37 | 0.00 | 0.04 |
| University of Linz | 0.20 | 0.08 | 0.44 | 0.25 | 0.00 | 0.04 |
| University of Salzburg | 0.15 | 0.04 | 0.39 | 0.36 | 0.00 | 0.07 |
| University of Vienna | 0.19 | 0.08 | 0.39 | 0.27 | 0.00 | 0.06 |
| Univ. of Natural Resources and Life Sciences Vienna | 0.14 | 0.00 | 0.43 | 0.43 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.20 | 0.20 | 0.47 | 0.13 | 0.00 | 0.00 |
| University of Music and Performing Arts Vienna | 0.16 | 0.03 | 0.42 | 0.29 | 0.00 | 0.11 |
| University of Applied Arts Vienna | 0.21 | 0.13 | 0.36 | 0.17 | 0.02 | 0.11 |
| University of Arts and Design Linz | 0.22 | 0.17 | 0.28 | 0.28 | 0.00 | 0.06 |
| University of Veterinary Medicine Vienna | 0.15 | 0.10 | 0.22 | 0.46 | 0.00 | 0.07 |
| Vienna University of Economics and Business | 0.18 | 0.12 | 0.38 | 0.28 | 0.00 | 0.04 |
| Austrian Academy of Sciences | 0.16 | 0.09 | 0.43 | 0.18 | 0.02 | 0.13 |
| **Sum of answers** | 0.20 | 0.07 | 0.38 | 0.28 | 0.00 | 0.07 |

Table 24: Do you normally document your research data? Answers per discipline, absolute, n=3026

| Discipline | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 11 | 8 | 15 | 2 | 10 | 0 | 43 | 46 |
| Biology | 58 | 94 | 113 | 19 | 38 | 2 | 287 | 324 |
| Chemistry | 30 | 50 | 65 | 13 | 28 | 0 | 167 | 186 |
| Humanities | 112 | 197 | 214 | 99 | 136 | 6 | 685 | 764 |
| Geoscience (including Geography) | 21 | 33 | 65 | 13 | 10 | 1 | 118 | 143 |
| Electrical and System Engineering | 36 | 70 | 205 | 43 | 21 | 2 | 324 | 377 |
| Mathematics | 15 | 22 | 37 | 24 | 15 | 2 | 104 | 115 |
| Medicine | 61 | 55 | 64 | 17 | 54 | 0 | 220 | 251 |
| Physics | 29 | 59 | 110 | 20 | 17 | 0 | 204 | 235 |
| Other | 63 | 92 | 154 | 53 | 56 | 0 | 381 | 418 |
| Social and Behavioural Sciences | 80 | 139 | 181 | 68 | 79 | 2 | 491 | 549 |
| **Sum of answers** | **516** | **819** | **1224** | **371** | **465** | **15** | **3026** | **3410** |

Table 25: Do you normally document your research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.26 | 0.19 | 0.35 | 0.05 | 0.23 | 0.00 |
| Biology | 0.20 | 0.33 | 0.39 | 0.07 | 0.13 | 0.01 |
| Chemistry | 0.18 | 0.30 | 0.39 | 0.08 | 0.17 | 0.00 |
| Humanities | 0.16 | 0.29 | 0.31 | 0.14 | 0.20 | 0.01 |
| Geoscience (including Geography) | 0.18 | 0.28 | 0.55 | 0.11 | 0.08 | 0.01 |
| Electrical and System Engineering | 0.11 | 0.22 | 0.63 | 0.13 | 0.06 | 0.01 |
| Mathematics | 0.14 | 0.21 | 0.36 | 0.23 | 0.14 | 0.02 |
| Medicine | 0.28 | 0.25 | 0.29 | 0.08 | 0.25 | 0.00 |
| Physics | 0.14 | 0.29 | 0.54 | 0.10 | 0.08 | 0.00 |
| Other | 0.17 | 0.24 | 0.40 | 0.14 | 0.15 | 0.00 |
| Social and Behavioural Sciences | 0.16 | 0.28 | 0.37 | 0.14 | 0.16 | 0.00 |
| **Sum of answers** | 0.17 | 0.27 | 0.40 | 0.12 | 0.15 | 0.00 |

Table 26: Do you normally document your research data? Answers per option, relative distribution per discipline, n=3410

| Discipline | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.24 | 0.17 | 0.33 | 0.04 | 0.22 | 0.00 |
| Biology | 0.18 | 0.29 | 0.35 | 0.06 | 0.12 | 0.01 |
| Chemistry | 0.16 | 0.27 | 0.35 | 0.07 | 0.15 | 0.00 |
| Humanities | 0.15 | 0.26 | 0.28 | 0.13 | 0.18 | 0.01 |
| Geoscience (including Geography) | 0.15 | 0.23 | 0.45 | 0.09 | 0.07 | 0.01 |
| Electrical and System Engineering | 0.10 | 0.19 | 0.54 | 0.11 | 0.06 | 0.01 |
| Mathematics | 0.13 | 0.19 | 0.32 | 0.21 | 0.13 | 0.02 |
| Medicine | 0.24 | 0.22 | 0.25 | 0.07 | 0.22 | 0.00 |
| Physics | 0.12 | 0.25 | 0.47 | 0.09 | 0.07 | 0.00 |
| Other | 0.15 | 0.22 | 0.37 | 0.13 | 0.13 | 0.00 |
| Social and Behavioural Sciences | 0.15 | 0.25 | 0.33 | 0.12 | 0.14 | 0.00 |
| **Sum of answers** | 0.15 | 0.24 | 0.36 | 0.11 | 0.14 | 0.00 |

Table 27: Do you normally document your research data? Answers per institution, absolute, n=3026

| Institution | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0 | 7 | 4 | 4 | 0 | 0 | 15 | 15 |
| Vienna Chamber of Labour | 4 | 2 | 6 | 4 | 8 | 0 | 21 | 24 |
| Institute of Science and Technology (IST Austria) | 7 | 12 | 15 | 2 | 2 | 0 | 33 | 38 |
| Medical University Graz | 5 | 5 | 5 | 2 | 2 | 0 | 17 | 19 |
| Medical University of Innsbruck | 13 | 19 | 26 | 4 | 14 | 0 | 70 | 76 |
| Medical University of Vienna | 54 | 61 | 59 | 17 | 46 | 1 | 212 | 238 |
| Montanuniversität Leoben | 4 | 13 | 17 | 6 | 3 | 0 | 35 | 43 |
| Other | 18 | 27 | 40 | 9 | 17 | 0 | 102 | 111 |
| Graz University of Technology | 21 | 28 | 90 | 13 | 15 | 1 | 152 | 168 |
| Vienna University of Technology | 37 | 77 | 203 | 47 | 40 | 1 | 352 | 405 |
| University of Graz | 50 | 67 | 97 | 24 | 41 | 1 | 240 | 280 |
| University of Innsbruck | 38 | 69 | 108 | 40 | 37 | 1 | 257 | 293 |
| University of Klagenfurt | 18 | 25 | 40 | 4 | 10 | 1 | 84 | 98 |
| University of Linz | 15 | 23 | 49 | 13 | 17 | 0 | 105 | 117 |
| University of Salzburg | 10 | 22 | 27 | 13 | 7 | 3 | 75 | 82 |
| University of Vienna | 161 | 260 | 302 | 119 | 137 | 6 | 888 | 985 |
| Univ. of Natural Resources and Life Sciences Vienna | 0 | 2 | 3 | 0 | 2 | 0 | 7 | 7 |
| University of Music and Performing Arts Graz | 1 | 3 | 5 | 4 | 6 | 0 | 15 | 19 |
| University of Music and Performing Arts Vienna | 7 | 12 | 16 | 6 | 4 | 0 | 38 | 45 |
| University of Applied Arts Vienna | 3 | 15 | 18 | 7 | 9 | 0 | 47 | 52 |
| University of Arts and Design Linz | 1 | 4 | 6 | 7 | 3 | 0 | 18 | 21 |
| University of Veterinary Medicine Vienna | 25 | 24 | 29 | 4 | 23 | 0 | 94 | 105 |
| Vienna University of Economics and Business | 11 | 23 | 41 | 12 | 15 | 0 | 93 | 102 |
| Austrian Academy of Sciences | 13 | 19 | 18 | 10 | 7 | 0 | 56 | 67 |
| **Sum of answers** | 516 | 819 | 1224 | 371 | 465 | 15 | 3026 | 3410 |

Table 28: Do you normally document your research data? Answers per person, relative distribution per institution, n=3026

| Institution | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.00 | 0.47 | 0.27 | 0.27 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.19 | 0.10 | 0.29 | 0.19 | 0.38 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.21 | 0.36 | 0.45 | 0.06 | 0.06 | 0.00 |
| Medical University Graz | 0.29 | 0.29 | 0.29 | 0.12 | 0.12 | 0.00 |
| Medical University of Innsbruck | 0.19 | 0.27 | 0.37 | 0.06 | 0.20 | 0.00 |
| Medical University of Vienna | 0.25 | 0.29 | 0.28 | 0.08 | 0.22 | 0.00 |
| Montanuniversität Leoben | 0.11 | 0.37 | 0.49 | 0.17 | 0.09 | 0.00 |
| Other | 0.18 | 0.26 | 0.39 | 0.09 | 0.17 | 0.00 |
| Graz University of Technology | 0.14 | 0.18 | 0.59 | 0.09 | 0.10 | 0.01 |
| Vienna University of Technology | 0.11 | 0.22 | 0.58 | 0.13 | 0.11 | 0.00 |
| University of Graz | 0.21 | 0.28 | 0.40 | 0.10 | 0.17 | 0.00 |
| University of Innsbruck | 0.15 | 0.27 | 0.42 | 0.16 | 0.14 | 0.00 |
| University of Klagenfurt | 0.21 | 0.30 | 0.48 | 0.05 | 0.12 | 0.01 |
| University of Linz | 0.14 | 0.22 | 0.47 | 0.12 | 0.16 | 0.00 |
| University of Salzburg | 0.13 | 0.29 | 0.36 | 0.17 | 0.09 | 0.04 |
| University of Vienna | 0.18 | 0.29 | 0.34 | 0.13 | 0.15 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.00 | 0.29 | 0.43 | 0.00 | 0.29 | 0.00 |
| University of Music and Performing Arts Graz | 0.07 | 0.20 | 0.33 | 0.27 | 0.40 | 0.00 |
| University of Music and Performing Arts Vienna | 0.18 | 0.32 | 0.42 | 0.16 | 0.11 | 0.00 |
| University of Applied Arts Vienna | 0.06 | 0.32 | 0.38 | 0.15 | 0.19 | 0.00 |
| University of Arts and Design Linz | 0.06 | 0.22 | 0.33 | 0.39 | 0.17 | 0.00 |
| University of Veterinary Medicine Vienna | 0.27 | 0.26 | 0.31 | 0.04 | 0.24 | 0.00 |
| Vienna University of Economics and Business | 0.12 | 0.25 | 0.44 | 0.13 | 0.16 | 0.00 |
| Austrian Academy of Sciences | 0.23 | 0.34 | 0.32 | 0.18 | 0.13 | 0.00 |
| **Sum of answers** | 0.17 | 0.27 | 0.40 | 0.12 | 0.15 | 0.00 |

Table 29: Do you normally document your research data? Answers per option, relative distribution per institution, n=3410

| Institution | Using suitable standards | Individually and consistently | Individually and not consistantly | No | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.00 | 0.47 | 0.27 | 0.27 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.17 | 0.08 | 0.25 | 0.17 | 0.33 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.18 | 0.32 | 0.39 | 0.05 | 0.05 | 0.00 |
| Medical University Graz | 0.26 | 0.26 | 0.26 | 0.11 | 0.11 | 0.00 |
| Medical University of Innsbruck | 0.17 | 0.25 | 0.34 | 0.05 | 0.18 | 0.00 |
| Medical University of Vienna | 0.23 | 0.26 | 0.25 | 0.07 | 0.19 | 0.00 |
| Montanuniversität Leoben | 0.09 | 0.30 | 0.40 | 0.14 | 0.07 | 0.00 |
| Other | 0.16 | 0.24 | 0.36 | 0.08 | 0.15 | 0.00 |
| Graz University of Technology | 0.13 | 0.17 | 0.54 | 0.08 | 0.09 | 0.01 |
| Vienna University of Technology | 0.09 | 0.19 | 0.50 | 0.12 | 0.10 | 0.00 |
| University of Graz | 0.18 | 0.24 | 0.35 | 0.09 | 0.15 | 0.00 |
| University of Innsbruck | 0.13 | 0.24 | 0.37 | 0.14 | 0.13 | 0.00 |
| University of Klagenfurt | 0.18 | 0.26 | 0.41 | 0.04 | 0.10 | 0.01 |
| University of Linz | 0.13 | 0.20 | 0.42 | 0.11 | 0.15 | 0.00 |
| University of Salzburg | 0.12 | 0.27 | 0.33 | 0.16 | 0.09 | 0.04 |
| University of Vienna | 0.16 | 0.26 | 0.31 | 0.12 | 0.14 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.00 | 0.29 | 0.43 | 0.00 | 0.29 | 0.00 |
| University of Music and Performing Arts Graz | 0.05 | 0.16 | 0.26 | 0.21 | 0.32 | 0.00 |
| University of Music and Performing Arts Vienna | 0.16 | 0.27 | 0.36 | 0.13 | 0.09 | 0.00 |
| University of Applied Arts Vienna | 0.06 | 0.29 | 0.35 | 0.13 | 0.17 | 0.00 |
| University of Arts and Design Linz | 0.05 | 0.19 | 0.29 | 0.33 | 0.14 | 0.00 |
| University of Veterinary Medicine Vienna | 0.24 | 0.23 | 0.28 | 0.04 | 0.22 | 0.00 |
| Vienna University of Economics and Business | 0.11 | 0.23 | 0.40 | 0.12 | 0.15 | 0.00 |
| Austrian Academy of Sciences | 0.19 | 0.28 | 0.27 | 0.15 | 0.10 | 0.00 |
| **Sum of answers** | 0.15 | 0.24 | 0.36 | 0.11 | 0.14 | 0.00 |

Table 30: Who is responsible for the archiving of your research data? Answers per discipline, absolute, n=3026

| Discipline | I myself | Project/Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 2 | 5 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 39 | 6 | 4 | 4 | 6 | 1 | 1 | 0 | 43 | 61 |
| Biology | 277 | 49 | 64 | 22 | 37 | 3 | 4 | 1 | 287 | 457 |
| Chemistry | 151 | 30 | 40 | 21 | 13 | 1 | 2 | 2 | 167 | 260 |
| Humanities | 658 | 45 | 81 | 27 | 34 | 13 | 26 | 10 | 685 | 894 |
| Geoscience (including Geography) | 109 | 15 | 23 | 14 | 12 | 0 | 1 | 0 | 118 | 174 |
| Electrical and System Engineering | 280 | 48 | 64 | 56 | 45 | 4 | 6 | 4 | 324 | 507 |
| Mathematics | 100 | 3 | 6 | 7 | 10 | 1 | 1 | 0 | 104 | 128 |
| Medicine | 207 | 35 | 59 | 22 | 17 | 3 | 7 | 4 | 220 | 354 |
| Physics | 183 | 28 | 49 | 8 | 29 | 3 | 1 | 2 | 204 | 303 |
| Other | 348 | 43 | 55 | 33 | 36 | 7 | 5 | 8 | 381 | 535 |
| Social and Behavioural Sciences | 465 | 53 | 80 | 26 | 32 | 9 | 4 | 1 | 491 | 670 |
| **Sum of answers** | 2818 | 355 | 526 | 241 | 273 | 45 | 58 | 32 | 3026 | 4348 |

Tabelle 31: Who is responsible for the archiving of your research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | I myself | Project/Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.50 | 0.00 | 0.50 | 0.50 | 1.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.91 | 0.14 | 0.09 | 0.09 | 0.14 | 0.02 | 0.02 | 0.00 |
| Biology | 0.97 | 0.17 | 0.22 | 0.08 | 0.13 | 0.01 | 0.01 | 0.00 |
| Chemistry | 0.90 | 0.18 | 0.24 | 0.13 | 0.08 | 0.01 | 0.01 | 0.01 |
| Humanities | 0.96 | 0.07 | 0.12 | 0.04 | 0.05 | 0.02 | 0.04 | 0.01 |
| Geoscience (including Geography) | 0.92 | 0.13 | 0.19 | 0.12 | 0.10 | 0.00 | 0.01 | 0.00 |
| Electrical and System Engineering | 0.86 | 0.15 | 0.20 | 0.17 | 0.14 | 0.01 | 0.02 | 0.01 |
| Mathematics | 0.96 | 0.03 | 0.06 | 0.07 | 0.10 | 0.01 | 0.01 | 0.00 |
| Medicine | 0.94 | 0.16 | 0.27 | 0.10 | 0.08 | 0.01 | 0.03 | 0.02 |
| Physics | 0.90 | 0.14 | 0.24 | 0.04 | 0.14 | 0.01 | 0.00 | 0.01 |
| Other | 0.91 | 0.11 | 0.14 | 0.09 | 0.09 | 0.02 | 0.01 | 0.02 |
| Social and Behavioural Sciences | 0.95 | 0.11 | 0.16 | 0.05 | 0.07 | 0.02 | 0.01 | 0.00 |
| **Sum of answers** | 0.93 | 0.12 | 0.17 | 0.08 | 0.09 | 0.01 | 0.02 | 0.01 |

Table 32: Who is responsible for the archiving of your research data? Answers per option. relative distribution per discipline, n=4348

| Discipline | I myself | Project/Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.2 | 0 | 0.2 | 0.2 | 0.4 | 0 | 0 | 0 |
| Agriculture. Forestry. Horticulture and Veterinary Medicine | 0.64 | 0.10 | 0.07 | 0.07 | 0.10 | 0.02 | 0.02 | 0.00 |
| Biology | 0.61 | 0.11 | 0.14 | 0.05 | 0.08 | 0.01 | 0.01 | 0.00 |
| Chemistry | 0.58 | 0.12 | 0.15 | 0.08 | 0.05 | 0.00 | 0.01 | 0.01 |
| Humanities | 0.74 | 0.05 | 0.09 | 0.03 | 0.04 | 0.01 | 0.03 | 0.01 |
| Geoscience (including Geography) | 0.63 | 0.09 | 0.13 | 0.08 | 0.07 | 0.00 | 0.01 | 0.00 |
| Electrical and System Engineering | 0.55 | 0.09 | 0.13 | 0.11 | 0.09 | 0.01 | 0.01 | 0.01 |
| Mathematics | 0.78 | 0.02 | 0.05 | 0.05 | 0.08 | 0.01 | 0.01 | 0.00 |
| Medicine | 0.58 | 0.10 | 0.17 | 0.06 | 0.05 | 0.01 | 0.02 | 0.01 |
| Physics | 0.60 | 0.09 | 0.16 | 0.03 | 0.10 | 0.01 | 0.00 | 0.01 |
| Other | 0.65 | 0.08 | 0.10 | 0.06 | 0.07 | 0.01 | 0.01 | 0.01 |
| Social and Behavioural Sciences | 0.69 | 0.08 | 0.12 | 0.04 | 0.05 | 0.01 | 0.01 | 0.00 |
| **Sum of answers** | 0.65 | 0.08 | 0.12 | 0.06 | 0.06 | 0.01 | 0.01 | 0.01 |

Table 33: Who is responsible for the archiving of your research data? nswers per institution absolute, n=3026

| Institution | I myself | Project/ Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 15 | 2 | 1 | 0 | 3 | 1 | 0 | 0 | 15 | 22 |
| Vienna Chamber of Labour | 14 | 1 | 0 | 2 | 5 | 7 | 1 | 0 | 21 | 30 |
| Institute of Science and Technology (IST Austria) | 32 | 6 | 2 | 0 | 5 | 2 | 0 | 0 | 33 | 47 |
| Medical University Graz | 16 | 1 | 3 | 1 | 2 | 1 | 0 | 0 | 17 | 24 |
| Medical University of Innsbruck | 66 | 12 | 19 | 10 | 11 | 0 | 0 | 1 | 70 | 119 |
| Medical University of Vienna | 200 | 38 | 54 | 11 | 12 | 1 | 7 | 2 | 212 | 325 |
| Montanuniversität Leoben | 30 | 5 | 6 | 5 | 4 | 0 | 1 | 0 | 35 | 51 |
| Other | 98 | 13 | 11 | 2 | 8 | 2 | 3 | 1 | 102 | 138 |
| Graz University of Technology | 134 | 20 | 26 | 22 | 27 | 2 | 1 | 2 | 152 | 234 |
| Vienna University of Technology | 314 | 51 | 74 | 47 | 32 | 5 | 6 | 6 | 352 | 535 |
| University of Graz | 227 | 24 | 42 | 13 | 13 | 2 | 5 | 2 | 240 | 328 |
| University of Innsbruck | 233 | 34 | 51 | 16 | 35 | 3 | 5 | 3 | 257 | 380 |
| University of Klagenfurt | 78 | 7 | 17 | 11 | 14 | 1 | 3 | 0 | 84 | 131 |
| University of Linz | 93 | 14 | 16 | 13 | 11 | 0 | 1 | 1 | 105 | 149 |
| University of Salzburg | 72 | 8 | 9 | 3 | 2 | 0 | 0 | 0 | 75 | 94 |
| University of Vienna | 852 | 73 | 133 | 57 | 54 | 7 | 22 | 10 | 888 | 1208 |
| University of Natural Resources and Life Sciences Vienna | 6 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 7 | 11 |
| University of Music and Performing Arts Graz | 15 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 15 | 19 |
| University of Music and Performing Arts Vienna | 35 | 3 | 6 | 1 | 4 | 2 | 1 | 2 | 38 | 54 |
| University of Applied Arts Vienna | 47 | 3 | 3 | 2 | 1 | 3 | 1 | 1 | 47 | 61 |
| University of Arts and Design Linz | 18 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 18 | 23 |
| University of Veterinary Medicine Vienna | 89 | 9 | 11 | 13 | 11 | 3 | 1 | 0 | 94 | 137 |
| Vienna University of Economics and Business | 87 | 12 | 22 | 3 | 6 | 2 | 0 | 0 | 93 | 132 |
| Austrian Academy of Sciences | 47 | 16 | 14 | 8 | 10 | 0 | 0 | 1 | 56 | 96 |
| **Sum of answers** | 2818 | 355 | 526 | 241 | 273 | 45 | 58 | 32 | 3026 | 4348 |

Table 34: Who is responsible for the archiving of your research data? Answers per person, relative distribution per institution, n=3026

| Institution | I myself | Project/Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 1.00 | 0.13 | 0.07 | 0.00 | 0.20 | 0.07 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.67 | 0.05 | 0.00 | 0.10 | 0.24 | 0.33 | 0.05 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.97 | 0.18 | 0.06 | 0.00 | 0.15 | 0.06 | 0.00 | 0.00 |
| Medical University Graz | 0.94 | 0.06 | 0.18 | 0.06 | 0.12 | 0.06 | 0.00 | 0.00 |
| Medical University of Innsbruck | 0.94 | 0.17 | 0.27 | 0.14 | 0.16 | 0.00 | 0.00 | 0.01 |
| Medical University of Vienna | 0.94 | 0.18 | 0.25 | 0.05 | 0.06 | 0.00 | 0.03 | 0.01 |
| Montanuniversität Leoben | 0.86 | 0.14 | 0.17 | 0.14 | 0.11 | 0.00 | 0.03 | 0.00 |
| Other | 0.96 | 0.13 | 0.11 | 0.02 | 0.08 | 0.02 | 0.03 | 0.01 |
| Graz University of Technology | 0.88 | 0.13 | 0.17 | 0.14 | 0.18 | 0.01 | 0.01 | 0.01 |
| Vienna University of Technology | 0.89 | 0.14 | 0.21 | 0.13 | 0.09 | 0.01 | 0.02 | 0.02 |
| University of Graz | 0.95 | 0.10 | 0.18 | 0.05 | 0.05 | 0.01 | 0.02 | 0.01 |
| University of Innsbruck | 0.91 | 0.13 | 0.20 | 0.06 | 0.14 | 0.01 | 0.02 | 0.01 |
| University of Klagenfurt | 0.93 | 0.08 | 0.20 | 0.13 | 0.17 | 0.01 | 0.04 | 0.00 |
| University of Linz | 0.89 | 0.13 | 0.15 | 0.12 | 0.10 | 0.00 | 0.01 | 0.01 |
| University of Salzburg | 0.96 | 0.11 | 0.12 | 0.04 | 0.03 | 0.00 | 0.00 | 0.00 |
| University of Vienna | 0.96 | 0.08 | 0.15 | 0.06 | 0.06 | 0.01 | 0.02 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.86 | 0.14 | 0.14 | 0.00 | 0.29 | 0.14 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 1.00 | 0.00 | 0.20 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| University of Music and Performing Arts Vienna | 0.92 | 0.08 | 0.16 | 0.03 | 0.11 | 0.05 | 0.03 | 0.05 |
| University of Applied Arts Vienna | 1.00 | 0.06 | 0.06 | 0.04 | 0.02 | 0.06 | 0.02 | 0.02 |
| University of Arts and Design Linz | 1.00 | 0.11 | 0.11 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| University of Veterinary Medicine Vienna | 0.95 | 0.10 | 0.12 | 0.14 | 0.12 | 0.03 | 0.01 | 0.00 |
| Vienna University of Economics and Business | 0.94 | 0.13 | 0.24 | 0.03 | 0.06 | 0.02 | 0.00 | 0.00 |
| Austrian Academy of Sciences | 0.84 | 0.29 | 0.25 | 0.14 | 0.18 | 0.00 | 0.00 | 0.02 |
| **Sum of answers** | 0.93 | 0.12 | 0.17 | 0.08 | 0.09 | 0.01 | 0.02 | 0.01 |

Table 35: Who is responsible for the archiving of your research data? Answers per option, relative distribution per institution, n=4348

| Institution | I myself | Project/Group manager | Scientific employee | Non-Scientific employee | University computer/IT center | Library | External service provider | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.68 | 0.09 | 0.05 | 0.00 | 0.14 | 0.05 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.47 | 0.03 | 0.00 | 0.07 | 0.17 | 0.23 | 0.03 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.68 | 0.13 | 0.04 | 0.00 | 0.11 | 0.04 | 0.00 | 0.00 |
| Medical University Graz | 0.67 | 0.04 | 0.13 | 0.04 | 0.08 | 0.04 | 0.00 | 0.00 |
| Medical University of Innsbruck | 0.55 | 0.10 | 0.16 | 0.08 | 0.09 | 0.00 | 0.00 | 0.01 |
| Medical University of Vienna | 0.62 | 0.12 | 0.17 | 0.03 | 0.04 | 0.00 | 0.02 | 0.01 |
| Montanuniversität Leoben | 0.59 | 0.10 | 0.12 | 0.10 | 0.08 | 0.00 | 0.02 | 0.00 |
| Other | 0.71 | 0.09 | 0.08 | 0.01 | 0.06 | 0.01 | 0.02 | 0.01 |
| Graz University of Technology | 0.57 | 0.09 | 0.11 | 0.09 | 0.12 | 0.01 | 0.00 | 0.01 |
| Vienna University of Technology | 0.59 | 0.10 | 0.14 | 0.09 | 0.06 | 0.01 | 0.01 | 0.01 |
| University of Graz | 0.69 | 0.07 | 0.13 | 0.04 | 0.04 | 0.01 | 0.02 | 0.01 |
| University of Innsbruck | 0.61 | 0.09 | 0.13 | 0.04 | 0.09 | 0.01 | 0.01 | 0.01 |
| University of Klagenfurt | 0.60 | 0.05 | 0.13 | 0.08 | 0.11 | 0.01 | 0.02 | 0.00 |
| University of Linz | 0.62 | 0.09 | 0.11 | 0.09 | 0.07 | 0.00 | 0.01 | 0.01 |
| University of Salzburg | 0.77 | 0.09 | 0.10 | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 |
| University of Vienna | 0.71 | 0.06 | 0.11 | 0.05 | 0.04 | 0.01 | 0.02 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.55 | 0.09 | 0.09 | 0.00 | 0.18 | 0.09 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.79 | 0.00 | 0.16 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| University of Music and Performing Arts Vienna | 0.65 | 0.06 | 0.11 | 0.02 | 0.07 | 0.04 | 0.02 | 0.04 |
| University of Applied Arts Vienna | 0.77 | 0.05 | 0.05 | 0.03 | 0.02 | 0.05 | 0.02 | 0.02 |
| University of Arts and Design Linz | 0.78 | 0.09 | 0.09 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 |
| University of Veterinary Medicine Vienna | 0.65 | 0.07 | 0.08 | 0.09 | 0.08 | 0.02 | 0.01 | 0.00 |
| Vienna University of Economics and Business | 0.66 | 0.09 | 0.17 | 0.02 | 0.05 | 0.02 | 0.00 | 0.00 |
| Austrian Academy of Sciences | 0.49 | 0.17 | 0.15 | 0.08 | 0.10 | 0.00 | 0.00 | 0.01 |
| **Sum of answers** | 0.65 | 0.08 | 0.12 | 0.06 | 0.06 | 0.01 | 0.01 | 0.01 |

Table 36: Have you already experienced research data loss? Answers per discipline, absolute, n=3026

| Discipline | Yes | No | Persons |
|---|---|---|---|
| Not specified | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 17 | 26 | 43 |
| Biology | 101 | 186 | 287 |
| Chemistry | 65 | 102 | 167 |
| Humanities | 261 | 424 | 685 |
| Geoscience (including Geography) | 44 | 74 | 118 |
| Electrical and System Engineering | 104 | 220 | 324 |
| Mathematics | 27 | 77 | 104 |
| Medicine | 93 | 127 | 220 |
| Physics | 74 | 130 | 204 |
| Other | 136 | 245 | 381 |
| Social and Behavioural Sciences | 167 | 324 | 491 |
| **Sum of answers** | 1089 | 1937 | 3026 |

Table 37: Have you already experienced research data loss? Answers per person, relative distribution per discipline, n=3026

| Discipline | Yes | No |
|---|---|---|
| Not specified | 0.00 | 1.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.40 | 0.60 |
| Biology | 0.35 | 0.65 |
| Chemistry | 0.39 | 0.61 |
| Humanities | 0.38 | 0.62 |
| Geoscience (including Geography) | 0.37 | 0.63 |
| Electrical and System Engineering | 0.32 | 0.68 |
| Mathematics | 0.26 | 0.74 |
| Medicine | 0.42 | 0.58 |
| Physics | 0.36 | 0.64 |
| Other | 0.36 | 0.64 |
| Social and Behavioural Sciences | 0.34 | 0.66 |
| **Gesamt** | 0.36 | 0.64 |

Table 38: Have you already experienced research data loss? Answers per institution, absolute, n=3026

| Institution | Yes | No | Persons |
|---|---|---|---|
| Academy of Fine Arts Vienna | 9 | 6 | 15 |
| Vienna Chamber of Labour | 3 | 18 | 21 |
| Institute of Science and Technology (IST Austria) | 10 | 23 | 33 |
| Medical University Graz | 5 | 12 | 17 |
| Medical University of Innsbruck | 29 | 41 | 70 |
| Medical University of Vienna | 85 | 127 | 212 |
| Montanuniversität Leoben | 14 | 21 | 35 |
| Other | 31 | 71 | 102 |
| Graz University of Technology | 49 | 103 | 152 |
| Vienna University of Technology | 130 | 222 | 352 |
| University of Graz | 94 | 146 | 240 |
| University of Innsbruck | 92 | 165 | 257 |
| University of Klagenfurt | 30 | 54 | 84 |
| University of Linz | 45 | 60 | 105 |
| University of Salzburg | 21 | 54 | 75 |
| University of Vienna | 314 | 574 | 888 |
| University of Natural Resources and Life Sciences Vienna | 1 | 6 | 7 |
| University of Music and Performing Arts Graz | 7 | 8 | 15 |
| University of Music and Performing Arts Vienna | 11 | 27 | 38 |
| University of Applied Arts Vienna | 24 | 23 | 47 |
| University of Arts and Design Linz | 6 | 12 | 18 |
| University of Veterinary Medicine Vienna | 34 | 60 | 94 |
| Vienna University of Economics and Business | 24 | 69 | 93 |
| Austrian Academy of Sciences | 21 | 35 | 56 |
| **Sum of answers** | 1089 | 1937 | 3026 |

Table 39: Have you already experienced research data loss? Answers per person, relative distribution per institution, n=3026

| Institution | Yes | No |
|---|---|---|
| Academy of Fine Arts Vienna | 0.60 | 0.40 |
| Vienna Chamber of Labour | 0.14 | 0.86 |
| Institute of Science and Technology (IST Austria) | 0.30 | 0.70 |
| Medical University Graz | 0.29 | 0.71 |
| Medical University of Innsbruck | 0.41 | 0.59 |
| Medical University of Vienna | 0.40 | 0.60 |
| Montanuniversität Leoben | 0.40 | 0.60 |
| Other | 0.30 | 0.70 |
| Graz University of Technology | 0.32 | 0.68 |
| Vienna University of Technology | 0.37 | 0.63 |
| University of Graz | 0.39 | 0.61 |
| University of Innsbruck | 0.36 | 0.64 |
| University of Klagenfurt | 0.36 | 0.64 |
| University of Linz | 0.43 | 0.57 |
| University of Salzburg | 0.28 | 0.72 |
| University of Vienna | 0.35 | 0.65 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.86 |
| University of Music and Performing Arts Graz | 0.47 | 0.53 |
| University of Music and Performing Arts Vienna | 0.29 | 0.71 |
| University of Applied Arts Vienna | 0.51 | 0.49 |
| University of Arts and Design Linz | 0.33 | 0.67 |
| University of Veterinary Medicine Vienna | 0.36 | 0.64 |
| Vienna University of Economics and Business | 0.26 | 0.74 |
| Austrian Academy of Sciences | 0.38 | 0.63 |
| **Sum of answers** | 0.36 | 0.64 |

## *Ethical and legal aspects*

Table 40: Do you use any external data (i.e. not generated by you) in your own research? Answers per discipline, absolute, n=3026

| Discipline | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 4 | 16 | 7 | 18 | 0 | 2 | 43 | 47 |
| Biology | 34 | 114 | 90 | 81 | 20 | 3 | 287 | 342 |
| Chemistry | 22 | 61 | 50 | 40 | 17 | 1 | 167 | 191 |
| Humanities | 79 | 241 | 230 | 161 | 60 | 17 | 685 | 788 |
| Geoscience (including Geography) | 23 | 71 | 51 | 14 | 5 | 1 | 118 | 165 |
| Electrical and System Engineering | 42 | 172 | 123 | 58 | 14 | 7 | 324 | 416 |
| Mathematics | 12 | 42 | 26 | 33 | 1 | 1 | 104 | 115 |
| Medicine | 29 | 83 | 63 | 67 | 11 | 5 | 220 | 258 |
| Physics | 24 | 83 | 48 | 69 | 13 | 8 | 204 | 245 |
| Other | 50 | 141 | 153 | 86 | 32 | 11 | 381 | 473 |
| Social and Behavioural Sciences | 62 | 236 | 149 | 116 | 35 | 8 | 491 | 606 |
| **Sum of answers** | 381 | 1260 | 991 | 743 | 209 | 64 | 3026 | 3648 |

Table 41: Do you use any external data (i.e. not generated by you) in your own research? Answers per person, relative distribution per discipline, n=3026

| Discipline | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agricult., Forestry, Hortic. and Vet. Medicine | 0.09 | 0.37 | 0.16 | 0.42 | 0.00 | 0.05 |
| Biology | 0.12 | 0.40 | 0.31 | 0.28 | 0.07 | 0.01 |
| Chemistry | 0.13 | 0.37 | 0.30 | 0.24 | 0.10 | 0.01 |
| Humanities | 0.12 | 0.35 | 0.34 | 0.24 | 0.09 | 0.02 |
| Geoscience (including Geography) | 0.19 | 0.60 | 0.43 | 0.12 | 0.04 | 0.01 |
| Electrical and System Engineering | 0.13 | 0.53 | 0.38 | 0.18 | 0.04 | 0.02 |
| Mathematics | 0.12 | 0.40 | 0.25 | 0.32 | 0.01 | 0.01 |
| Medicine | 0.13 | 0.38 | 0.29 | 0.30 | 0.05 | 0.02 |
| Physics | 0.12 | 0.41 | 0.24 | 0.34 | 0.06 | 0.04 |
| Other | 0.13 | 0.37 | 0.40 | 0.23 | 0.08 | 0.03 |
| Social and Behavioural Sciences | 0.13 | 0.48 | 0.30 | 0.24 | 0.07 | 0.02 |
| **Sum of answers** | 0.13 | 0.42 | 0.33 | 0.25 | 0.07 | 0.02 |

Table 42: Do you use any external data (i.e. not generated by you) in your own research? Answers per option, relative distribution per discipline, n=3648

| Discipline | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.09 | 0.34 | 0.15 | 0.38 | 0.00 | 0.04 |
| Biology | 0.10 | 0.33 | 0.26 | 0.24 | 0.06 | 0.01 |
| Chemistry | 0.12 | 0.32 | 0.26 | 0.21 | 0.09 | 0.01 |
| Humanities | 0.10 | 0.31 | 0.29 | 0.20 | 0.08 | 0.02 |
| Geoscience (including Geography) | 0.14 | 0.43 | 0.31 | 0.08 | 0.03 | 0.01 |
| Electrical and System Engineering | 0.10 | 0.41 | 0.30 | 0.14 | 0.03 | 0.02 |
| Mathematics | 0.10 | 0.37 | 0.23 | 0.29 | 0.01 | 0.01 |
| Medicine | 0.11 | 0.32 | 0.24 | 0.26 | 0.04 | 0.02 |
| Physics | 0.10 | 0.34 | 0.20 | 0.28 | 0.05 | 0.03 |
| Other | 0.11 | 0.30 | 0.32 | 0.18 | 0.07 | 0.02 |
| Social and Behavioural Sciences | 0.10 | 0.39 | 0.25 | 0.19 | 0.06 | 0.01 |
| **Sum of answers** | 0.10 | 0.35 | 0.27 | 0.20 | 0.06 | 0.02 |

Table 43: Do you use any external data (i.e. not generated by you) in your own research? Answers per institution, absolute, n=3026

| Institution | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 1 | 5 | 4 | 3 | 2 | 1 | 15 | 16 |
| Vienna Chamber of Labour | 9 | 15 | 4 | 1 | 0 | 0 | 21 | 29 |
| Inst. of Science and Technology (IST Austria) | 2 | 14 | 8 | 10 | 3 | 0 | 33 | 37 |
| Medical University Graz | 0 | 6 | 5 | 5 | 2 | 0 | 17 | 18 |
| Medical University of Innsbruck | 8 | 30 | 23 | 23 | 1 | 3 | 70 | 88 |
| Medical University of Vienna | 26 | 88 | 56 | 63 | 10 | 5 | 212 | 248 |
| Montanuniversität Leoben | 1 | 14 | 10 | 11 | 3 | 0 | 35 | 39 |
| Other | 16 | 43 | 32 | 25 | 7 | 4 | 102 | 127 |
| Graz University of Technology | 22 | 85 | 47 | 24 | 7 | 4 | 152 | 189 |
| Vienna University of Technology | 52 | 153 | 138 | 77 | 17 | 6 | 352 | 443 |
| University of Graz | 35 | 89 | 77 | 61 | 20 | 4 | 240 | 286 |
| University of Innsbruck | 33 | 106 | 99 | 60 | 17 | 2 | 257 | 317 |
| University of Klagenfurt | 6 | 29 | 30 | 25 | 7 | 3 | 84 | 100 |
| University of Linz | 17 | 49 | 31 | 15 | 13 | 4 | 105 | 129 |
| University of Salzburg | 6 | 26 | 20 | 23 | 7 | 3 | 75 | 85 |
| University of Vienna | 101 | 362 | 290 | 215 | 73 | 20 | 888 | 1061 |
| Univ. of Natural Res. a. Life Sciences Vienna | 2 | 5 | 2 | 1 | 0 | 0 | 7 | 10 |
| University of Music and Perf. Arts Graz | 3 | 7 | 2 | 2 | 0 | 1 | 15 | 15 |
| University of Music and Perf. Arts Vienna | 4 | 14 | 11 | 11 | 5 | 0 | 38 | 45 |
| University of Applied Arts Vienna | 5 | 11 | 15 | 11 | 8 | 1 | 47 | 51 |
| University of Arts and Design Linz | 2 | 7 | 6 | 5 | 1 | 1 | 18 | 22 |
| University of Veterinary Medicine Vienna | 7 | 31 | 22 | 37 | 2 | 2 | 94 | 101 |
| Vienna University of Econ. and Business | 10 | 47 | 40 | 24 | 1 | 0 | 93 | 122 |
| Austrian Academy of Sciences | 13 | 24 | 19 | 11 | 3 | 0 | 56 | 70 |
| **Sum of answers** | 381 | 1260 | 991 | 743 | 209 | 64 | 3026 | 3648 |

Table 44: Do you use any external data (i.e. not generated by you) in your own research? Answers per person, relative distribution per institution, n=3026

| Institution | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.07 | 0.33 | 0.27 | 0.20 | 0.13 | 0.07 |
| Vienna Chamber of Labour | 0.43 | 0.71 | 0.19 | 0.05 | 0.00 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.06 | 0.42 | 0.24 | 0.30 | 0.09 | 0.00 |
| Medical University Graz | 0.00 | 0.35 | 0.29 | 0.29 | 0.12 | 0.00 |
| Medical University of Innsbruck | 0.11 | 0.43 | 0.33 | 0.33 | 0.01 | 0.04 |
| Medical University of Vienna | 0.12 | 0.42 | 0.26 | 0.30 | 0.05 | 0.02 |
| Montanuniversität Leoben | 0.03 | 0.40 | 0.29 | 0.31 | 0.09 | 0.00 |
| Other | 0.16 | 0.42 | 0.31 | 0.25 | 0.07 | 0.04 |
| Graz University of Technology | 0.14 | 0.56 | 0.31 | 0.16 | 0.05 | 0.03 |
| Vienna University of Technology | 0.15 | 0.43 | 0.39 | 0.22 | 0.05 | 0.02 |
| University of Graz | 0.15 | 0.37 | 0.32 | 0.25 | 0.08 | 0.02 |
| University of Innsbruck | 0.13 | 0.41 | 0.39 | 0.23 | 0.07 | 0.01 |
| University of Klagenfurt | 0.07 | 0.35 | 0.36 | 0.30 | 0.08 | 0.04 |
| University of Linz | 0.16 | 0.47 | 0.30 | 0.14 | 0.12 | 0.04 |
| University of Salzburg | 0.08 | 0.35 | 0.27 | 0.31 | 0.09 | 0.04 |
| University of Vienna | 0.11 | 0.41 | 0.33 | 0.24 | 0.08 | 0.02 |
| Univ. of Natural Resources a. Life Sciences Vienna | 0.29 | 0.71 | 0.29 | 0.14 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.20 | 0.47 | 0.13 | 0.13 | 0.00 | 0.07 |
| University of Music and Performing Arts Vienna | 0.11 | 0.37 | 0.29 | 0.29 | 0.13 | 0.00 |
| University of Applied Arts Vienna | 0.11 | 0.23 | 0.32 | 0.23 | 0.17 | 0.02 |
| University of Arts and Design Linz | 0.11 | 0.39 | 0.33 | 0.28 | 0.06 | 0.06 |
| University of Veterinary Medicine Vienna | 0.07 | 0.33 | 0.23 | 0.39 | 0.02 | 0.02 |
| Vienna University of Economics and Business | 0.11 | 0.51 | 0.43 | 0.26 | 0.01 | 0.00 |
| Austrian Academy of Sciences | 0.23 | 0.43 | 0.34 | 0.20 | 0.05 | 0.00 |
| **Sum of answers** | 0.13 | 0.42 | 0.33 | 0.25 | 0.07 | 0.02 |

Table 45: Do you use any external data (i.e. not generated by you) in your own research? Answers per option, relative distribution per institution, n=3648

| Institution | Immediately without any processing | After minimal processing | After substantial processing | Never | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.06 | 0.31 | 0.25 | 0.19 | 0.13 | 0.06 |
| Vienna Chamber of Labour | 0.31 | 0.52 | 0.14 | 0.03 | 0.00 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.05 | 0.38 | 0.22 | 0.27 | 0.08 | 0.00 |
| Medical University Graz | 0.00 | 0.33 | 0.28 | 0.28 | 0.11 | 0.00 |
| Medical University of Innsbruck | 0.09 | 0.34 | 0.26 | 0.26 | 0.01 | 0.03 |
| Medical University of Vienna | 0.10 | 0.35 | 0.23 | 0.25 | 0.04 | 0.02 |
| Montanuniversität Leoben | 0.03 | 0.36 | 0.26 | 0.28 | 0.08 | 0.00 |
| Other | 0.13 | 0.34 | 0.25 | 0.20 | 0.06 | 0.03 |
| Graz University of Technology | 0.12 | 0.45 | 0.25 | 0.13 | 0.04 | 0.02 |
| Vienna University of Technology | 0.12 | 0.35 | 0.31 | 0.17 | 0.04 | 0.01 |
| University of Graz | 0.12 | 0.31 | 0.27 | 0.21 | 0.07 | 0.01 |
| University of Innsbruck | 0.10 | 0.33 | 0.31 | 0.19 | 0.05 | 0.01 |
| University of Klagenfurt | 0.06 | 0.29 | 0.30 | 0.25 | 0.07 | 0.03 |
| University of Linz | 0.13 | 0.38 | 0.24 | 0.12 | 0.10 | 0.03 |
| University of Salzburg | 0.07 | 0.31 | 0.24 | 0.27 | 0.08 | 0.04 |
| University of Vienna | 0.10 | 0.34 | 0.27 | 0.20 | 0.07 | 0.02 |
| Univ. of Natural Resour. a. Life Sciences Vienna | 0.20 | 0.50 | 0.20 | 0.10 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.20 | 0.47 | 0.13 | 0.13 | 0.00 | 0.07 |
| University of Music and Performing Arts Vienna | 0.09 | 0.31 | 0.24 | 0.24 | 0.11 | 0.00 |
| University of Applied Arts Vienna | 0.10 | 0.22 | 0.29 | 0.22 | 0.16 | 0.02 |
| University of Arts and Design Linz | 0.09 | 0.32 | 0.27 | 0.23 | 0.05 | 0.05 |
| University of Veterinary Medicine Vienna | 0.07 | 0.31 | 0.22 | 0.37 | 0.02 | 0.02 |
| Vienna University of Economics and Business | 0.08 | 0.39 | 0.33 | 0.20 | 0.01 | 0.00 |
| Austrian Academy of Sciences | 0.19 | 0.34 | 0.27 | 0.16 | 0.04 | 0.00 |
| **Sum of answers** | 0.10 | 0.35 | 0.27 | 0.20 | 0.06 | 0.02 |

Table 46: Do you have any legal concerns regarding the use of external data? Answers per discipline, absolute, n=3026

| Discipline | No use of external data | Yes, sometimes | Yes, often | Never | Sometimes | I do not know | Persons | Sum of answers* |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 19 | 5 | 0 | 8 | 9 | 2 | 43 | 24 |
| Biology | 83 | 33 | 4 | 91 | 64 | 12 | 287 | 204 |
| Chemistry | 40 | 15 | 6 | 47 | 44 | 15 | 167 | 127 |
| Humanities | 171 | 138 | 38 | 148 | 151 | 39 | 685 | 514 |
| Geoscience (including Geography) | 15 | 19 | 5 | 32 | 43 | 4 | 118 | 103 |
| Electrical and System Engineering | 61 | 51 | 15 | 82 | 97 | 18 | 324 | 263 |
| Mathematics | 34 | 8 | 5 | 31 | 23 | 3 | 104 | 70 |
| Medicine | 69 | 20 | 6 | 67 | 49 | 9 | 220 | 151 |
| Physics | 76 | 14 | 4 | 61 | 38 | 11 | 204 | 128 |
| Other | 93 | 62 | 10 | 100 | 98 | 18 | 381 | 288 |
| Social and Behavioural Sciences | 121 | 76 | 12 | 105 | 147 | 30 | 491 | 370 |
| **Sum of answers** | 782 | 441 | 105 | 772 | 764 | 162 | 3026 | 2244 |

*) without "No use" in previous question

Table 47: Do you have any legal concerns regarding the use of external data? Answers per person, relative distribution per discipline, n=2244

| Discipline | Yes, sometimes | Yes, often | Never | Sometimes | I do not know |
|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 |
| Agriculture, Forestry, Horticulture and Veter. Medicine | 0.21 | 0.00 | 0.33 | 0.38 | 0.08 |
| Biology | 0.16 | 0.02 | 0.45 | 0.31 | 0.06 |
| Chemistry | 0.12 | 0.05 | 0.37 | 0.35 | 0.12 |
| Humanities | 0.27 | 0.07 | 0.29 | 0.29 | 0.08 |
| Geoscience (including Geography) | 0.18 | 0.05 | 0.31 | 0.42 | 0.04 |
| Electrical and System Engineering | 0.19 | 0.06 | 0.31 | 0.37 | 0.07 |
| Mathematics | 0.11 | 0.07 | 0.44 | 0.33 | 0.04 |
| Medicine | 0.13 | 0.04 | 0.44 | 0.32 | 0.06 |
| Physics | 0.11 | 0.03 | 0.48 | 0.30 | 0.09 |
| Other | 0.22 | 0.03 | 0.35 | 0.34 | 0.06 |
| Social and Behavioural Sciences | 0.21 | 0.03 | 0.28 | 0.40 | 0.08 |
| **Sum of answers** | 0.20 | 0.05 | 0.34 | 0.34 | 0.07 |

Table 48: Do you have any legal concerns regarding the use of external data? Answers per institution, absolute, n=3026

| Institution | No use of external data | Yes, sometimes | Yes, often | Never | Sometimes | I do not know | Persons | Sum of answers* |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 4 | 4 | 2 | 2 | 2 | 1 | 15 | 11 |
| Vienna Chamber of Labour | 1 | 5 | 0 | 6 | 7 | 2 | 21 | 20 |
| Institute of Science and Technology (IST Austria) | 10 | 2 | 1 | 9 | 7 | 4 | 33 | 23 |
| Medical University Graz | 5 | 3 | 0 | 4 | 3 | 2 | 17 | 12 |
| Medical University of Innsbruck | 25 | 8 | 1 | 22 | 12 | 2 | 70 | 45 |
| Medical University of Vienna | 66 | 21 | 2 | 68 | 46 | 9 | 212 | 146 |
| Montanuniversität Leoben | 11 | 4 | 0 | 12 | 8 | 0 | 35 | 24 |
| Other | 29 | 15 | 6 | 28 | 20 | 4 | 102 | 73 |
| Graz University of Technology | 28 | 26 | 6 | 46 | 37 | 9 | 152 | 124 |
| Vienna University of Technology | 81 | 48 | 11 | 96 | 98 | 18 | 352 | 271 |
| University of Graz | 65 | 33 | 2 | 66 | 60 | 14 | 240 | 175 |
| University of Innsbruck | 58 | 43 | 14 | 43 | 83 | 16 | 257 | 199 |
| University of Klagenfurt | 26 | 12 | 4 | 19 | 21 | 2 | 84 | 58 |
| University of Linz | 18 | 15 | 2 | 24 | 37 | 9 | 105 | 87 |
| University of Salzburg | 26 | 14 | 1 | 11 | 20 | 3 | 75 | 49 |
| University of Vienna | 225 | 128 | 38 | 243 | 207 | 47 | 888 | 663 |
| University of Natural Resources and Life Sciences Vienna | 1 | 0 | 1 | 3 | 2 | 0 | 7 | 6 |
| University of Music and Performing Arts Graz | 3 | 2 | 0 | 5 | 4 | 1 | 15 | 12 |
| University of Music and Performing Arts Vienna | 11 | 7 | 3 | 8 | 8 | 1 | 38 | 27 |
| University of Applied Arts Vienna | 11 | 14 | 2 | 7 | 9 | 4 | 47 | 36 |
| University of Arts and Design Linz | 6 | 3 | 0 | 1 | 5 | 3 | 18 | 12 |
| University of Veterinary Medicine Vienna | 38 | 8 | 0 | 21 | 22 | 5 | 94 | 56 |
| Vienna University of Economics and Business | 23 | 15 | 5 | 13 | 34 | 3 | 93 | 70 |
| Austrian Academy of Sciences | 11 | 11 | 4 | 15 | 12 | 3 | 56 | 45 |
| **Sum of answers** | 782 | 441 | 105 | 772 | 764 | 162 | 3026 | 2244 |

*) without ”No use“ in previous question

Table 49: Do you have any legal concerns regarding the use of external data? Answers per person, relative distribution per institution, n=2244

| Institution | Yes, sometimes | Yes, often | Never | Sometimes | I do not know |
|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.36 | 0.18 | 0.18 | 0.18 | 0.09 |
| Vienna Chamber of Labour | 0.25 | 0.00 | 0.30 | 0.35 | 0.10 |
| Institute of Science and Technology (IST Austria) | 0.09 | 0.04 | 0.39 | 0.30 | 0.17 |
| Medical University Graz | 0.25 | 0.00 | 0.33 | 0.25 | 0.17 |
| Medical University of Innsbruck | 0.18 | 0.02 | 0.49 | 0.27 | 0.04 |
| Medical University of Vienna | 0.14 | 0.01 | 0.47 | 0.32 | 0.06 |
| Montanuniversität Leoben | 0.17 | 0.00 | 0.50 | 0.33 | 0.00 |
| Other | 0.21 | 0.08 | 0.38 | 0.27 | 0.05 |
| Graz University of Technology | 0.21 | 0.05 | 0.37 | 0.30 | 0.07 |
| Vienna University of Technology | 0.18 | 0.04 | 0.35 | 0.36 | 0.07 |
| University of Graz | 0.19 | 0.01 | 0.38 | 0.34 | 0.08 |
| University of Innsbruck | 0.22 | 0.07 | 0.22 | 0.42 | 0.08 |
| University of Klagenfurt | 0.21 | 0.07 | 0.33 | 0.36 | 0.03 |
| University of Linz | 0.17 | 0.02 | 0.28 | 0.43 | 0.10 |
| University of Salzburg | 0.29 | 0.02 | 0.22 | 0.41 | 0.06 |
| University of Vienna | 0.19 | 0.06 | 0.37 | 0.31 | 0.07 |
| University of Natural Resources and Life Sciences Vienna | 0.00 | 0.17 | 0.50 | 0.33 | 0.00 |
| University of Music and Performing Arts Graz | 0.17 | 0.00 | 0.42 | 0.33 | 0.08 |
| University of Music and Performing Arts Vienna | 0.26 | 0.11 | 0.30 | 0.30 | 0.04 |
| University of Applied Arts Vienna | 0.39 | 0.06 | 0.19 | 0.25 | 0.11 |
| University of Arts and Design Linz | 0.25 | 0.00 | 0.08 | 0.42 | 0.25 |
| University of Veterinary Medicine Vienna | 0.14 | 0.00 | 0.38 | 0.39 | 0.09 |
| Vienna University of Economics and Business | 0.21 | 0.07 | 0.19 | 0.49 | 0.04 |
| Austrian Academy of Sciences | 0.24 | 0.09 | 0.33 | 0.27 | 0.07 |
| **Sum of answers** | 0.20 | 0.05 | 0.34 | 0.34 | 0.07 |

Table 50: What normally happens with the research data you generated when you leave the institution? Answers per discipline, absolute, n=3026

| Discipline | Remain at the institution | Data are taken | Data are deleted | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|
| Not specified | 0 | 1 | 0 | 1 | 0 | 2 | 2 |
| Agric., Forestry, Hortic. and Vet. Medicine | 37 | 16 | 1 | 7 | 1 | 43 | 62 |
| Biology | 226 | 138 | 11 | 34 | 3 | 287 | 412 |
| Chemistry | 131 | 67 | 15 | 22 | 3 | 167 | 238 |
| Humanities | 232 | 399 | 42 | 174 | 24 | 685 | 871 |
| Geoscience (including Geography) | 89 | 63 | 9 | 15 | 0 | 118 | 176 |
| Electrical and System Engineering | 248 | 115 | 25 | 63 | 4 | 324 | 455 |
| Mathematics | 51 | 54 | 7 | 21 | 2 | 104 | 135 |
| Medicine | 151 | 77 | 13 | 43 | 6 | 220 | 290 |
| Physics | 147 | 107 | 16 | 34 | 1 | 204 | 305 |
| Other | 210 | 175 | 35 | 86 | 13 | 381 | 519 |
| Social and Behavioural Sciences | 231 | 263 | 39 | 116 | 7 | 491 | 656 |
| **Sum of answers** | 1753 | 1475 | 213 | 616 | 64 | 3026 | 4121 |

Table 51: What normally happens with the research data you generated when you leave the institution? Answers per person, relative distribution per discipline, n=3026

| Discipline | Remain at the institution | Data are taken | Data are deleted | I do not know | Other |
|---|---|---|---|---|---|
| Not specified | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.86 | 0.37 | 0.02 | 0.16 | 0.02 |
| Biology | 0.79 | 0.48 | 0.04 | 0.12 | 0.01 |
| Chemistry | 0.78 | 0.40 | 0.09 | 0.13 | 0.02 |
| Humanities | 0.34 | 0.58 | 0.06 | 0.25 | 0.04 |
| Geoscience (including Geography) | 0.75 | 0.53 | 0.08 | 0.13 | 0.00 |
| Electrical and System Engineering | 0.77 | 0.35 | 0.08 | 0.19 | 0.01 |
| Mathematics | 0.49 | 0.52 | 0.07 | 0.20 | 0.02 |
| Medicine | 0.69 | 0.35 | 0.06 | 0.20 | 0.03 |
| Physics | 0.72 | 0.52 | 0.08 | 0.17 | 0.00 |
| Other | 0.55 | 0.46 | 0.09 | 0.23 | 0.03 |
| Social and Behavioural Sciences | 0.47 | 0.54 | 0.08 | 0.24 | 0.01 |
| **Sum of answers** | 0.58 | 0.49 | 0.07 | 0.20 | 0.02 |

Table 52: What normally happens with the research data you generated when you leave the institution? Answers per option, relative distribution per discipline, n=4121

| Discipline | Remain at the institution | Data are taken | Data are deleted | I do not know | Other |
|---|---|---|---|---|---|
| Not specified | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.60 | 0.26 | 0.02 | 0.11 | 0.02 |
| Biology | 0.55 | 0.33 | 0.03 | 0.08 | 0.01 |
| Chemistry | 0.55 | 0.28 | 0.06 | 0.09 | 0.01 |
| Humanities | 0.27 | 0.46 | 0.05 | 0.20 | 0.03 |
| Geoscience (including Geography) | 0.51 | 0.36 | 0.05 | 0.09 | 0.00 |
| Electrical and System Engineering | 0.55 | 0.25 | 0.05 | 0.14 | 0.01 |
| Mathematics | 0.38 | 0.40 | 0.05 | 0.16 | 0.01 |
| Medicine | 0.52 | 0.27 | 0.04 | 0.15 | 0.02 |
| Physics | 0.48 | 0.35 | 0.05 | 0.11 | 0.00 |
| Other | 0.40 | 0.34 | 0.07 | 0.17 | 0.03 |
| Social and Behavioural Sciences | 0.35 | 0.40 | 0.06 | 0.18 | 0.01 |
| **Sum of answers** | 0.43 | 0.36 | 0.05 | 0.15 | 0.02 |

Table 53: What normally happens with the research data you generated when you leave the institution? Answers per institution, absolute, n=3026

| Institution | Remain at the institution | Data are taken | Data are deleted | I do not know | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 7 | 9 | 0 | 4 | 0 | 15 | 20 |
| Vienna Chamber of Labour | 17 | 7 | 3 | 5 | 0 | 21 | 32 |
| Institute of Science and Technology (IST Austria) | 21 | 13 | 1 | 10 | 0 | 33 | 45 |
| Medical University Graz | 11 | 4 | 0 | 4 | 0 | 17 | 19 |
| Medical University of Innsbruck | 48 | 26 | 6 | 15 | 1 | 70 | 96 |
| Medical University of Vienna | 149 | 75 | 15 | 36 | 5 | 212 | 280 |
| Montanuniversität Leoben | 29 | 13 | 1 | 3 | 0 | 35 | 46 |
| Other | 47 | 38 | 9 | 25 | 5 | 102 | 124 |
| Graz University of Technology | 120 | 55 | 9 | 24 | 3 | 152 | 211 |
| Vienna University of Technology | 256 | 151 | 26 | 66 | 5 | 352 | 504 |
| University of Graz | 123 | 135 | 15 | 45 | 4 | 240 | 322 |
| University of Innsbruck | 138 | 128 | 26 | 58 | 6 | 257 | 356 |
| University of Klagenfurt | 41 | 48 | 6 | 23 | 1 | 84 | 119 |
| University of Linz | 71 | 50 | 9 | 20 | 2 | 105 | 152 |
| University of Salzburg | 39 | 43 | 7 | 12 | 2 | 75 | 103 |
| University of Vienna | 406 | 496 | 64 | 194 | 22 | 888 | 1182 |
| Univ. of Natural Res.and Life Sciences Vienna | 6 | 6 | 0 | 0 | 0 | 7 | 12 |
| Univ. of Music and Performing Arts Graz | 5 | 7 | 0 | 5 | 1 | 15 | 18 |
| Univ. of Music and Perform. Arts Vienna | 17 | 20 | 2 | 9 | 1 | 38 | 49 |
| University of Applied Arts Vienna | 18 | 30 | 3 | 12 | 2 | 47 | 65 |
| University of Arts and Design Linz | 15 | 9 | 0 | 3 | 0 | 18 | 27 |
| University of Veterinary Medicine Vienna | 80 | 33 | 2 | 13 | 2 | 94 | 130 |
| Vienna Univ. of Economics and Business | 48 | 52 | 7 | 23 | 2 | 93 | 132 |
| Austrian Academy of Sciences | 41 | 27 | 2 | 7 | 0 | 56 | 77 |
| **Sum of answers** | 1753 | 1475 | 213 | 616 | 64 | 3026 | 4121 |

Table 54: What normally happens with the research data you generated when you leave the institution? Answers per person, relative distribution per institution, n=3026

| Institution | Remain at the institution | Data are taken | Data are deleted | I do not know | Other |
|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.47 | 0.60 | 0.00 | 0.27 | 0.00 |
| Vienna Chamber of Labour | 0.81 | 0.33 | 0.14 | 0.24 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.64 | 0.39 | 0.03 | 0.30 | 0.00 |
| Medical University Graz | 0.65 | 0.24 | 0.00 | 0.24 | 0.00 |
| Medical University of Innsbruck | 0.69 | 0.37 | 0.09 | 0.21 | 0.01 |
| Medical University of Vienna | 0.70 | 0.35 | 0.07 | 0.17 | 0.02 |
| Montanuniversität Leoben | 0.83 | 0.37 | 0.03 | 0.09 | 0.00 |
| Other | 0.46 | 0.37 | 0.09 | 0.25 | 0.05 |
| Graz University of Technology | 0.79 | 0.36 | 0.06 | 0.16 | 0.02 |
| Vienna University of Technology | 0.73 | 0.43 | 0.07 | 0.19 | 0.01 |
| University of Graz | 0.51 | 0.56 | 0.06 | 0.19 | 0.02 |
| University of Innsbruck | 0.54 | 0.50 | 0.10 | 0.23 | 0.02 |
| University of Klagenfurt | 0.49 | 0.57 | 0.07 | 0.27 | 0.01 |
| University of Linz | 0.68 | 0.48 | 0.09 | 0.19 | 0.02 |
| University of Salzburg | 0.52 | 0.57 | 0.09 | 0.16 | 0.03 |
| University of Vienna | 0.46 | 0.56 | 0.07 | 0.22 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.86 | 0.86 | 0.00 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.33 | 0.47 | 0.00 | 0.33 | 0.07 |
| University of Music and Performing Arts Vienna | 0.45 | 0.53 | 0.05 | 0.24 | 0.03 |
| University of Applied Arts Vienna | 0.38 | 0.64 | 0.06 | 0.26 | 0.04 |
| University of Arts and Design Linz | 0.83 | 0.50 | 0.00 | 0.17 | 0.00 |
| University of Veterinary Medicine Vienna | 0.85 | 0.35 | 0.02 | 0.14 | 0.02 |
| Vienna University of Economics and Business | 0.52 | 0.56 | 0.08 | 0.25 | 0.02 |
| Austrian Academy of Sciences | 0.73 | 0.48 | 0.04 | 0.13 | 0.00 |
| **Sum of answers** | 0.58 | 0.49 | 0.07 | 0.20 | 0.02 |

Table 55: What normally happens with the research data you generated when you leave the institution? Answers per option, relative distribution per institution, n=4121

| Institution | Remain at the institution | Data are taken | Data are deleted | I do not know | Other |
|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.35 | 0.45 | 0.00 | 0.20 | 0.00 |
| Vienna Chamber of Labour | 0.53 | 0.22 | 0.09 | 0.16 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.47 | 0.29 | 0.02 | 0.22 | 0.00 |
| Medical University Graz | 0.58 | 0.21 | 0.00 | 0.21 | 0.00 |
| Medical University of Innsbruck | 0.50 | 0.27 | 0.06 | 0.16 | 0.01 |
| Medical University of Vienna | 0.53 | 0.27 | 0.05 | 0.13 | 0.02 |
| Montanuniversität Leoben | 0.63 | 0.28 | 0.02 | 0.07 | 0.00 |
| Other | 0.38 | 0.31 | 0.07 | 0.20 | 0.04 |
| Graz University of Technology | 0.57 | 0.26 | 0.04 | 0.11 | 0.01 |
| Vienna University of Technology | 0.51 | 0.30 | 0.05 | 0.13 | 0.01 |
| University of Graz | 0.38 | 0.42 | 0.05 | 0.14 | 0.01 |
| University of Innsbruck | 0.39 | 0.36 | 0.07 | 0.16 | 0.02 |
| University of Klagenfurt | 0.34 | 0.40 | 0.05 | 0.19 | 0.01 |
| University of Linz | 0.47 | 0.33 | 0.06 | 0.13 | 0.01 |
| University of Salzburg | 0.38 | 0.42 | 0.07 | 0.12 | 0.02 |
| University of Vienna | 0.34 | 0.42 | 0.05 | 0.16 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.50 | 0.50 | 0.00 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.28 | 0.39 | 0.00 | 0.28 | 0.06 |
| University of Music and Performing Arts Vienna | 0.35 | 0.41 | 0.04 | 0.18 | 0.02 |
| University of Applied Arts Vienna | 0.28 | 0.46 | 0.05 | 0.18 | 0.03 |
| University of Arts and Design Linz | 0.56 | 0.33 | 0.00 | 0.11 | 0.00 |
| University of Veterinary Medicine Vienna | 0.62 | 0.25 | 0.02 | 0.10 | 0.02 |
| Vienna University of Economics and Business | 0.36 | 0.39 | 0.05 | 0.17 | 0.02 |
| Austrian Academy of Sciences | 0.53 | 0.35 | 0.03 | 0.09 | 0.00 |
| **Sum of answers** | 0.43 | 0.36 | 0.05 | 0.15 | 0.02 |

Table 56: Do you use or generate sensitive or confidental research data? Answers per discipline, absolute, n=3026

| Discipline | Hardly ever | Some-times | Never | Often | I do not know | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|
| Not specified | 0 | 1 | 0 | 0 | 1 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Vet. Medicine | 18 | 15 | 5 | 5 | 0 | 43 | 43 |
| Biology | 90 | 88 | 62 | 43 | 4 | 287 | 287 |
| Chemistry | 54 | 67 | 17 | 26 | 3 | 167 | 167 |
| Humanities | 228 | 154 | 229 | 56 | 18 | 685 | 685 |
| Geoscience (including Geography) | 54 | 33 | 27 | 4 | 0 | 118 | 118 |
| Electrical and System Engineering | 86 | 149 | 42 | 45 | 2 | 324 | 324 |
| Mathematics | 30 | 13 | 55 | 2 | 4 | 104 | 104 |
| Medicine | 40 | 77 | 13 | 89 | 1 | 220 | 220 |
| Physics | 66 | 38 | 79 | 16 | 5 | 204 | 204 |
| Other | 109 | 125 | 79 | 59 | 9 | 381 | 381 |
| Social and Behavioural Sciences | 140 | 185 | 49 | 113 | 4 | 491 | 491 |
| **Sum of answers** | 915 | 945 | 657 | 458 | 51 | 3026 | 3026 |

Table 57: Do you use or generate sensitive or confidental research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | Hardly ever | Sometimes | Never | Often | I do not know |
|---|---|---|---|---|---|
| Not specified | 0.00 | 0.50 | 0.00 | 0.00 | 0.50 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.42 | 0.35 | 0.12 | 0.12 | 0.00 |
| Biology | 0.31 | 0.31 | 0.22 | 0.15 | 0.01 |
| Chemistry | 0.32 | 0.40 | 0.10 | 0.16 | 0.02 |
| Humanities | 0.33 | 0.22 | 0.33 | 0.08 | 0.03 |
| Geoscience (including Geography) | 0.46 | 0.28 | 0.23 | 0.03 | 0.00 |
| Electrical and System Engineering | 0.27 | 0.46 | 0.13 | 0.14 | 0.01 |
| Mathematics | 0.29 | 0.13 | 0.53 | 0.02 | 0.04 |
| Medicine | 0.18 | 0.35 | 0.06 | 0.40 | 0.00 |
| Physics | 0.32 | 0.19 | 0.39 | 0.08 | 0.02 |
| Other | 0.29 | 0.33 | 0.21 | 0.15 | 0.02 |
| Social and Behavioural Sciences | 0.29 | 0.38 | 0.10 | 0.23 | 0.01 |
| **Sum of answers** | 0.30 | 0.31 | 0.22 | 0.15 | 0.02 |

Table 58: Do you use or generate sensitive or confidental research data? Answers per institution, absolute, n=3026

| Institution | Hardly ever | Sometimes | Never | Often | I do not know | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 4 | 4 | 2 | 5 | 0 | 15 | 15 |
| Vienna Chamber of Labour | 5 | 10 | 5 | 1 | 0 | 21 | 21 |
| Institute of Science and Technology (IST Austria) | 9 | 4 | 17 | 2 | 1 | 33 | 33 |
| Medical University Graz | 5 | 4 | 0 | 7 | 1 | 17 | 17 |
| Medical University of Innsbruck | 13 | 30 | 5 | 21 | 1 | 70 | 70 |
| Medical University of Vienna | 42 | 73 | 15 | 79 | 3 | 212 | 212 |
| Montanuniversität Leoben | 8 | 13 | 4 | 10 | 0 | 35 | 35 |
| Other | 32 | 33 | 22 | 13 | 2 | 102 | 102 |
| Graz University of Technology | 36 | 63 | 25 | 27 | 1 | 152 | 152 |
| Vienna University of Technology | 106 | 124 | 67 | 52 | 3 | 352 | 352 |
| University of Graz | 70 | 75 | 60 | 31 | 4 | 240 | 240 |
| University of Innsbruck | 91 | 65 | 69 | 25 | 7 | 257 | 257 |
| University of Klagenfurt | 25 | 27 | 18 | 13 | 1 | 84 | 84 |
| University of Linz | 34 | 45 | 11 | 12 | 3 | 105 | 105 |
| University of Salzburg | 31 | 21 | 15 | 8 | 0 | 75 | 75 |
| University of Vienna | 278 | 234 | 260 | 99 | 17 | 888 | 888 |
| Univ. of Natural Resour. and Life Sciences Vienna | 4 | 2 | 0 | 1 | 0 | 7 | 7 |
| University of Music and Performing Arts Graz | 5 | 6 | 4 | 0 | 0 | 15 | 15 |
| University of Music and Performing Arts Vienna | 11 | 14 | 9 | 4 | 0 | 38 | 38 |
| University of Applied Arts Vienna | 17 | 12 | 12 | 5 | 1 | 47 | 47 |
| University of Arts and Design Linz | 7 | 2 | 6 | 2 | 1 | 18 | 18 |
| University of Veterinary Medicine Vienna | 30 | 34 | 13 | 15 | 2 | 94 | 94 |
| Vienna University of Economics and Business | 31 | 31 | 8 | 21 | 2 | 93 | 93 |
| Austrian Academy of Sciences | 21 | 19 | 10 | 5 | 1 | 56 | 56 |
| **Sum of answers** | 915 | 945 | 657 | 458 | 51 | 3026 | 3026 |

Table 59: Do you use or generate sensitive or confidental research data? Answers per person, relative distribution per institution, n=3026

| Institution | Hardly ever | Sometimes | Never | Often | I do not know |
|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.27 | 0.27 | 0.13 | 0.33 | 0.00 |
| Vienna Chamber of Labour | 0.24 | 0.48 | 0.24 | 0.05 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.27 | 0.12 | 0.52 | 0.06 | 0.03 |
| Medical University Graz | 0.29 | 0.24 | 0.00 | 0.41 | 0.06 |
| Medical University of Innsbruck | 0.19 | 0.43 | 0.07 | 0.30 | 0.01 |
| Medical University of Vienna | 0.20 | 0.34 | 0.07 | 0.37 | 0.01 |
| Montanuniversität Leoben | 0.23 | 0.37 | 0.11 | 0.29 | 0.00 |
| Other | 0.31 | 0.32 | 0.22 | 0.13 | 0.02 |
| Graz University of Technology | 0.24 | 0.41 | 0.16 | 0.18 | 0.01 |
| Vienna University of Technology | 0.30 | 0.35 | 0.19 | 0.15 | 0.01 |
| University of Graz | 0.29 | 0.31 | 0.25 | 0.13 | 0.02 |
| University of Innsbruck | 0.35 | 0.25 | 0.27 | 0.10 | 0.03 |
| University of Klagenfurt | 0.30 | 0.32 | 0.21 | 0.15 | 0.01 |
| University of Linz | 0.32 | 0.43 | 0.10 | 0.11 | 0.03 |
| University of Salzburg | 0.41 | 0.28 | 0.20 | 0.11 | 0.00 |
| University of Vienna | 0.31 | 0.26 | 0.29 | 0.11 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.57 | 0.29 | 0.00 | 0.14 | 0.00 |
| University of Music and Performing Arts Graz | 0.33 | 0.40 | 0.27 | 0.00 | 0.00 |
| University of Music and Performing Arts Vienna | 0.29 | 0.37 | 0.24 | 0.11 | 0.00 |
| University of Applied Arts Vienna | 0.36 | 0.26 | 0.26 | 0.11 | 0.02 |
| University of Arts and Design Linz | 0.39 | 0.11 | 0.33 | 0.11 | 0.06 |
| University of Veterinary Medicine Vienna | 0.32 | 0.36 | 0.14 | 0.16 | 0.02 |
| Vienna University of Economics and Business | 0.33 | 0.33 | 0.09 | 0.23 | 0.02 |
| Austrian Academy of Sciences | 0.38 | 0.34 | 0.18 | 0.09 | 0.02 |
| **Sum of answers** | 0.30 | 0.31 | 0.22 | 0.15 | 0.02 |

## *Accessibility and reuse*

Table 60: Whom do you grant access to your research data? Answers per discipline, absolute, n=3026

| Discipline | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veter. Medicine | 1 | 9 | 8 | 31 | 22 | 1 | 2 | 43 | 74 |
| Biology | 37 | 94 | 60 | 178 | 161 | 11 | 4 | 287 | 545 |
| Chemistry | 11 | 44 | 46 | 99 | 78 | 10 | 3 | 167 | 291 |
| Humanities | 87 | 187 | 78 | 277 | 449 | 88 | 13 | 685 | 1179 |
| Geoscience (incl. Geography) | 11 | 46 | 28 | 62 | 86 | 6 | 2 | 118 | 241 |
| Electrical and System Engineering | 32 | 97 | 102 | 191 | 183 | 17 | 13 | 324 | 635 |
| Mathematics | 16 | 33 | 19 | 31 | 62 | 5 | 5 | 104 | 171 |
| Medicine | 10 | 38 | 32 | 158 | 80 | 16 | 6 | 220 | 340 |
| Physics | 22 | 58 | 41 | 118 | 135 | 8 | 9 | 204 | 391 |
| Other | 60 | 109 | 69 | 194 | 206 | 36 | 9 | 381 | 683 |
| Social and Behav. Sciences | 47 | 127 | 73 | 259 | 260 | 62 | 15 | 491 | 843 |
| **Sum of answers** | 334 | 842 | 556 | 1598 | 1722 | 261 | 82 | 3026 | 5395 |

Table 61: Whom do you grant access to your research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other |
|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 |
| Agriculture, Forestry, Horticulture and Veter. Medicine | 0.02 | 0.21 | 0.19 | 0.72 | 0.51 | 0.02 | 0.05 |
| Biology | 0.13 | 0.33 | 0.21 | 0.62 | 0.56 | 0.04 | 0.01 |
| Chemistry | 0.07 | 0.26 | 0.28 | 0.59 | 0.47 | 0.06 | 0.02 |
| Humanities | 0.13 | 0.27 | 0.11 | 0.40 | 0.66 | 0.13 | 0.02 |
| Geoscience (incl. Geography) | 0.09 | 0.39 | 0.24 | 0.53 | 0.73 | 0.05 | 0.02 |
| Electrical and System Engineering | 0.10 | 0.30 | 0.31 | 0.59 | 0.56 | 0.05 | 0.04 |
| Mathematics | 0.15 | 0.32 | 0.18 | 0.30 | 0.60 | 0.05 | 0.05 |
| Medicine | 0.05 | 0.17 | 0.15 | 0.72 | 0.36 | 0.07 | 0.03 |
| Physics | 0.11 | 0.28 | 0.20 | 0.58 | 0.66 | 0.04 | 0.04 |
| Other | 0.16 | 0.29 | 0.18 | 0.51 | 0.54 | 0.09 | 0.02 |
| Social and Behav. Sciences | 0.10 | 0.26 | 0.15 | 0.53 | 0.53 | 0.13 | 0.03 |
| **Sum of answers** | 0.11 | 0.28 | 0.18 | 0.53 | 0.57 | 0.09 | 0.03 |

Table 62: Whom do you grant access to your research data? Answers per option, relative distribution per discipline, n=5395

| Discipline | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other |
|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.01 | 0.12 | 0.11 | 0.42 | 0.30 | 0.01 | 0.03 |
| Biology | 0.07 | 0.17 | 0.11 | 0.33 | 0.30 | 0.02 | 0.01 |
| Chemistry | 0.04 | 0.15 | 0.16 | 0.34 | 0.27 | 0.03 | 0.01 |
| Humanities | 0.07 | 0.16 | 0.07 | 0.23 | 0.38 | 0.07 | 0.01 |
| Geoscience (including Geography) | 0.05 | 0.19 | 0.12 | 0.26 | 0.36 | 0.02 | 0.01 |
| Electrical and System Engineering | 0.05 | 0.15 | 0.16 | 0.30 | 0.29 | 0.03 | 0.02 |
| Mathematics | 0.09 | 0.19 | 0.11 | 0.18 | 0.36 | 0.03 | 0.03 |
| Medicine | 0.03 | 0.11 | 0.09 | 0.46 | 0.24 | 0.05 | 0.02 |
| Physics | 0.06 | 0.15 | 0.10 | 0.30 | 0.35 | 0.02 | 0.02 |
| Other | 0.09 | 0.16 | 0.10 | 0.28 | 0.30 | 0.05 | 0.01 |
| Social and Behavioural Sciences | 0.06 | 0.15 | 0.09 | 0.31 | 0.31 | 0.07 | 0.02 |
| **Sum of answers** | 0.06 | 0.16 | 0.10 | 0.30 | 0.32 | 0.05 | 0.02 |

Table 63: Whom do you grant access to your research data? Answers per institution, absolute, n=3026

| Institution | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 1 | 2 | 2 | 5 | 11 | 0 | 0 | 15 | 21 |
| Vienna Chamber of Labour | 5 | 10 | 7 | 12 | 9 | 1 | 1 | 21 | 45 |
| Instit. of Science and Technology (IST Austria) | 1 | 7 | 2 | 14 | 20 | 1 | 0 | 33 | 45 |
| Medical University Graz | 2 | 4 | 4 | 11 | 8 | 0 | 0 | 17 | 29 |
| Medical University of Innsbruck | 6 | 15 | 13 | 49 | 30 | 4 | 2 | 70 | 119 |
| Medical University of Vienna | 12 | 42 | 22 | 156 | 90 | 16 | 6 | 212 | 344 |
| Montanuniversität Leoben | 2 | 6 | 6 | 25 | 15 | 1 | 1 | 35 | 56 |
| Other | 13 | 27 | 24 | 31 | 64 | 22 | 3 | 102 | 184 |
| Graz University of Technology | 13 | 45 | 50 | 85 | 82 | 4 | 4 | 152 | 283 |
| Vienna University of Technology | 37 | 93 | 99 | 202 | 212 | 20 | 14 | 352 | 677 |
| University of Graz | 29 | 88 | 37 | 124 | 146 | 22 | 5 | 240 | 451 |
| University of Innsbruck | 34 | 80 | 46 | 149 | 164 | 24 | 2 | 257 | 499 |
| University of Klagenfurt | 10 | 25 | 12 | 47 | 46 | 8 | 3 | 84 | 151 |
| University of Linz | 13 | 39 | 35 | 53 | 50 | 4 | 3 | 105 | 197 |
| University of Salzburg | 10 | 24 | 7 | 29 | 40 | 8 | 1 | 75 | 119 |
| University of Vienna | 100 | 234 | 116 | 407 | 536 | 101 | 20 | 888 | 1514 |
| Univ. of Natural Resour. and Life Sciences Vienna | 1 | 2 | 0 | 3 | 5 | 1 | 0 | 7 | 12 |
| University of Music and Performing Arts Graz | 2 | 7 | 1 | 8 | 11 | 1 | 0 | 15 | 30 |
| University of Music and Performing Arts Vienna | 3 | 9 | 6 | 18 | 25 | 5 | 0 | 38 | 66 |
| University of Applied Arts Vienna | 6 | 14 | 7 | 17 | 37 | 2 | 1 | 47 | 84 |
| University of Arts and Design Linz | 8 | 6 | 8 | 6 | 9 | 2 | 1 | 18 | 40 |
| University of Veterinary Medicine Vienna | 5 | 21 | 24 | 63 | 38 | 2 | 2 | 94 | 155 |
| Vienna University of Economics and Business | 9 | 21 | 13 | 54 | 42 | 10 | 11 | 93 | 160 |
| Austrian Academy of Sciences | 12 | 21 | 15 | 30 | 32 | 2 | 2 | 56 | 114 |
| **Sum of answers** | 334 | 842 | 556 | 1598 | 1722 | 261 | 82 | 3026 | 5395 |

Table 64: Whom do you grant access to your research data? Answers per person, relative distribution per institution, n=3026

| Institution | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.07 | 0.13 | 0.13 | 0.33 | 0.73 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.24 | 0.48 | 0.33 | 0.57 | 0.43 | 0.05 | 0.05 |
| Institute of Science and Technology (IST Austria) | 0.03 | 0.21 | 0.06 | 0.42 | 0.61 | 0.03 | 0.00 |
| Medical University Graz | 0.12 | 0.24 | 0.24 | 0.65 | 0.47 | 0.00 | 0.00 |
| Medical University of Innsbruck | 0.09 | 0.21 | 0.19 | 0.70 | 0.43 | 0.06 | 0.03 |
| Medical University of Vienna | 0.06 | 0.20 | 0.10 | 0.74 | 0.42 | 0.08 | 0.03 |
| Montanuniversität Leoben | 0.06 | 0.17 | 0.17 | 0.71 | 0.43 | 0.03 | 0.03 |
| Other | 0.13 | 0.26 | 0.24 | 0.30 | 0.63 | 0.22 | 0.03 |
| Graz University of Technology | 0.09 | 0.30 | 0.33 | 0.56 | 0.54 | 0.03 | 0.03 |
| Vienna University of Technology | 0.11 | 0.26 | 0.28 | 0.57 | 0.60 | 0.06 | 0.04 |
| University of Graz | 0.12 | 0.37 | 0.15 | 0.52 | 0.61 | 0.09 | 0.02 |
| University of Innsbruck | 0.13 | 0.31 | 0.18 | 0.58 | 0.64 | 0.09 | 0.01 |
| University of Klagenfurt | 0.12 | 0.30 | 0.14 | 0.56 | 0.55 | 0.10 | 0.04 |
| University of Linz | 0.12 | 0.37 | 0.33 | 0.50 | 0.48 | 0.04 | 0.03 |
| University of Salzburg | 0.13 | 0.32 | 0.09 | 0.39 | 0.53 | 0.11 | 0.01 |
| University of Vienna | 0.11 | 0.26 | 0.13 | 0.46 | 0.60 | 0.11 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.29 | 0.00 | 0.43 | 0.71 | 0.14 | 0.00 |
| University of Music and Performing Arts Graz | 0.13 | 0.47 | 0.07 | 0.53 | 0.73 | 0.07 | 0.00 |
| University of Music and Performing Arts Vienna | 0.08 | 0.24 | 0.16 | 0.47 | 0.66 | 0.13 | 0.00 |
| University of Applied Arts Vienna | 0.13 | 0.30 | 0.15 | 0.36 | 0.79 | 0.04 | 0.02 |
| University of Arts and Design Linz | 0.44 | 0.33 | 0.44 | 0.33 | 0.50 | 0.11 | 0.06 |
| University of Veterinary Medicine Vienna | 0.05 | 0.22 | 0.26 | 0.67 | 0.40 | 0.02 | 0.02 |
| Vienna University of Economics and Business | 0.10 | 0.23 | 0.14 | 0.58 | 0.45 | 0.11 | 0.12 |
| Austrian Academy of Sciences | 0.21 | 0.38 | 0.27 | 0.54 | 0.57 | 0.04 | 0.04 |
| **Sum of answers** | 0.11 | 0.28 | 0.18 | 0.53 | 0.57 | 0.09 | 0.03 |

Table 65: Whom do you grant access to your research data? Answers per option, relative distribution per institution, n=5395

| Institution | The public | The scientific community | Members of my institution | Selected members of my institution | Interested persons by request | No one | Other |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.05 | 0.10 | 0.10 | 0.24 | 0.52 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.11 | 0.22 | 0.16 | 0.27 | 0.20 | 0.02 | 0.02 |
| Institute of Science and Technology (IST Austria) | 0.02 | 0.16 | 0.04 | 0.31 | 0.44 | 0.02 | 0.00 |
| Medical University Graz | 0.07 | 0.14 | 0.14 | 0.38 | 0.28 | 0.00 | 0.00 |
| Medical University of Innsbruck | 0.05 | 0.13 | 0.11 | 0.41 | 0.25 | 0.03 | 0.02 |
| Medical University of Vienna | 0.03 | 0.12 | 0.06 | 0.45 | 0.26 | 0.05 | 0.02 |
| Montanuniversität Leoben | 0.04 | 0.11 | 0.11 | 0.45 | 0.27 | 0.02 | 0.02 |
| Other | 0.07 | 0.15 | 0.13 | 0.17 | 0.35 | 0.12 | 0.02 |
| Graz University of Technology | 0.05 | 0.16 | 0.18 | 0.30 | 0.29 | 0.01 | 0.01 |
| Vienna University of Technology | 0.05 | 0.14 | 0.15 | 0.30 | 0.31 | 0.03 | 0.02 |
| University of Graz | 0.06 | 0.20 | 0.08 | 0.27 | 0.32 | 0.05 | 0.01 |
| University of Innsbruck | 0.07 | 0.16 | 0.09 | 0.30 | 0.33 | 0.05 | 0.00 |
| University of Klagenfurt | 0.07 | 0.17 | 0.08 | 0.31 | 0.30 | 0.05 | 0.02 |
| University of Linz | 0.07 | 0.20 | 0.18 | 0.27 | 0.25 | 0.02 | 0.02 |
| University of Salzburg | 0.08 | 0.20 | 0.06 | 0.24 | 0.34 | 0.07 | 0.01 |
| University of Vienna | 0.07 | 0.15 | 0.08 | 0.27 | 0.35 | 0.07 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.08 | 0.17 | 0.00 | 0.25 | 0.42 | 0.08 | 0.00 |
| University of Music and Performing Arts Graz | 0.07 | 0.23 | 0.03 | 0.27 | 0.37 | 0.03 | 0.00 |
| University of Music and Performing Arts Vienna | 0.05 | 0.14 | 0.09 | 0.27 | 0.38 | 0.08 | 0.00 |
| University of Applied Arts Vienna | 0.07 | 0.17 | 0.08 | 0.20 | 0.44 | 0.02 | 0.01 |
| University of Arts and Design Linz | 0.20 | 0.15 | 0.20 | 0.15 | 0.23 | 0.05 | 0.03 |
| University of Veterinary Medicine Vienna | 0.03 | 0.14 | 0.15 | 0.41 | 0.25 | 0.01 | 0.01 |
| Vienna University of Economics and Business | 0.06 | 0.13 | 0.08 | 0.34 | 0.26 | 0.06 | 0.07 |
| Austrian Academy of Sciences | 0.11 | 0.18 | 0.13 | 0.26 | 0.28 | 0.02 | 0.02 |
| **Sum of answers** | 0.06 | 0.16 | 0.10 | 0.30 | 0.32 | 0.05 | 0.02 |

Table 66: How can others access your research data? Answers per discipline, absolute, n=3026

| Discipline | Data archive/ repository | Linked supple-ment material | Website | Remote server/ share drives | Cloud applica-tions | Physical disk/ Email | Not at all | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 7 | 9 | 5 | 10 | 8 | 26 | 5 | 1 | 43 | 71 |
| Biology | 60 | 117 | 43 | 65 | 70 | 166 | 32 | 9 | 287 | 562 |
| Chemistry | 13 | 44 | 20 | 29 | 34 | 96 | 38 | 5 | 167 | 279 |
| Humanities | 79 | 49 | 150 | 80 | 164 | 362 | 169 | 27 | 685 | 1080 |
| Geoscience (including Geography) | 20 | 37 | 33 | 33 | 36 | 81 | 8 | 4 | 118 | 252 |
| Electrical and System Engineering | 53 | 41 | 79 | 92 | 74 | 188 | 47 | 7 | 324 | 581 |
| Mathematics | 25 | 21 | 49 | 10 | 29 | 38 | 14 | 3 | 104 | 189 |
| Medicine | 19 | 39 | 16 | 31 | 44 | 112 | 55 | 7 | 220 | 323 |
| Physics | 48 | 47 | 45 | 46 | 57 | 134 | 19 | 5 | 204 | 401 |
| Other | 50 | 56 | 106 | 87 | 99 | 171 | 81 | 9 | 381 | 659 |
| Social and Behavioural Sciences | 46 | 48 | 81 | 106 | 116 | 257 | 116 | 10 | 491 | 780 |
| **Sum of answers** | 420 | 508 | 627 | 589 | 731 | 1631 | 586 | 87 | 3026 | 5179 |

Table 67: How can others access your research data? Answers per person, relative distribution per discipline, n=3026

| Discipline | Data archive/ repository | Linked supplement material | Website | Remote server/ share drives | Cloud applications | Physical disk/ Email | Not at all | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.16 | 0.21 | 0.12 | 0.23 | 0.19 | 0.60 | 0.12 | 0.02 |
| Biology | 0.21 | 0.41 | 0.15 | 0.23 | 0.24 | 0.58 | 0.11 | 0.03 |
| Chemistry | 0.08 | 0.26 | 0.12 | 0.17 | 0.20 | 0.57 | 0.23 | 0.03 |
| Humanities | 0.12 | 0.07 | 0.22 | 0.12 | 0.24 | 0.53 | 0.25 | 0.04 |
| Geoscience (including Geography) | 0.17 | 0.31 | 0.28 | 0.28 | 0.31 | 0.69 | 0.07 | 0.03 |
| Electrical and System Engineering | 0.16 | 0.13 | 0.24 | 0.28 | 0.23 | 0.58 | 0.15 | 0.02 |
| Mathematics | 0.24 | 0.20 | 0.47 | 0.10 | 0.28 | 0.37 | 0.13 | 0.03 |
| Medicine | 0.09 | 0.18 | 0.07 | 0.14 | 0.20 | 0.51 | 0.25 | 0.03 |
| Physics | 0.24 | 0.23 | 0.22 | 0.23 | 0.28 | 0.66 | 0.09 | 0.02 |
| Other | 0.13 | 0.15 | 0.28 | 0.23 | 0.26 | 0.45 | 0.21 | 0.02 |
| **Social and Behavioural Sciences** | 0.09 | 0.10 | 0.16 | 0.22 | 0.24 | 0.52 | 0.24 | 0.02 |
| **Sum of answers** | 0.14 | 0.17 | 0.21 | 0.19 | 0.24 | 0.54 | 0.19 | 0.03 |

Table 68: How can others access your research data? Answers per option, relative distribution per discipline, n=5179

| Discipline | Data archive/ repository | Linked supplement material | Website | Remote server/ share drives | Cloud applications | Physical disk/ Email | Not at all | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.10 | 0.13 | 0.07 | 0.14 | 0.11 | 0.37 | 0.07 | 0.01 |
| Biology | 0.11 | 0.21 | 0.08 | 0.12 | 0.12 | 0.30 | 0.06 | 0.02 |
| Chemistry | 0.05 | 0.16 | 0.07 | 0.10 | 0.12 | 0.34 | 0.14 | 0.02 |
| Humanities | 0.07 | 0.05 | 0.14 | 0.07 | 0.15 | 0.34 | 0.16 | 0.03 |
| Geoscience (including Geography) | 0.08 | 0.15 | 0.13 | 0.13 | 0.14 | 0.32 | 0.03 | 0.02 |
| Electrical and System Engineering | 0.09 | 0.07 | 0.14 | 0.16 | 0.13 | 0.32 | 0.08 | 0.01 |
| Mathematics | 0.13 | 0.11 | 0.26 | 0.05 | 0.15 | 0.20 | 0.07 | 0.02 |
| Medicine | 0.06 | 0.12 | 0.05 | 0.10 | 0.14 | 0.35 | 0.17 | 0.02 |
| Physics | 0.12 | 0.12 | 0.11 | 0.11 | 0.14 | 0.33 | 0.05 | 0.01 |
| Other | 0.08 | 0.08 | 0.16 | 0.13 | 0.15 | 0.26 | 0.12 | 0.01 |
| Social and Behavioural Sciences | 0.06 | 0.06 | 0.10 | 0.14 | 0.15 | 0.33 | 0.15 | 0.01 |
| **Sum of answers** | 0.08 | 0.10 | 0.12 | 0.11 | 0.14 | 0.31 | 0.11 | 0.02 |

Table 69: How can others access your research data? Answers per institution, absolute, n=3026

| Institution | Data archive/ repository | Linked supplement material | Website | Remote server/ share drives | Cloud applications | Physical disk/ Email | Not at all | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 1 | 0 | 6 | 2 | 5 | 7 | 4 | 1 | 15 | 26 |
| Vienna Chamber of Labour | 2 | 1 | 4 | 5 | 1 | 9 | 8 | 1 | 21 | 31 |
| Institute of Science and Technology (IST Austria) | 7 | 11 | 11 | 6 | 11 | 14 | 2 | 0 | 33 | 62 |
| Medical University Graz | 3 | 4 | 1 | 1 | 2 | 6 | 4 | 1 | 17 | 22 |
| Medical University of Innsbruck | 11 | 15 | 9 | 18 | 15 | 32 | 17 | 3 | 70 | 120 |
| Medical University of Vienna | 19 | 44 | 13 | 31 | 52 | 119 | 45 | 5 | 212 | 328 |
| Montanuniversität Leoben | 2 | 1 | 4 | 7 | 3 | 23 | 6 | 0 | 35 | 46 |
| Other | 12 | 9 | 23 | 12 | 19 | 48 | 27 | 3 | 102 | 153 |
| Graz University of Technology | 25 | 31 | 32 | 41 | 36 | 77 | 22 | 3 | 152 | 267 |
| Vienna University of Technology | 51 | 55 | 85 | 91 | 102 | 222 | 51 | 8 | 352 | 665 |
| University of Graz | 21 | 26 | 48 | 47 | 62 | 143 | 46 | 9 | 240 | 402 |
| University of Innsbruck | 34 | 39 | 59 | 54 | 66 | 143 | 52 | 8 | 257 | 455 |
| University of Klagenfurt | 9 | 15 | 20 | 12 | 24 | 43 | 16 | 5 | 84 | 144 |
| University of Linz | 19 | 25 | 28 | 25 | 26 | 52 | 18 | 3 | 105 | 196 |
| University of Salzburg | 6 | 21 | 12 | 11 | 17 | 42 | 16 | 2 | 75 | 127 |
| University of Vienna | 142 | 152 | 196 | 133 | 198 | 467 | 189 | 25 | 888 | 1502 |
| University of Natural Resources and Life Sciences Vienna | 1 | 2 | 3 | 4 | 2 | 5 | 1 | 0 | 7 | 18 |
| University of Music and Performing Arts Graz | 1 | 2 | 5 | 2 | 6 | 8 | 3 | 1 | 15 | 28 |
| University of Music and Performing Arts Vienna | 7 | 3 | 8 | 7 | 12 | 18 | 6 | 1 | 38 | 62 |
| University of Applied Arts Vienna | 4 | 6 | 11 | 2 | 13 | 20 | 9 | 0 | 47 | 65 |
| University of Arts and Design Linz | 1 | 1 | 7 | 2 | 3 | 6 | 5 | 0 | 18 | 25 |
| University of Veterinary Medicine Vienna | 17 | 26 | 7 | 20 | 21 | 50 | 15 | 5 | 94 | 161 |
| Vienna University of Economics and Business | 11 | 10 | 10 | 36 | 24 | 45 | 19 | 2 | 93 | 157 |
| Austrian Academy of Sciences | 14 | 9 | 25 | 20 | 11 | 32 | 5 | 1 | 56 | 117 |
| **Sum of answers** | 420 | 508 | 627 | 589 | 731 | 1631 | 586 | 87 | 3026 | 5179 |

Table 70: How can others access your research data? Answers per person, relative distribution per institution, n=3026

| Institution | Data archive/ repository | Linked supplement material | Website | Remote server/ share drives | Cloud applications | Physical disk/ Email | Not at all | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.07 | 0.00 | 0.40 | 0.13 | 0.33 | 0.47 | 0.27 | 0.07 |
| Vienna Chamber of Labour | 0.10 | 0.05 | 0.19 | 0.24 | 0.05 | 0.43 | 0.38 | 0.05 |
| Institute of Science and Technology (IST Austria) | 0.21 | 0.33 | 0.33 | 0.18 | 0.33 | 0.42 | 0.06 | 0.00 |
| Medical University Graz | 0.18 | 0.24 | 0.06 | 0.06 | 0.12 | 0.35 | 0.24 | 0.06 |
| Medical University of Innsbruck | 0.16 | 0.21 | 0.13 | 0.26 | 0.21 | 0.46 | 0.24 | 0.04 |
| Medical University of Vienna | 0.09 | 0.21 | 0.06 | 0.15 | 0.25 | 0.56 | 0.21 | 0.02 |
| Montanuniversität Leoben | 0.06 | 0.03 | 0.11 | 0.20 | 0.09 | 0.66 | 0.17 | 0.00 |
| Other | 0.12 | 0.09 | 0.23 | 0.12 | 0.19 | 0.47 | 0.26 | 0.03 |
| Graz University of Technology | 0.16 | 0.20 | 0.21 | 0.27 | 0.24 | 0.51 | 0.14 | 0.02 |
| Vienna University of Technology | 0.14 | 0.16 | 0.24 | 0.26 | 0.29 | 0.63 | 0.14 | 0.02 |
| University of Graz | 0.09 | 0.11 | 0.20 | 0.20 | 0.26 | 0.60 | 0.19 | 0.04 |
| University of Innsbruck | 0.13 | 0.15 | 0.23 | 0.21 | 0.26 | 0.56 | 0.20 | 0.03 |
| University of Klagenfurt | 0.11 | 0.18 | 0.24 | 0.14 | 0.29 | 0.51 | 0.19 | 0.06 |
| University of Linz | 0.18 | 0.24 | 0.27 | 0.24 | 0.25 | 0.50 | 0.17 | 0.03 |
| University of Salzburg | 0.08 | 0.28 | 0.16 | 0.15 | 0.23 | 0.56 | 0.21 | 0.03 |
| University of Vienna | 0.16 | 0.17 | 0.22 | 0.15 | 0.22 | 0.53 | 0.21 | 0.03 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.29 | 0.43 | 0.57 | 0.29 | 0.71 | 0.14 | 0.00 |
| University of Music and Performing Arts Graz | 0.07 | 0.13 | 0.33 | 0.13 | 0.40 | 0.53 | 0.20 | 0.07 |
| University of Music and Performing Arts Vienna | 0.18 | 0.08 | 0.21 | 0.18 | 0.32 | 0.47 | 0.16 | 0.03 |
| University of Applied Arts Vienna | 0.09 | 0.13 | 0.23 | 0.04 | 0.28 | 0.43 | 0.19 | 0.00 |
| University of Arts and Design Linz | 0.06 | 0.06 | 0.39 | 0.11 | 0.17 | 0.33 | 0.28 | 0.00 |
| University of Veterinary Medicine Vienna | 0.18 | 0.28 | 0.07 | 0.21 | 0.22 | 0.53 | 0.16 | 0.05 |
| Vienna University of Economics and Business | 0.12 | 0.11 | 0.11 | 0.39 | 0.26 | 0.48 | 0.20 | 0.02 |
| Austrian Academy of Sciences | 0.25 | 0.16 | 0.45 | 0.36 | 0.20 | 0.57 | 0.09 | 0.02 |
| **Sum of answers** | 0.14 | 0.17 | 0.21 | 0.19 | 0.24 | 0.54 | 0.19 | 0.03 |

Table 71: How can others access your research data? Answers per option, relative distribution per institution, n=5179

| Institution | Data archive/ repository | Linked supplement material | Website | Remote server/ share drives | Cloud applications | Physical disk/ Email | Not at all | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.04 | 0.00 | 0.23 | 0.08 | 0.19 | 0.27 | 0.15 | 0.04 |
| Vienna Chamber of Labour | 0.06 | 0.03 | 0.13 | 0.16 | 0.03 | 0.29 | 0.26 | 0.03 |
| Institute of Science and Technology (IST Austria) | 0.11 | 0.18 | 0.18 | 0.10 | 0.18 | 0.23 | 0.03 | 0.00 |
| Medical University Graz | 0.14 | 0.18 | 0.05 | 0.05 | 0.09 | 0.27 | 0.18 | 0.05 |
| Medical University of Innsbruck | 0.09 | 0.13 | 0.08 | 0.15 | 0.13 | 0.27 | 0.14 | 0.03 |
| Medical University of Vienna | 0.06 | 0.13 | 0.04 | 0.09 | 0.16 | 0.36 | 0.14 | 0.02 |
| Montanuniversität Leoben | 0.04 | 0.02 | 0.09 | 0.15 | 0.07 | 0.50 | 0.13 | 0.00 |
| Other | 0.08 | 0.06 | 0.15 | 0.08 | 0.12 | 0.31 | 0.18 | 0.02 |
| Graz University of Technology | 0.09 | 0.12 | 0.12 | 0.15 | 0.13 | 0.29 | 0.08 | 0.01 |
| Vienna University of Technology | 0.08 | 0.08 | 0.13 | 0.14 | 0.15 | 0.33 | 0.08 | 0.01 |
| University of Graz | 0.05 | 0.06 | 0.12 | 0.12 | 0.15 | 0.36 | 0.11 | 0.02 |
| University of Innsbruck | 0.07 | 0.09 | 0.13 | 0.12 | 0.15 | 0.31 | 0.11 | 0.02 |
| University of Klagenfurt | 0.06 | 0.10 | 0.14 | 0.08 | 0.17 | 0.30 | 0.11 | 0.03 |
| University of Linz | 0.10 | 0.13 | 0.14 | 0.13 | 0.13 | 0.27 | 0.09 | 0.02 |
| University of Salzburg | 0.05 | 0.17 | 0.09 | 0.09 | 0.13 | 0.33 | 0.13 | 0.02 |
| University of Vienna | 0.09 | 0.10 | 0.13 | 0.09 | 0.13 | 0.31 | 0.13 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.06 | 0.11 | 0.17 | 0.22 | 0.11 | 0.28 | 0.06 | 0.00 |
| University of Music and Performing Arts Graz | 0.04 | 0.07 | 0.18 | 0.07 | 0.21 | 0.29 | 0.11 | 0.04 |
| University of Music and Performing Arts Vienna | 0.11 | 0.05 | 0.13 | 0.11 | 0.19 | 0.29 | 0.10 | 0.02 |
| University of Applied Arts Vienna | 0.06 | 0.09 | 0.17 | 0.03 | 0.20 | 0.31 | 0.14 | 0.00 |
| University of Arts and Design Linz | 0.04 | 0.04 | 0.28 | 0.08 | 0.12 | 0.24 | 0.20 | 0.00 |
| University of Veterinary Medicine Vienna | 0.11 | 0.16 | 0.04 | 0.12 | 0.13 | 0.31 | 0.09 | 0.03 |
| Vienna University of Economics and Business | 0.07 | 0.06 | 0.06 | 0.23 | 0.15 | 0.29 | 0.12 | 0.01 |
| Austrian Academy of Sciences | 0.12 | 0.08 | 0.21 | 0.17 | 0.09 | 0.27 | 0.04 | 0.01 |
| **Sum of answers** | 0.08 | 0.10 | 0.12 | 0.11 | 0.14 | 0.31 | 0.11 | 0.02 |

Table 72: Are your research data reusable for others? Answers per discipline, absolute, n=3026

| Discipline | Yes | Sometimes | No | Persons | Sum of answers | Persons for next question |
|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 2 | 2 | 2 | 0 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 11 | 23 | 9 | 43 | 43 | 34 |
| Biology | 108 | 127 | 52 | 287 | 287 | 235 |
| Chemistry | 64 | 66 | 37 | 167 | 167 | 130 |
| Humanities | 226 | 281 | 178 | 685 | 685 | 507 |
| Geoscience (including Geography) | 46 | 64 | 8 | 118 | 118 | 110 |
| Electrical and System Engineering | 80 | 194 | 50 | 324 | 324 | 274 |
| Mathematics | 31 | 54 | 19 | 104 | 104 | 85 |
| Medicine | 72 | 87 | 61 | 220 | 220 | 159 |
| Physics | 63 | 109 | 32 | 204 | 204 | 172 |
| Other | 113 | 190 | 78 | 381 | 381 | 303 |
| Social and Behavioural Sciences | 101 | 251 | 139 | 491 | 491 | 352 |
| **Sum of answers** | 915 | 1446 | 665 | 3026 | 3026 | 2361 |

Table 73: Are your research data reusable for others? Answers per person, relative distribution per discipline, n=3026

| Discipline | Yes | Sometimes | No |
|---|---|---|---|
| Not specified | 0.00 | 0.00 | 1.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.26 | 0.53 | 0.21 |
| Biology | 0.38 | 0.44 | 0.18 |
| Chemistry | 0.38 | 0.40 | 0.22 |
| Humanities | 0.33 | 0.41 | 0.26 |
| Geoscience (including Geography) | 0.39 | 0.54 | 0.07 |
| Electrical and System Engineering | 0.25 | 0.60 | 0.15 |
| Mathematics | 0.30 | 0.52 | 0.18 |
| Medicine | 0.33 | 0.40 | 0.28 |
| Physics | 0.31 | 0.53 | 0.16 |
| Other | 0.30 | 0.50 | 0.20 |
| Social and Behavioural Sciences | 0.21 | 0.51 | 0.28 |
| **Sum of answers** | 0.30 | 0.48 | 0.22 |

Table 74: Are your research data reusable for others? Answers per institution, absolute, n=3026

| Institution | Yes | Sometimes | No | Persons | Sum of answers | Persons for next question |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 4 | 10 | 1 | 15 | 15 | 14 |
| Vienna Chamber of Labour | 6 | 14 | 1 | 21 | 21 | 20 |
| Inst. of Science and Technology (IST Austria) | 11 | 17 | 5 | 33 | 33 | 28 |
| Medical University Graz | 4 | 8 | 5 | 17 | 17 | 12 |
| Medical University of Innsbruck | 24 | 38 | 8 | 70 | 70 | 62 |
| Medical University of Vienna | 64 | 84 | 64 | 212 | 212 | 148 |
| Montanuniversität Leoben | 11 | 23 | 1 | 35 | 35 | 34 |
| Other | 36 | 40 | 26 | 102 | 102 | 76 |
| Graz University of Technology | 47 | 77 | 28 | 152 | 152 | 124 |
| Vienna University of Technology | 103 | 184 | 65 | 352 | 352 | 287 |
| University of Graz | 81 | 104 | 55 | 240 | 240 | 185 |
| University of Innsbruck | 75 | 123 | 59 | 257 | 257 | 198 |
| University of Klagenfurt | 32 | 36 | 16 | 84 | 84 | 68 |
| University of Linz | 24 | 59 | 22 | 105 | 105 | 83 |
| University of Salzburg | 20 | 38 | 17 | 75 | 75 | 58 |
| University of Vienna | 273 | 420 | 195 | 888 | 888 | 693 |
| Univ. of Natural Res. and Life Sciences Vienna | 1 | 4 | 2 | 7 | 7 | 5 |
| University of Music and Performing Arts Graz | 6 | 4 | 5 | 15 | 15 | 10 |
| Univ. of Music and Performing Arts Vienna | 8 | 20 | 10 | 38 | 38 | 28 |
| University of Applied Arts Vienna | 12 | 21 | 14 | 47 | 47 | 33 |
| University of Arts and Design Linz | 3 | 13 | 2 | 18 | 18 | 16 |
| University of Veterinary Medicine Vienna | 27 | 45 | 22 | 94 | 94 | 72 |
| Vienna University of Economics and Business | 20 | 38 | 35 | 93 | 93 | 58 |
| Austrian Academy of Sciences | 23 | 26 | 7 | 56 | 56 | 49 |
| **Sum of answers** | 915 | 1446 | 665 | 3026 | 3026 | 2361 |

Table 75: Are your research data reusable for others? Answers per person, relative distribution per institution, n=3026

| Institution | Yes | Sometimes | No |
|---|---|---|---|
| Academy of Fine Arts Vienna | 0.27 | 0.67 | 0.07 |
| Vienna Chamber of Labour | 0.29 | 0.67 | 0.05 |
| Institute of Science and Technology (IST Austria) | 0.33 | 0.52 | 0.15 |
| Medical University Graz | 0.24 | 0.47 | 0.29 |
| Medical University of Innsbruck | 0.34 | 0.54 | 0.11 |
| Medical University of Vienna | 0.30 | 0.40 | 0.30 |
| Montanuniversität Leoben | 0.31 | 0.66 | 0.03 |
| Other | 0.35 | 0.39 | 0.25 |
| Graz University of Technology | 0.31 | 0.51 | 0.18 |
| Vienna University of Technology | 0.29 | 0.52 | 0.18 |
| University of Graz | 0.34 | 0.43 | 0.23 |
| University of Innsbruck | 0.29 | 0.48 | 0.23 |
| University of Klagenfurt | 0.38 | 0.43 | 0.19 |
| University of Linz | 0.23 | 0.56 | 0.21 |
| University of Salzburg | 0.27 | 0.51 | 0.23 |
| University of Vienna | 0.31 | 0.47 | 0.22 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.57 | 0.29 |
| University of Music and Performing Arts Graz | 0.40 | 0.27 | 0.33 |
| University of Music and Performing Arts Vienna | 0.21 | 0.53 | 0.26 |
| University of Applied Arts Vienna | 0.26 | 0.45 | 0.30 |
| University of Arts and Design Linz | 0.17 | 0.72 | 0.11 |
| University of Veterinary Medicine Vienna | 0.29 | 0.48 | 0.23 |
| Vienna University of Economics and Business | 0.22 | 0.41 | 0.38 |
| Austrian Academy of Sciences | 0.41 | 0.46 | 0.13 |
| **Sum of answers** | 0.30 | 0.48 | 0.22 |

Table 76: Which type(s) of user agreements have been put in place? Answers per discipline, absolute, n=3026

| Discipline | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other | Persons total | Persons for this question | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 2 | 1 | 15 | 11 | 11 | 0 | 43 | 34 | 40 |
| Biology | 44 | 20 | 78 | 89 | 60 | 6 | 287 | 235 | 297 |
| Chemistry | 20 | 14 | 42 | 55 | 27 | 2 | 167 | 130 | 160 |
| Humanities | 58 | 47 | 89 | 259 | 110 | 19 | 685 | 507 | 582 |
| Geoscience (including Geography) | 22 | 15 | 33 | 51 | 22 | 5 | 118 | 110 | 148 |
| Electrical and System Engineering | 64 | 52 | 123 | 95 | 38 | 8 | 324 | 274 | 380 |
| Mathematics | 22 | 4 | 9 | 45 | 13 | 1 | 104 | 85 | 94 |
| Medicine | 11 | 11 | 68 | 66 | 23 | 6 | 220 | 159 | 185 |
| Physics | 41 | 15 | 45 | 72 | 38 | 7 | 204 | 172 | 218 |
| Other | 70 | 34 | 69 | 132 | 52 | 15 | 381 | 303 | 372 |
| Social and Behavioural Sciences | 37 | 31 | 79 | 170 | 80 | 15 | 491 | 352 | 412 |
| **Sum of answers** | 391 | 244 | 650 | 1045 | 474 | 84 | 3026 | 2361 | 2888 |

Table 77: Which type(s) of user agreements have been put in place? Answers per person, relative distribution per discipline, n=2361

| Discipline | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Hortic. and Veterinary Medicine | 0.06 | 0.03 | 0.44 | 0.32 | 0.32 | 0.00 |
| Biology | 0.19 | 0.09 | 0.33 | 0.38 | 0.26 | 0.03 |
| Chemistry | 0.15 | 0.11 | 0.32 | 0.42 | 0.21 | 0.02 |
| Humanities | 0.11 | 0.09 | 0.18 | 0.51 | 0.22 | 0.04 |
| Geoscience (including Geography) | 0.20 | 0.14 | 0.30 | 0.46 | 0.20 | 0.05 |
| Electrical and System Engineering | 0.23 | 0.19 | 0.45 | 0.35 | 0.14 | 0.03 |
| Mathematics | 0.26 | 0.05 | 0.11 | 0.53 | 0.15 | 0.01 |
| Medicine | 0.07 | 0.07 | 0.43 | 0.42 | 0.14 | 0.04 |
| Physics | 0.24 | 0.09 | 0.26 | 0.42 | 0.22 | 0.04 |
| Other | 0.23 | 0.11 | 0.23 | 0.44 | 0.17 | 0.05 |
| Social and Behavioural Sciences | 0.11 | 0.09 | 0.22 | 0.48 | 0.23 | 0.04 |
| **Sum of answers** | 0.17 | 0.10 | 0.28 | 0.44 | 0.20 | 0.04 |

Table 78: Which type(s) of user agreements have been put in place? Answers per option, relative distribution per discipline, n=2888

| Discipline | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Hortic.and Vet. Medicine | 0.05 | 0.03 | 0.38 | 0.28 | 0.28 | 0.00 |
| Biology | 0.15 | 0.07 | 0.26 | 0.30 | 0.20 | 0.02 |
| Chemistry | 0.13 | 0.09 | 0.26 | 0.34 | 0.17 | 0.01 |
| Humanities | 0.10 | 0.08 | 0.15 | 0.45 | 0.19 | 0.03 |
| Geoscience (including Geography) | 0.15 | 0.10 | 0.22 | 0.34 | 0.15 | 0.03 |
| Electrical and System Engineering | 0.17 | 0.14 | 0.32 | 0.25 | 0.10 | 0.02 |
| Mathematics | 0.23 | 0.04 | 0.10 | 0.48 | 0.14 | 0.01 |
| Medicine | 0.06 | 0.06 | 0.37 | 0.36 | 0.12 | 0.03 |
| Physics | 0.19 | 0.07 | 0.21 | 0.33 | 0.17 | 0.03 |
| Other | 0.19 | 0.09 | 0.19 | 0.35 | 0.14 | 0.04 |
| Social and Behavioural Sciences | 0.09 | 0.08 | 0.19 | 0.41 | 0.19 | 0.04 |
| **Sum of answers** | 0.14 | 0.08 | 0.23 | 0.36 | 0.16 | 0.03 |

Table 79: Which type(s) of user agreements have been put in place? Answers per institution, absolute, n=3026

| Institution | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other | Persons total | Persons for this question | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 3 | 2 | 5 | 5 | 1 | 1 | 15 | 14 | 17 |
| Vienna Chamber of Labour | 0 | 1 | 4 | 13 | 1 | 2 | 21 | 20 | 21 |
| Inst. of Science and Technology (IST Austria) | 7 | 3 | 2 | 6 | 14 | 0 | 33 | 28 | 32 |
| Medical University Graz | 1 | 0 | 3 | 7 | 3 | 0 | 17 | 12 | 14 |
| Medical University of Innsbruck | 8 | 6 | 25 | 25 | 12 | 3 | 70 | 62 | 79 |
| Medical University of Vienna | 15 | 12 | 57 | 54 | 31 | 5 | 212 | 148 | 174 |
| Montanuniversität Leoben | 2 | 3 | 15 | 11 | 7 | 2 | 35 | 34 | 40 |
| Other | 10 | 4 | 18 | 34 | 20 | 2 | 102 | 76 | 88 |
| Graz University of Technology | 20 | 17 | 44 | 42 | 30 | 4 | 152 | 124 | 157 |
| Vienna University of Technology | 58 | 43 | 114 | 121 | 43 | 10 | 352 | 287 | 389 |
| University of Graz | 21 | 11 | 37 | 92 | 42 | 11 | 240 | 185 | 214 |
| University of Innsbruck | 37 | 21 | 54 | 96 | 38 | 2 | 257 | 198 | 248 |
| University of Klagenfurt | 9 | 16 | 20 | 34 | 8 | 3 | 84 | 68 | 90 |
| University of Linz | 24 | 9 | 26 | 38 | 12 | 2 | 105 | 83 | 111 |
| University of Salzburg | 11 | 5 | 12 | 28 | 9 | 2 | 75 | 58 | 67 |
| University of Vienna | 113 | 63 | 132 | 329 | 148 | 20 | 888 | 693 | 805 |
| Univ. of Natural Res. and Life Sciences Vienna | 1 | 0 | 2 | 4 | 0 | 0 | 7 | 5 | 7 |
| Univ. of Music and Performing Arts Graz | 2 | 1 | 2 | 4 | 2 | 2 | 15 | 10 | 13 |
| University of Music and Performing Arts Vienna | 4 | 5 | 5 | 17 | 4 | 0 | 38 | 28 | 35 |
| University of Applied Arts Vienna | 7 | 6 | 5 | 12 | 9 | 3 | 47 | 33 | 42 |
| University of Arts and Design Linz | 7 | 1 | 4 | 6 | 0 | 2 | 18 | 16 | 20 |
| University of Veterinary Medicine Vienna | 11 | 3 | 26 | 21 | 24 | 0 | 94 | 72 | 85 |
| Vienna University of Economics and Business | 7 | 5 | 17 | 28 | 11 | 4 | 93 | 58 | 72 |
| Austrian Academy of Sciences | 13 | 7 | 21 | 18 | 5 | 4 | 56 | 49 | 68 |
| **Sum of answers** | 391 | 244 | 650 | 1045 | 474 | 84 | 3026 | 2361 | 2888 |

Table 80: Which type(s) of user agreements have been put in place? Answers per person, relative distribution per institution, n=2361

| Institution | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.21 | 0.14 | 0.36 | 0.36 | 0.07 | 0.07 |
| Vienna Chamber of Labour | 0.00 | 0.05 | 0.20 | 0.65 | 0.05 | 0.10 |
| Inst. of Science and Technology (IST Austria) | 0.25 | 0.11 | 0.07 | 0.21 | 0.50 | 0.00 |
| Medical University Graz | 0.08 | 0.00 | 0.25 | 0.58 | 0.25 | 0.00 |
| Medical University of Innsbruck | 0.13 | 0.10 | 0.40 | 0.40 | 0.19 | 0.05 |
| Medical University of Vienna | 0.10 | 0.08 | 0.39 | 0.36 | 0.21 | 0.03 |
| Montanuniversität Leoben | 0.06 | 0.09 | 0.44 | 0.32 | 0.21 | 0.06 |
| Other | 0.13 | 0.05 | 0.24 | 0.45 | 0.26 | 0.03 |
| Graz University of Technology | 0.16 | 0.14 | 0.35 | 0.34 | 0.24 | 0.03 |
| Vienna University of Technology | 0.20 | 0.15 | 0.40 | 0.42 | 0.15 | 0.03 |
| University of Graz | 0.11 | 0.06 | 0.20 | 0.50 | 0.23 | 0.06 |
| University of Innsbruck | 0.19 | 0.11 | 0.27 | 0.48 | 0.19 | 0.01 |
| University of Klagenfurt | 0.13 | 0.24 | 0.29 | 0.50 | 0.12 | 0.04 |
| University of Linz | 0.29 | 0.11 | 0.31 | 0.46 | 0.14 | 0.02 |
| University of Salzburg | 0.19 | 0.09 | 0.21 | 0.48 | 0.16 | 0.03 |
| University of Vienna | 0.16 | 0.09 | 0.19 | 0.47 | 0.21 | 0.03 |
| Univ. of Natural Res. and Life Sciences Vienna | 0.20 | 0.00 | 0.40 | 0.80 | 0.00 | 0.00 |
| Univ. of Music and Performing Arts Graz | 0.20 | 0.10 | 0.20 | 0.40 | 0.20 | 0.20 |
| Univ. of Music and Performing Arts Vienna | 0.14 | 0.18 | 0.18 | 0.61 | 0.14 | 0.00 |
| University of Applied Arts Vienna | 0.21 | 0.18 | 0.15 | 0.36 | 0.27 | 0.09 |
| University of Arts and Design Linz | 0.44 | 0.06 | 0.25 | 0.38 | 0.00 | 0.13 |
| University of Veterinary Medicine Vienna | 0.15 | 0.04 | 0.36 | 0.29 | 0.33 | 0.00 |
| Vienna University of Economics and Business | 0.12 | 0.09 | 0.29 | 0.48 | 0.19 | 0.07 |
| Austrian Academy of Sciences | 0.27 | 0.14 | 0.43 | 0.37 | 0.10 | 0.08 |
| **Sum of answers** | 0.17 | 0.10 | 0.28 | 0.44 | 0.20 | 0.04 |

Table 81: Which type(s) of user agreements have been put in place? Answers per option, relative distribution per institution, n=2888

| Institution | Open content licences | Individual licence agreements | Cooperation agreements | None | I do not know | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.18 | 0.12 | 0.29 | 0.29 | 0.06 | 0.06 |
| Vienna Chamber of Labour | 0.00 | 0.05 | 0.19 | 0.62 | 0.05 | 0.10 |
| Institute of Science and Technology (IST Austria) | 0.22 | 0.09 | 0.06 | 0.19 | 0.44 | 0.00 |
| Medical University Graz | 0.07 | 0.00 | 0.21 | 0.50 | 0.21 | 0.00 |
| Medical University of Innsbruck | 0.10 | 0.08 | 0.32 | 0.32 | 0.15 | 0.04 |
| Medical University of Vienna | 0.09 | 0.07 | 0.33 | 0.31 | 0.18 | 0.03 |
| Montanuniversität Leoben | 0.05 | 0.08 | 0.38 | 0.28 | 0.18 | 0.05 |
| Other | 0.11 | 0.05 | 0.20 | 0.39 | 0.23 | 0.02 |
| Graz University of Technology | 0.13 | 0.11 | 0.28 | 0.27 | 0.19 | 0.03 |
| Vienna University of Technology | 0.15 | 0.11 | 0.29 | 0.31 | 0.11 | 0.03 |
| University of Graz | 0.10 | 0.05 | 0.17 | 0.43 | 0.20 | 0.05 |
| University of Innsbruck | 0.15 | 0.08 | 0.22 | 0.39 | 0.15 | 0.01 |
| University of Klagenfurt | 0.10 | 0.18 | 0.22 | 0.38 | 0.09 | 0.03 |
| University of Linz | 0.22 | 0.08 | 0.23 | 0.34 | 0.11 | 0.02 |
| University of Salzburg | 0.16 | 0.07 | 0.18 | 0.42 | 0.13 | 0.03 |
| University of Vienna | 0.14 | 0.08 | 0.16 | 0.41 | 0.18 | 0.02 |
| Univ. of Natural Resourc. and Life Sciences Vienna | 0.14 | 0.00 | 0.29 | 0.57 | 0.00 | 0.00 |
| University of Music and Performing Arts Graz | 0.15 | 0.08 | 0.15 | 0.31 | 0.15 | 0.15 |
| University of Music and Performing Arts Vienna | 0.11 | 0.14 | 0.14 | 0.49 | 0.11 | 0.00 |
| University of Applied Arts Vienna | 0.17 | 0.14 | 0.12 | 0.29 | 0.21 | 0.07 |
| University of Arts and Design Linz | 0.35 | 0.05 | 0.20 | 0.30 | 0.00 | 0.10 |
| University of Veterinary Medicine Vienna | 0.13 | 0.04 | 0.31 | 0.25 | 0.28 | 0.00 |
| Vienna University of Economics and Business | 0.10 | 0.07 | 0.24 | 0.39 | 0.15 | 0.06 |
| Austrian Academy of Sciences | 0.19 | 0.10 | 0.31 | 0.26 | 0.07 | 0.06 |
| **Sum of answers** | 0.14 | 0.08 | 0.23 | 0.36 | 0.16 | 0.03 |

Table 82: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per discipline, absolute, n=3026

| Discipline | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 |
| Agriculture, Forestry, Hortic. and Vet. Medicine | 25 | 27 | 32 | 27 | 17 | 19 | 9 | 1 | 1 | 43 | 158 |
| Biology | 165 | 173 | 233 | 196 | 99 | 118 | 81 | 10 | 4 | 287 | 1079 |
| Chemistry | 88 | 85 | 112 | 105 | 58 | 61 | 37 | 9 | 2 | 167 | 557 |
| Humanities | 377 | 366 | 399 | 446 | 209 | 265 | 238 | 36 | 23 | 685 | 2359 |
| Geoscience (including Geography) | 58 | 71 | 86 | 79 | 36 | 47 | 40 | 4 | 7 | 118 | 428 |
| Electrical and System Engineering | 202 | 186 | 223 | 216 | 119 | 103 | 90 | 19 | 8 | 324 | 1166 |
| Mathematics | 57 | 51 | 64 | 62 | 18 | 27 | 24 | 9 | 3 | 104 | 315 |
| Medicine | 104 | 127 | 155 | 162 | 64 | 94 | 49 | 17 | 4 | 220 | 776 |
| Physics | 124 | 114 | 149 | 144 | 56 | 74 | 60 | 8 | 4 | 204 | 733 |
| Other | 220 | 188 | 226 | 211 | 112 | 114 | 100 | 35 | 10 | 381 | 1216 |
| Social and Behavioural Sciences | 241 | 256 | 320 | 302 | 135 | 201 | 145 | 35 | 13 | 491 | 1648 |
| **Sum of answers** | 1661 | 1644 | 2000 | 1950 | 923 | 1123 | 873 | 184 | 79 | 3026 | 10437 |

Table 83: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per person, relative distribution per discipline, n=3026

| Discipline | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other |
|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0.5 | 0 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.58 | 0.63 | 0.74 | 0.63 | 0.40 | 0.44 | 0.21 | 0.02 | 0.02 |
| Biology | 0.57 | 0.60 | 0.81 | 0.68 | 0.34 | 0.41 | 0.28 | 0.03 | 0.01 |
| Chemistry | 0.53 | 0.51 | 0.67 | 0.63 | 0.35 | 0.37 | 0.22 | 0.05 | 0.01 |
| Humanities | 0.55 | 0.53 | 0.58 | 0.65 | 0.31 | 0.39 | 0.35 | 0.05 | 0.03 |
| Geoscience (including Geography) | 0.49 | 0.60 | 0.73 | 0.67 | 0.31 | 0.40 | 0.34 | 0.03 | 0.06 |
| Electrical and System Engineering | 0.62 | 0.57 | 0.69 | 0.67 | 0.37 | 0.32 | 0.28 | 0.06 | 0.02 |
| Mathematics | 0.55 | 0.49 | 0.62 | 0.60 | 0.17 | 0.26 | 0.23 | 0.09 | 0.03 |
| Medicine | 0.47 | 0.58 | 0.70 | 0.74 | 0.29 | 0.43 | 0.22 | 0.08 | 0.02 |
| Physics | 0.61 | 0.56 | 0.73 | 0.71 | 0.27 | 0.36 | 0.29 | 0.04 | 0.02 |
| Other | 0.58 | 0.49 | 0.59 | 0.55 | 0.29 | 0.30 | 0.26 | 0.09 | 0.03 |
| Social and Behavioural Sciences | 0.49 | 0.52 | 0.65 | 0.62 | 0.27 | 0.41 | 0.30 | 0.07 | 0.03 |
| **Sum of answers** | 0.55 | 0.54 | 0.66 | 0.64 | 0.31 | 0.37 | 0.29 | 0.06 | 0.03 |

Table 84: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per option, relative distribution per discipline, n=10437

| Discipline | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other |
|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0.5 | 0 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.16 | 0.17 | 0.20 | 0.17 | 0.11 | 0.12 | 0.06 | 0.01 | 0.01 |
| Biology | 0.15 | 0.16 | 0.22 | 0.18 | 0.09 | 0.11 | 0.08 | 0.01 | 0.00 |
| Chemistry | 0.16 | 0.15 | 0.20 | 0.19 | 0.10 | 0.11 | 0.07 | 0.02 | 0.00 |
| Humanities | 0.16 | 0.16 | 0.17 | 0.19 | 0.09 | 0.11 | 0.10 | 0.02 | 0.01 |
| Geoscience (including Geography) | 0.14 | 0.17 | 0.20 | 0.18 | 0.08 | 0.11 | 0.09 | 0.01 | 0.02 |
| Electrical and System Engineering | 0.17 | 0.16 | 0.19 | 0.19 | 0.10 | 0.09 | 0.08 | 0.02 | 0.01 |
| Mathematics | 0.18 | 0.16 | 0.20 | 0.20 | 0.06 | 0.09 | 0.08 | 0.03 | 0.01 |
| Medicine | 0.13 | 0.16 | 0.20 | 0.21 | 0.08 | 0.12 | 0.06 | 0.02 | 0.01 |
| Physics | 0.17 | 0.16 | 0.20 | 0.20 | 0.08 | 0.10 | 0.08 | 0.01 | 0.01 |
| Other | 0.18 | 0.15 | 0.19 | 0.17 | 0.09 | 0.09 | 0.08 | 0.03 | 0.01 |
| Social and Behavioural Sciences | 0.15 | 0.16 | 0.19 | 0.18 | 0.08 | 0.12 | 0.09 | 0.02 | 0.01 |
| **Sum of answers** | 0.16 | 0.16 | 0.19 | 0.19 | 0.09 | 0.11 | 0.08 | 0.02 | 0.01 |

Table 85: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per institution, absolute, n=3026

| Institution | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 10 | 4 | 8 | 11 | 3 | 4 | 9 | 0 | 0 | 15 | 49 |
| Vienna Chamber of Labour | 12 | 6 | 11 | 11 | 3 | 3 | 8 | 3 | 0 | 21 | 57 |
| Institute of Science and Technology (IST Austria) | 21 | 20 | 24 | 17 | 8 | 10 | 10 | 1 | 0 | 33 | 111 |
| Medical University Graz | 5 | 8 | 9 | 9 | 6 | 7 | 4 | 2 | 0 | 17 | 50 |
| Medical University of Innsbruck | 34 | 42 | 46 | 53 | 21 | 27 | 16 | 4 | 3 | 70 | 246 |
| Medical University of Vienna | 97 | 120 | 152 | 149 | 73 | 88 | 47 | 16 | 2 | 212 | 744 |
| Montanuniversität Leoben | 21 | 20 | 23 | 23 | 9 | 11 | 7 | 3 | 1 | 35 | 118 |
| Other | 53 | 56 | 58 | 61 | 30 | 43 | 28 | 3 | 5 | 102 | 337 |
| Graz University of Technology | 93 | 82 | 101 | 101 | 50 | 50 | 47 | 11 | 4 | 152 | 539 |
| Vienna University of Technology | 192 | 192 | 241 | 242 | 129 | 127 | 96 | 22 | 10 | 352 | 1251 |
| University of Graz | 124 | 124 | 152 | 147 | 65 | 77 | 72 | 17 | 8 | 240 | 786 |
| University of Innsbruck | 137 | 151 | 170 | 168 | 77 | 103 | 87 | 14 | 6 | 257 | 913 |
| University of Klagenfurt | 48 | 43 | 55 | 52 | 33 | 33 | 27 | 6 | 2 | 84 | 299 |
| University of Linz | 70 | 58 | 73 | 65 | 31 | 42 | 25 | 9 | 3 | 105 | 376 |
| University of Salzburg | 45 | 40 | 53 | 50 | 18 | 27 | 21 | 4 | 0 | 75 | 258 |
| University of Vienna | 496 | 479 | 575 | 554 | 260 | 330 | 280 | 46 | 27 | 888 | 3047 |
| University of Natural Resources and Life Sciences Vienna | 6 | 3 | 5 | 3 | 3 | 3 | 2 | 0 | 1 | 7 | 26 |
| University of Music and Performing Arts Graz | 10 | 5 | 7 | 8 | 3 | 4 | 4 | 3 | 1 | 15 | 45 |
| University of Music and Performing Arts Vienna | 16 | 19 | 22 | 22 | 11 | 10 | 12 | 3 | 1 | 38 | 116 |
| University of Applied Arts Vienna | 33 | 23 | 27 | 35 | 16 | 11 | 9 | 1 | 0 | 47 | 155 |
| University of Arts and Design Linz | 10 | 6 | 12 | 13 | 4 | 5 | 4 | 2 | 1 | 18 | 57 |
| University of Veterinary Medicine Vienna | 56 | 56 | 74 | 60 | 31 | 45 | 23 | 2 | 1 | 94 | 348 |
| Vienna University of Economics and Business | 39 | 49 | 63 | 60 | 23 | 43 | 23 | 9 | 1 | 93 | 310 |
| Austrian Academy of Sciences | 33 | 38 | 39 | 36 | 16 | 20 | 12 | 3 | 2 | 56 | 199 |
| **Sum of answers** | 1661 | 1644 | 2000 | 1950 | 923 | 1123 | 873 | 184 | 79 | 3026 | 10437 |

Table 86: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per person, relative distribution per institution, n=3026

| Institution | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other |
|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.67 | 0.27 | 0.53 | 0.73 | 0.20 | 0.27 | 0.60 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.57 | 0.29 | 0.52 | 0.52 | 0.14 | 0.14 | 0.38 | 0.14 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.64 | 0.61 | 0.73 | 0.52 | 0.24 | 0.30 | 0.30 | 0.03 | 0.00 |
| Medical University Graz | 0.29 | 0.47 | 0.53 | 0.53 | 0.35 | 0.41 | 0.24 | 0.12 | 0.00 |
| Medical University of Innsbruck | 0.49 | 0.60 | 0.66 | 0.76 | 0.30 | 0.39 | 0.23 | 0.06 | 0.04 |
| Medical University of Vienna | 0.46 | 0.57 | 0.72 | 0.70 | 0.34 | 0.42 | 0.22 | 0.08 | 0.01 |
| Montanuniversität Leoben | 0.60 | 0.57 | 0.66 | 0.66 | 0.26 | 0.31 | 0.20 | 0.09 | 0.03 |
| Other | 0.52 | 0.55 | 0.57 | 0.60 | 0.29 | 0.42 | 0.27 | 0.03 | 0.05 |
| Graz University of Technology | 0.61 | 0.54 | 0.66 | 0.66 | 0.33 | 0.33 | 0.31 | 0.07 | 0.03 |
| Vienna University of Technology | 0.55 | 0.55 | 0.68 | 0.69 | 0.37 | 0.36 | 0.27 | 0.06 | 0.03 |
| University of Graz | 0.52 | 0.52 | 0.63 | 0.61 | 0.27 | 0.32 | 0.30 | 0.07 | 0.03 |
| University of Innsbruck | 0.53 | 0.59 | 0.66 | 0.65 | 0.30 | 0.40 | 0.34 | 0.05 | 0.02 |
| University of Klagenfurt | 0.57 | 0.51 | 0.65 | 0.62 | 0.39 | 0.39 | 0.32 | 0.07 | 0.02 |
| University of Linz | 0.67 | 0.55 | 0.70 | 0.62 | 0.30 | 0.40 | 0.24 | 0.09 | 0.03 |
| University of Salzburg | 0.60 | 0.53 | 0.71 | 0.67 | 0.24 | 0.36 | 0.28 | 0.05 | 0.00 |
| University of Vienna | 0.56 | 0.54 | 0.65 | 0.62 | 0.29 | 0.37 | 0.32 | 0.05 | 0.03 |
| University of Natural Resources and Life Sciences Vienna | 0.86 | 0.43 | 0.71 | 0.43 | 0.43 | 0.43 | 0.29 | 0.00 | 0.14 |
| University of Music and Performing Arts Graz | 0.67 | 0.33 | 0.47 | 0.53 | 0.20 | 0.27 | 0.27 | 0.20 | 0.07 |
| University of Music and Performing Arts Vienna | 0.42 | 0.50 | 0.58 | 0.58 | 0.29 | 0.26 | 0.32 | 0.08 | 0.03 |
| University of Applied Arts Vienna | 0.70 | 0.49 | 0.57 | 0.74 | 0.34 | 0.23 | 0.19 | 0.02 | 0.00 |
| University of Arts and Design Linz | 0.56 | 0.33 | 0.67 | 0.72 | 0.22 | 0.28 | 0.22 | 0.11 | 0.06 |
| University of Veterinary Medicine Vienna | 0.60 | 0.60 | 0.79 | 0.64 | 0.33 | 0.48 | 0.24 | 0.02 | 0.01 |
| Vienna University of Economics and Business | 0.42 | 0.53 | 0.68 | 0.65 | 0.25 | 0.46 | 0.25 | 0.10 | 0.01 |
| Austrian Academy of Sciences | 0.59 | 0.68 | 0.70 | 0.64 | 0.29 | 0.36 | 0.21 | 0.05 | 0.04 |
| **Sum of answers** | 0.55 | 0.54 | 0.66 | 0.64 | 0.31 | 0.37 | 0.29 | 0.06 | 0.03 |

Table 87: Which kind of incentives could motivate you to share your research data and make them (openly) accessible? Answers per option, relative distribution per institution, n=10437

| Institution | Recognition | Relevance for evaluations | Visibility | New contacts | Financial incentives | Establishment of standards | Support | None | Other |
|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.20 | 0.08 | 0.16 | 0.22 | 0.06 | 0.08 | 0.18 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.21 | 0.11 | 0.19 | 0.19 | 0.05 | 0.05 | 0.14 | 0.05 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.19 | 0.18 | 0.22 | 0.15 | 0.07 | 0.09 | 0.09 | 0.01 | 0.00 |
| Medical University Graz | 0.10 | 0.16 | 0.18 | 0.18 | 0.12 | 0.14 | 0.08 | 0.04 | 0.00 |
| Medical University of Innsbruck | 0.14 | 0.17 | 0.19 | 0.22 | 0.09 | 0.11 | 0.07 | 0.02 | 0.01 |
| Medical University of Vienna | 0.13 | 0.16 | 0.20 | 0.20 | 0.10 | 0.12 | 0.06 | 0.02 | 0.00 |
| Montanuniversität Leoben | 0.18 | 0.17 | 0.19 | 0.19 | 0.08 | 0.09 | 0.06 | 0.03 | 0.01 |
| Other | 0.16 | 0.17 | 0.17 | 0.18 | 0.09 | 0.13 | 0.08 | 0.01 | 0.01 |
| Graz University of Technology | 0.17 | 0.15 | 0.19 | 0.19 | 0.09 | 0.09 | 0.09 | 0.02 | 0.01 |
| Vienna University of Technology | 0.15 | 0.15 | 0.19 | 0.19 | 0.10 | 0.10 | 0.08 | 0.02 | 0.01 |
| University of Graz | 0.16 | 0.16 | 0.19 | 0.19 | 0.08 | 0.10 | 0.09 | 0.02 | 0.01 |
| University of Innsbruck | 0.15 | 0.17 | 0.19 | 0.18 | 0.08 | 0.11 | 0.10 | 0.02 | 0.01 |
| University of Klagenfurt | 0.16 | 0.14 | 0.18 | 0.17 | 0.11 | 0.11 | 0.09 | 0.02 | 0.01 |
| University of Linz | 0.19 | 0.15 | 0.19 | 0.17 | 0.08 | 0.11 | 0.07 | 0.02 | 0.01 |
| University of Salzburg | 0.17 | 0.16 | 0.21 | 0.19 | 0.07 | 0.10 | 0.08 | 0.02 | 0.00 |
| University of Vienna | 0.16 | 0.16 | 0.19 | 0.18 | 0.09 | 0.11 | 0.09 | 0.02 | 0.01 |
| Univ. of Natural Resources and Life Sciences Vienna | 0.23 | 0.12 | 0.19 | 0.12 | 0.12 | 0.12 | 0.08 | 0.00 | 0.04 |
| University of Music and Performing Arts Graz | 0.22 | 0.11 | 0.16 | 0.18 | 0.07 | 0.09 | 0.09 | 0.07 | 0.02 |
| University of Music and Performing Arts Vienna | 0.14 | 0.16 | 0.19 | 0.19 | 0.09 | 0.09 | 0.10 | 0.03 | 0.01 |
| University of Applied Arts Vienna | 0.21 | 0.15 | 0.17 | 0.23 | 0.10 | 0.07 | 0.06 | 0.01 | 0.00 |
| University of Arts and Design Linz | 0.18 | 0.11 | 0.21 | 0.23 | 0.07 | 0.09 | 0.07 | 0.04 | 0.02 |
| University of Veterinary Medicine Vienna | 0.16 | 0.16 | 0.21 | 0.17 | 0.09 | 0.13 | 0.07 | 0.01 | 0.00 |
| Vienna University of Economics and Business | 0.13 | 0.16 | 0.20 | 0.19 | 0.07 | 0.14 | 0.07 | 0.03 | 0.00 |
| Austrian Academy of Sciences | 0.17 | 0.19 | 0.20 | 0.18 | 0.08 | 0.10 | 0.06 | 0.02 | 0.01 |
| **Sum of answers** | 0.16 | 0.16 | 0.19 | 0.19 | 0.09 | 0.11 | 0.08 | 0.02 | 0.01 |

Table 88: What keeps you from sharing your research data with others? Answers per discipline, absolute, n=3026

| Discipline | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commercial use | Misuse | Control | Competition | Missing data standards | Missing data processes | Rare data formats | Lack of motivation | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 5 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 19 | 17 | 18 | 21 | 17 | 23 | 3 | 17 | 6 | 5 | 0 | 5 | 1 | 43 | 152 |
| Biology | 85 | 74 | 122 | 111 | 73 | 115 | 3 | 150 | 49 | 47 | 11 | 19 | 11 | 287 | 870 |
| Chemistry | 42 | 63 | 65 | 67 | 63 | 72 | 6 | 64 | 25 | 20 | 9 | 8 | 5 | 167 | 509 |
| Humanities | 251 | 228 | 252 | 209 | 184 | 273 | 38 | 172 | 98 | 113 | 17 | 74 | 49 | 685 | 1958 |
| Geoscience (including Geography) | 28 | 38 | 55 | 51 | 32 | 40 | 3 | 43 | 21 | 19 | 8 | 12 | 6 | 118 | 356 |
| Electrical and System Engineering | 120 | 165 | 156 | 110 | 108 | 98 | 14 | 64 | 51 | 78 | 21 | 35 | 15 | 324 | 1035 |
| Mathematics | 26 | 17 | 37 | 17 | 18 | 16 | 3 | 15 | 8 | 10 | 5 | 16 | 8 | 104 | 196 |
| Medicine | 132 | 87 | 85 | 97 | 74 | 120 | 9 | 68 | 38 | 29 | 6 | 23 | 9 | 220 | 777 |
| Physics | 37 | 47 | 100 | 82 | 36 | 64 | 8 | 79 | 32 | 36 | 17 | 33 | 9 | 204 | 580 |
| Other | 141 | 130 | 154 | 139 | 123 | 145 | 15 | 74 | 46 | 59 | 20 | 41 | 25 | 381 | 1112 |
| Social and Behavioural Sciences | 237 | 121 | 212 | 211 | 152 | 226 | 34 | 114 | 72 | 82 | 13 | 60 | 24 | 491 | 1558 |
| **Sum of answers** | 1118 | 987 | 1257 | 1115 | 880 | 1192 | 138 | 861 | 446 | 498 | 127 | 327 | 162 | 3026 | 9108 |

Table 89: What keeps you from sharing your research data with others? Answers per person, relative distribution per discipline, n=3026

| Discipline | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commercial use | Misuse | Control | Competition | Missing data standards | Missing data processes | Rare data formats | Lack of motivation | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 | 1.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticult. a. Veter. Medicine | 0.44 | 0.40 | 0.42 | 0.49 | 0.40 | 0.53 | 0.07 | 0.40 | 0.14 | 0.12 | 0.00 | 0.12 | 0.02 |
| Biology | 0.30 | 0.26 | 0.43 | 0.39 | 0.25 | 0.40 | 0.01 | 0.52 | 0.17 | 0.16 | 0.04 | 0.07 | 0.04 |
| Chemistry | 0.25 | 0.38 | 0.39 | 0.40 | 0.38 | 0.43 | 0.04 | 0.38 | 0.15 | 0.12 | 0.05 | 0.05 | 0.03 |
| Humanities | 0.37 | 0.33 | 0.37 | 0.31 | 0.27 | 0.40 | 0.06 | 0.25 | 0.14 | 0.16 | 0.02 | 0.11 | 0.07 |
| Geoscience (including Geography) | 0.24 | 0.32 | 0.47 | 0.43 | 0.27 | 0.34 | 0.03 | 0.36 | 0.18 | 0.16 | 0.07 | 0.10 | 0.05 |
| Electrical and System Engineering | 0.37 | 0.51 | 0.48 | 0.34 | 0.33 | 0.30 | 0.04 | 0.20 | 0.16 | 0.24 | 0.06 | 0.11 | 0.05 |
| Mathematics | 0.25 | 0.16 | 0.36 | 0.16 | 0.17 | 0.15 | 0.03 | 0.14 | 0.08 | 0.10 | 0.05 | 0.15 | 0.08 |
| Medicine | 0.60 | 0.40 | 0.39 | 0.44 | 0.34 | 0.55 | 0.04 | 0.31 | 0.17 | 0.13 | 0.03 | 0.10 | 0.04 |
| Physics | 0.18 | 0.23 | 0.49 | 0.40 | 0.18 | 0.31 | 0.04 | 0.39 | 0.16 | 0.18 | 0.08 | 0.16 | 0.04 |
| Other | 0.37 | 0.34 | 0.40 | 0.36 | 0.32 | 0.38 | 0.04 | 0.19 | 0.12 | 0.15 | 0.05 | 0.11 | 0.07 |
| Social and Behavioural Sciences | 0.48 | 0.25 | 0.43 | 0.43 | 0.31 | 0.46 | 0.07 | 0.23 | 0.15 | 0.17 | 0.03 | 0.12 | 0.05 |
| **Sum of answers** | 0.37 | 0.33 | 0.42 | 0.37 | 0.29 | 0.39 | 0.05 | 0.28 | 0.15 | 0.16 | 0.04 | 0.11 | 0.05 |

Table 90: What keeps you from sharing your research data with others? Answers per option, relative distribution per discipline, n=9108

| Discipline | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commercial use | Misuse | Control | Competition | Missing data standards | Missing data processes | Rare data formats | Lack of motivation | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.40 | 0.20 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.13 | 0.11 | 0.12 | 0.14 | 0.11 | 0.15 | 0.02 | 0.11 | 0.04 | 0.03 | 0.00 | 0.03 | 0.01 |
| Biology | 0.10 | 0.09 | 0.14 | 0.13 | 0.08 | 0.13 | 0.00 | 0.17 | 0.06 | 0.05 | 0.01 | 0.02 | 0.01 |
| Chemistry | 0.08 | 0.12 | 0.13 | 0.13 | 0.12 | 0.14 | 0.01 | 0.13 | 0.05 | 0.04 | 0.02 | 0.02 | 0.01 |
| Humanities | 0.13 | 0.12 | 0.13 | 0.11 | 0.09 | 0.14 | 0.02 | 0.09 | 0.05 | 0.06 | 0.01 | 0.04 | 0.03 |
| Geoscience (including Geography) | 0.08 | 0.11 | 0.15 | 0.14 | 0.09 | 0.11 | 0.01 | 0.12 | 0.06 | 0.05 | 0.02 | 0.03 | 0.02 |
| Electrical and System Engineering | 0.12 | 0.16 | 0.15 | 0.11 | 0.10 | 0.09 | 0.01 | 0.06 | 0.05 | 0.08 | 0.02 | 0.03 | 0.01 |
| Mathematics | 0.13 | 0.09 | 0.19 | 0.09 | 0.09 | 0.08 | 0.02 | 0.08 | 0.04 | 0.05 | 0.03 | 0.08 | 0.04 |
| Medicine | 0.17 | 0.11 | 0.11 | 0.12 | 0.10 | 0.15 | 0.01 | 0.09 | 0.05 | 0.04 | 0.01 | 0.03 | 0.01 |
| Physics | 0.06 | 0.08 | 0.17 | 0.14 | 0.06 | 0.11 | 0.01 | 0.14 | 0.06 | 0.06 | 0.03 | 0.06 | 0.02 |
| Other | 0.13 | 0.12 | 0.14 | 0.13 | 0.11 | 0.13 | 0.01 | 0.07 | 0.04 | 0.05 | 0.02 | 0.04 | 0.02 |
| Social and Behavioural Sciences | 0.15 | 0.08 | 0.14 | 0.14 | 0.10 | 0.15 | 0.02 | 0.07 | 0.05 | 0.05 | 0.01 | 0.04 | 0.02 |
| **Sum of answers** | 0.12 | 0.11 | 0.14 | 0.12 | 0.10 | 0.13 | 0.02 | 0.09 | 0.05 | 0.05 | 0.01 | 0.04 | 0.02 |

Table 91: What keeps you from sharing your research data with others? Answers per institution, absolute, n=3026

| Institution | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commercial use | Misuse | Control | Compe-tition | Missing data standards | Missing data processes | Rare data formats | Lack of motivation | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 6 | 8 | 3 | 4 | 5 | 8 | 1 | 0 | 5 | 5 | 0 | 1 | 1 | 15 | 47 |
| Vienna Chamber of Labour | 8 | 4 | 12 | 7 | 8 | 8 | 0 | 5 | 4 | 5 | 0 | 2 | 0 | 21 | 63 |
| Institute of Science and Technology (IST Austria) | 7 | 3 | 15 | 12 | 6 | 5 | 1 | 16 | 6 | 5 | 3 | 8 | 0 | 33 | 87 |
| Medical University Graz | 7 | 3 | 8 | 4 | 2 | 3 | 0 | 3 | 4 | 3 | 1 | 3 | 2 | 17 | 43 |
| Medical University of Innsbruck | 33 | 30 | 20 | 26 | 19 | 36 | 1 | 23 | 7 | 8 | 2 | 7 | 5 | 70 | 217 |
| Medical University of Vienna | 121 | 81 | 86 | 87 | 73 | 106 | 10 | 80 | 36 | 30 | 7 | 24 | 6 | 212 | 747 |
| Montanuniversität Leoben | 18 | 17 | 12 | 18 | 15 | 17 | 0 | 7 | 6 | 6 | 2 | 2 | 0 | 35 | 120 |
| Other | 40 | 39 | 36 | 44 | 35 | 39 | 5 | 22 | 17 | 20 | 6 | 8 | 7 | 102 | 318 |
| Graz University of Technology | 56 | 67 | 67 | 56 | 54 | 54 | 8 | 40 | 25 | 31 | 13 | 17 | 6 | 152 | 494 |
| Vienna University of Technology | 113 | 136 | 164 | 139 | 118 | 123 | 12 | 96 | 53 | 71 | 21 | 35 | 16 | 352 | 1097 |
| University of Graz | 86 | 68 | 97 | 95 | 55 | 91 | 8 | 66 | 35 | 37 | 7 | 24 | 17 | 240 | 686 |
| University of Innsbruck | 92 | 75 | 122 | 98 | 65 | 97 | 12 | 73 | 36 | 48 | 11 | 17 | 17 | 257 | 763 |
| University of Klagenfurt | 35 | 26 | 43 | 32 | 23 | 40 | 3 | 21 | 8 | 16 | 2 | 5 | 4 | 84 | 258 |
| University of Linz | 30 | 36 | 41 | 42 | 29 | 40 | 3 | 25 | 9 | 18 | 6 | 14 | 5 | 105 | 298 |
| University of Salzburg | 25 | 22 | 34 | 31 | 18 | 31 | 6 | 20 | 14 | 17 | 3 | 6 | 2 | 75 | 229 |
| University of Vienna | 292 | 240 | 341 | 286 | 230 | 340 | 51 | 269 | 135 | 131 | 31 | 114 | 56 | 888 | 2516 |
| University of Natural Resources and Life Sciences Vienna | 1 | 2 | 5 | 5 | 3 | 1 | 0 | 2 | 2 | 3 | 1 | 1 | 0 | 7 | 26 |
| University of Music and Performing Arts Graz | 3 | 5 | 6 | 4 | 4 | 4 | 0 | 1 | 2 | 1 | 2 | 0 | 1 | 15 | 33 |
| University of Music and Performing Arts Vienna | 16 | 12 | 10 | 12 | 10 | 16 | 1 | 0 | 3 | 3 | 1 | 4 | 6 | 38 | 94 |
| University of Applied Arts Vienna | 13 | 13 | 25 | 19 | 24 | 20 | 2 | 7 | 3 | 8 | 3 | 4 | 0 | 47 | 141 |
| University of Arts and Design Linz | 5 | 4 | 10 | 4 | 6 | 4 | 2 | 0 | 5 | 3 | 1 | 1 | 1 | 18 | 46 |
| University of Veterinary Medicine Vienna | 41 | 35 | 35 | 43 | 31 | 53 | 4 | 43 | 15 | 9 | 0 | 9 | 1 | 94 | 319 |
| Vienna University of Economics and Business | 43 | 31 | 42 | 29 | 31 | 34 | 7 | 31 | 13 | 10 | 1 | 15 | 7 | 93 | 294 |
| Austrian Academy of Sciences | 27 | 30 | 23 | 18 | 16 | 22 | 1 | 11 | 3 | 10 | 3 | 6 | 2 | 56 | 172 |
| **Sum of answers** | 1118 | 987 | 1257 | 1115 | 880 | 1192 | 138 | 861 | 446 | 498 | 127 | 327 | 162 | 3026 | 9108 |

Table 92: What keeps you from sharing your research data with others? Answers per person, relative distribution per institution, n=3026

| Institution | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commer-cial use | Misuse | Control | Competition | Missing data standards | Missing data processes | Rare data formats | Lack of motivation | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.40 | 0.53 | 0.20 | 0.27 | 0.33 | 0.53 | 0.07 | 0.00 | 0.33 | 0.33 | 0.00 | 0.07 | 0.07 |
| Vienna Chamber of Labour | 0.38 | 0.19 | 0.57 | 0.33 | 0.38 | 0.38 | 0.00 | 0.24 | 0.19 | 0.24 | 0.00 | 0.10 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.21 | 0.09 | 0.45 | 0.36 | 0.18 | 0.15 | 0.03 | 0.48 | 0.18 | 0.15 | 0.09 | 0.24 | 0.00 |
| Medical University Graz | 0.41 | 0.18 | 0.47 | 0.24 | 0.12 | 0.18 | 0.00 | 0.18 | 0.24 | 0.18 | 0.06 | 0.18 | 0.12 |
| Medical University of Innsbruck | 0.47 | 0.43 | 0.29 | 0.37 | 0.27 | 0.51 | 0.01 | 0.33 | 0.10 | 0.11 | 0.03 | 0.10 | 0.07 |
| Medical University of Vienna | 0.57 | 0.38 | 0.41 | 0.41 | 0.34 | 0.50 | 0.05 | 0.38 | 0.17 | 0.14 | 0.03 | 0.11 | 0.03 |
| Montanuniversität Leoben | 0.51 | 0.49 | 0.34 | 0.51 | 0.43 | 0.49 | 0.00 | 0.20 | 0.17 | 0.17 | 0.06 | 0.06 | 0.00 |
| Other | 0.39 | 0.38 | 0.35 | 0.43 | 0.34 | 0.38 | 0.05 | 0.22 | 0.17 | 0.20 | 0.06 | 0.08 | 0.07 |
| Graz University of Technology | 0.37 | 0.44 | 0.44 | 0.37 | 0.36 | 0.36 | 0.05 | 0.26 | 0.16 | 0.20 | 0.09 | 0.11 | 0.04 |
| Vienna University of Technology | 0.32 | 0.39 | 0.47 | 0.39 | 0.34 | 0.35 | 0.03 | 0.27 | 0.15 | 0.20 | 0.06 | 0.10 | 0.05 |
| University of Graz | 0.36 | 0.28 | 0.40 | 0.40 | 0.23 | 0.38 | 0.03 | 0.28 | 0.15 | 0.15 | 0.03 | 0.10 | 0.07 |
| University of Innsbruck | 0.36 | 0.29 | 0.47 | 0.38 | 0.25 | 0.38 | 0.05 | 0.28 | 0.14 | 0.19 | 0.04 | 0.07 | 0.07 |
| University of Klagenfurt | 0.42 | 0.31 | 0.51 | 0.38 | 0.27 | 0.48 | 0.04 | 0.25 | 0.10 | 0.19 | 0.02 | 0.06 | 0.05 |
| University of Linz | 0.29 | 0.34 | 0.39 | 0.40 | 0.28 | 0.38 | 0.03 | 0.24 | 0.09 | 0.17 | 0.06 | 0.13 | 0.05 |
| University of Salzburg | 0.33 | 0.29 | 0.45 | 0.41 | 0.24 | 0.41 | 0.08 | 0.27 | 0.19 | 0.23 | 0.04 | 0.08 | 0.03 |
| University of Vienna | 0.33 | 0.27 | 0.38 | 0.32 | 0.26 | 0.38 | 0.06 | 0.30 | 0.15 | 0.15 | 0.03 | 0.13 | 0.06 |
| Univ. of Natural Resources and Life Sciences Vienna | 0.14 | 0.29 | 0.71 | 0.71 | 0.43 | 0.14 | 0.00 | 0.29 | 0.29 | 0.43 | 0.14 | 0.14 | 0.00 |
| University of Music and Performing Arts Graz | 0.20 | 0.33 | 0.40 | 0.27 | 0.27 | 0.27 | 0.00 | 0.07 | 0.13 | 0.07 | 0.13 | 0.00 | 0.07 |
| University of Music and Performing Arts Vienna | 0.42 | 0.32 | 0.26 | 0.32 | 0.26 | 0.42 | 0.03 | 0.00 | 0.08 | 0.08 | 0.03 | 0.11 | 0.16 |
| University of Applied Arts Vienna | 0.28 | 0.28 | 0.53 | 0.40 | 0.51 | 0.43 | 0.04 | 0.15 | 0.06 | 0.17 | 0.06 | 0.09 | 0.00 |
| University of Arts and Design Linz | 0.28 | 0.22 | 0.56 | 0.22 | 0.33 | 0.22 | 0.11 | 0.00 | 0.28 | 0.17 | 0.06 | 0.06 | 0.06 |
| University of Veterinary Medicine Vienna | 0.44 | 0.37 | 0.37 | 0.46 | 0.33 | 0.56 | 0.04 | 0.46 | 0.16 | 0.10 | 0.00 | 0.10 | 0.01 |
| Vienna University of Economics and Business | 0.46 | 0.33 | 0.45 | 0.31 | 0.33 | 0.37 | 0.08 | 0.33 | 0.14 | 0.11 | 0.01 | 0.16 | 0.08 |
| Austrian Academy of Sciences | 0.48 | 0.54 | 0.41 | 0.32 | 0.29 | 0.39 | 0.02 | 0.20 | 0.05 | 0.18 | 0.05 | 0.11 | 0.04 |
| **Sum of answers** | 0.37 | 0.33 | 0.42 | 0.37 | 0.29 | 0.39 | 0.05 | 0.28 | 0.15 | 0.16 | 0.04 | 0.11 | 0.05 |

Table 93: What keeps you from sharing your research data with others? Answers per option, relative distribution per institution, n=9108

| Institution | Privacy violoation | Other legal restrictions | Increased effort of time and/or cost | Misinterpre-tation | Commercial use | Misuse | Control | Competition | Missing data standards | Missing data processes | Rare data formats | Lack of moti-vation | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.13 | 0.17 | 0.06 | 0.09 | 0.11 | 0.17 | 0.02 | 0.00 | 0.11 | 0.11 | 0.00 | 0.02 | 0.02 |
| Vienna Chamber of Labour | 0.13 | 0.06 | 0.19 | 0.11 | 0.13 | 0.13 | 0.00 | 0.08 | 0.06 | 0.08 | 0.00 | 0.03 | 0.00 |
| Inst. of Science and Technology (IST Austria) | 0.08 | 0.03 | 0.17 | 0.14 | 0.07 | 0.06 | 0.01 | 0.18 | 0.07 | 0.06 | 0.03 | 0.09 | 0.00 |
| Medical University Graz | 0.16 | 0.07 | 0.19 | 0.09 | 0.05 | 0.07 | 0.00 | 0.07 | 0.09 | 0.07 | 0.02 | 0.07 | 0.05 |
| Medical University of Innsbruck | 0.15 | 0.14 | 0.09 | 0.12 | 0.09 | 0.17 | 0.00 | 0.11 | 0.03 | 0.04 | 0.01 | 0.03 | 0.02 |
| Medical University of Vienna | 0.16 | 0.11 | 0.12 | 0.12 | 0.10 | 0.14 | 0.01 | 0.11 | 0.05 | 0.04 | 0.01 | 0.03 | 0.01 |
| Montanuniversität Leoben | 0.15 | 0.14 | 0.10 | 0.15 | 0.13 | 0.14 | 0.00 | 0.06 | 0.05 | 0.05 | 0.02 | 0.02 | 0.00 |
| Other | 0.13 | 0.12 | 0.11 | 0.14 | 0.11 | 0.12 | 0.02 | 0.07 | 0.05 | 0.06 | 0.02 | 0.03 | 0.02 |
| Graz University of Technology | 0.11 | 0.14 | 0.14 | 0.11 | 0.11 | 0.11 | 0.02 | 0.08 | 0.05 | 0.06 | 0.03 | 0.03 | 0.01 |
| Vienna University of Technology | 0.10 | 0.12 | 0.15 | 0.13 | 0.11 | 0.11 | 0.01 | 0.09 | 0.05 | 0.06 | 0.02 | 0.03 | 0.01 |
| University of Graz | 0.13 | 0.10 | 0.14 | 0.14 | 0.08 | 0.13 | 0.01 | 0.10 | 0.05 | 0.05 | 0.01 | 0.03 | 0.02 |
| University of Innsbruck | 0.12 | 0.10 | 0.16 | 0.13 | 0.09 | 0.13 | 0.02 | 0.10 | 0.05 | 0.06 | 0.01 | 0.02 | 0.02 |
| University of Klagenfurt | 0.14 | 0.10 | 0.17 | 0.12 | 0.09 | 0.16 | 0.01 | 0.08 | 0.03 | 0.06 | 0.01 | 0.02 | 0.02 |
| University of Linz | 0.10 | 0.12 | 0.14 | 0.14 | 0.10 | 0.13 | 0.01 | 0.08 | 0.03 | 0.06 | 0.02 | 0.05 | 0.02 |
| University of Salzburg | 0.11 | 0.10 | 0.15 | 0.14 | 0.08 | 0.14 | 0.03 | 0.09 | 0.06 | 0.07 | 0.01 | 0.03 | 0.01 |
| University of Vienna | 0.12 | 0.10 | 0.14 | 0.11 | 0.09 | 0.14 | 0.02 | 0.11 | 0.05 | 0.05 | 0.01 | 0.05 | 0.02 |
| Univ. of Natural Res. and Life Sciences Vienna | 0.04 | 0.08 | 0.19 | 0.19 | 0.12 | 0.04 | 0.00 | 0.08 | 0.08 | 0.12 | 0.04 | 0.04 | 0.00 |
| University of Music and Performing Arts Graz | 0.09 | 0.15 | 0.18 | 0.12 | 0.12 | 0.12 | 0.00 | 0.03 | 0.06 | 0.03 | 0.06 | 0.00 | 0.03 |
| Univ. of Music and Performing Arts Vienna | 0.17 | 0.13 | 0.11 | 0.13 | 0.11 | 0.17 | 0.01 | 0.00 | 0.03 | 0.03 | 0.01 | 0.04 | 0.06 |
| University of Applied Arts Vienna | 0.09 | 0.09 | 0.18 | 0.13 | 0.17 | 0.14 | 0.01 | 0.05 | 0.02 | 0.06 | 0.02 | 0.03 | 0.00 |
| University of Arts and Design Linz | 0.11 | 0.09 | 0.22 | 0.09 | 0.13 | 0.09 | 0.04 | 0.00 | 0.11 | 0.07 | 0.02 | 0.02 | 0.02 |
| University of Veterinary Medicine Vienna | 0.13 | 0.11 | 0.11 | 0.13 | 0.10 | 0.17 | 0.01 | 0.13 | 0.05 | 0.03 | 0.00 | 0.03 | 0.00 |
| Vienna University of Economics and Business | 0.15 | 0.11 | 0.14 | 0.10 | 0.11 | 0.12 | 0.02 | 0.11 | 0.04 | 0.03 | 0.00 | 0.05 | 0.02 |
| Austrian Academy of Sciences | 0.16 | 0.17 | 0.13 | 0.10 | 0.09 | 0.13 | 0.01 | 0.06 | 0.02 | 0.06 | 0.02 | 0.03 | 0.01 |
| **Sum of answers** | 0.12 | 0.11 | 0.14 | 0.12 | 0.10 | 0.13 | 0.02 | 0.09 | 0.05 | 0.05 | 0.01 | 0.04 | 0.02 |

Table 94: Which data archive would you preferably use? Answers per discipline, absolute, n=3026

| Discipline | International multidisciplinary data archive | International discipline specific data archive | National multi-disciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other | Persons | Sum of Answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticult. abnd Vet. Medicine | 7 | 19 | 2 | 9 | 16 | 11 | 3 | 0 | 43 | 67 |
| Biology | 71 | 159 | 23 | 50 | 111 | 40 | 27 | 0 | 287 | 481 |
| Chemistry | 31 | 70 | 9 | 20 | 64 | 37 | 19 | 1 | 167 | 251 |
| Humanities | 259 | 373 | 111 | 174 | 209 | 108 | 68 | 12 | 685 | 1314 |
| Geoscience (including Geography) | 30 | 54 | 20 | 26 | 47 | 20 | 16 | 4 | 118 | 217 |
| Electrical and System Engineering | 65 | 138 | 31 | 67 | 169 | 85 | 23 | 6 | 324 | 584 |
| Mathematics | 28 | 62 | 8 | 14 | 36 | 9 | 13 | 2 | 104 | 172 |
| Medicine | 56 | 80 | 27 | 53 | 99 | 45 | 25 | 2 | 220 | 387 |
| Physics | 30 | 107 | 14 | 21 | 74 | 49 | 25 | 5 | 204 | 325 |
| Other | 125 | 152 | 50 | 77 | 134 | 64 | 60 | 12 | 381 | 674 |
| Social and Behavioural Sciences | 155 | 216 | 79 | 134 | 169 | 81 | 59 | 6 | 491 | 899 |
| **Sum of answers** | 857 | 1431 | 375 | 645 | 1128 | 549 | 338 | 50 | 3026 | 5373 |

Table 95: Which data archive would you preferably use? Answers per person, relative distribution per discipline, n=3026

| Discipline | International multidisciplinary data archive | International discipline specific data archive | National multidisciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.50 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.16 | 0.44 | 0.05 | 0.21 | 0.37 | 0.26 | 0.07 | 0.00 |
| Biology | 0.25 | 0.55 | 0.08 | 0.17 | 0.39 | 0.14 | 0.09 | 0.00 |
| Chemistry | 0.19 | 0.42 | 0.05 | 0.12 | 0.38 | 0.22 | 0.11 | 0.01 |
| Humanities | 0.38 | 0.54 | 0.16 | 0.25 | 0.31 | 0.16 | 0.10 | 0.02 |
| Geoscience (including Geography) | 0.25 | 0.46 | 0.17 | 0.22 | 0.40 | 0.17 | 0.14 | 0.03 |
| Electrical and System Engineering | 0.20 | 0.43 | 0.10 | 0.21 | 0.52 | 0.26 | 0.07 | 0.02 |
| Mathematics | 0.27 | 0.60 | 0.08 | 0.13 | 0.35 | 0.09 | 0.13 | 0.02 |
| Medicine | 0.25 | 0.36 | 0.12 | 0.24 | 0.45 | 0.20 | 0.11 | 0.01 |
| Physics | 0.15 | 0.52 | 0.07 | 0.10 | 0.36 | 0.24 | 0.12 | 0.02 |
| Other | 0.33 | 0.40 | 0.13 | 0.20 | 0.35 | 0.17 | 0.16 | 0.03 |
| Social and Behavioural Sciences | 0.32 | 0.44 | 0.16 | 0.27 | 0.34 | 0.16 | 0.12 | 0.01 |
| **Sum of answers** | 0.28 | 0.47 | 0.12 | 0.21 | 0.37 | 0.18 | 0.11 | 0.02 |

Table 96: Which data archive would you preferably use? Answers per option, relative distribution per discipline, n=5373

| Discipline | International multidisciplinary data archive | International discipline specific data archive | National multidisciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other |
|---|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.50 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.10 | 0.28 | 0.03 | 0.13 | 0.24 | 0.16 | 0.04 | 0.00 |
| Biology | 0.15 | 0.33 | 0.05 | 0.10 | 0.23 | 0.08 | 0.06 | 0.00 |
| Chemistry | 0.12 | 0.28 | 0.04 | 0.08 | 0.25 | 0.15 | 0.08 | 0.00 |
| Humanities | 0.20 | 0.28 | 0.08 | 0.13 | 0.16 | 0.08 | 0.05 | 0.01 |
| Geoscience (including Geography) | 0.14 | 0.25 | 0.09 | 0.12 | 0.22 | 0.09 | 0.07 | 0.02 |
| Electrical and System Engineering | 0.11 | 0.24 | 0.05 | 0.11 | 0.29 | 0.15 | 0.04 | 0.01 |
| Mathematics | 0.16 | 0.36 | 0.05 | 0.08 | 0.21 | 0.05 | 0.08 | 0.01 |
| Medicine | 0.14 | 0.21 | 0.07 | 0.14 | 0.26 | 0.12 | 0.06 | 0.01 |
| Physics | 0.09 | 0.33 | 0.04 | 0.06 | 0.23 | 0.15 | 0.08 | 0.02 |
| Other | 0.19 | 0.23 | 0.07 | 0.11 | 0.20 | 0.09 | 0.09 | 0.02 |
| Social and Behavioural Sciences | 0.17 | 0.24 | 0.09 | 0.15 | 0.19 | 0.09 | 0.07 | 0.01 |
| **Sum of answers** | 0.16 | 0.27 | 0.07 | 0.12 | 0.21 | 0.10 | 0.06 | 0.01 |

Table 97: Which data archive would you preferably use? Answers per institution, absolute, n=3026

| Institute | International multidisciplinary data archive | International discipline specific data archive | National multi-disciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other | Persons | Sum of Answers |
|---|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 5 | 8 | 2 | 6 | 6 | 2 | 0 | 0 | 15 | 29 |
| Vienna Chamber of Labour | 5 | 7 | 2 | 6 | 10 | 5 | 1 | 0 | 21 | 36 |
| Institute of Science and Technology (IST Austria) | 11 | 17 | 1 | 0 | 10 | 2 | 5 | 1 | 33 | 47 |
| Medical University Graz | 4 | 9 | 0 | 3 | 6 | 0 | 3 | 0 | 17 | 25 |
| Medical University of Innsbruck | 18 | 31 | 2 | 10 | 35 | 4 | 11 | 2 | 70 | 113 |
| Medical University of Vienna | 50 | 77 | 26 | 52 | 95 | 53 | 23 | 0 | 212 | 376 |
| Montanuniversität Leoben | 5 | 11 | 2 | 9 | 19 | 6 | 6 | 0 | 35 | 58 |
| Other | 37 | 48 | 18 | 29 | 32 | 15 | 7 | 2 | 102 | 188 |
| Graz University of Technology | 30 | 61 | 9 | 25 | 73 | 24 | 21 | 2 | 152 | 245 |
| Vienna University of Technology | 75 | 148 | 41 | 59 | 155 | 100 | 33 | 5 | 352 | 616 |
| University of Graz | 75 | 121 | 31 | 50 | 79 | 44 | 26 | 0 | 240 | 426 |
| University of Innsbruck | 69 | 130 | 37 | 54 | 97 | 46 | 23 | 5 | 257 | 461 |
| University of Klagenfurt | 30 | 32 | 16 | 14 | 32 | 15 | 12 | 3 | 84 | 154 |
| University of Linz | 28 | 54 | 13 | 20 | 38 | 20 | 10 | 2 | 105 | 185 |
| University of Salzburg | 12 | 38 | 3 | 18 | 24 | 14 | 6 | 1 | 75 | 116 |
| University of Vienna | 288 | 465 | 124 | 198 | 282 | 131 | 118 | 16 | 888 | 1622 |
| Univer. of Natural Resourc.a.Life Sciences Vienna | 1 | 4 | 0 | 0 | 1 | 1 | 1 | 2 | 7 | 10 |
| University of Music and Performing Arts Graz | 3 | 10 | 2 | 5 | 6 | 2 | 1 | 0 | 15 | 29 |
| University of Music and Performing Arts Vienna | 17 | 18 | 8 | 13 | 13 | 4 | 3 | 1 | 38 | 77 |
| University of Applied Arts Vienna | 23 | 18 | 7 | 13 | 14 | 6 | 3 | 0 | 47 | 84 |
| University of Arts and Design Linz | 7 | 6 | 3 | 6 | 5 | 2 | 4 | 2 | 18 | 35 |
| University of Veterinary Medicine Vienna | 17 | 46 | 7 | 16 | 32 | 21 | 8 | 1 | 94 | 148 |
| Vienna University of Economics and Business | 28 | 48 | 18 | 26 | 37 | 23 | 11 | 4 | 93 | 195 |
| Austrian Academy of Sciences | 19 | 24 | 3 | 13 | 27 | 9 | 2 | 1 | 56 | 98 |
| **Summe der Antworten** | 857 | 1431 | 375 | 645 | 1128 | 549 | 338 | 50 | 3026 | 5373 |

Table 98: Which data archive would you preferably use? Answers per person, relative distribution per institution, n=3026

| Institution | International multidisciplinary data archive | International discipline specific data archive | National multidisciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.33 | 0.53 | 0.13 | 0.40 | 0.40 | 0.13 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.24 | 0.33 | 0.10 | 0.29 | 0.48 | 0.24 | 0.05 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.33 | 0.52 | 0.03 | 0.00 | 0.30 | 0.06 | 0.15 | 0.03 |
| Medical University Graz | 0.24 | 0.53 | 0.00 | 0.18 | 0.35 | 0.00 | 0.18 | 0.00 |
| Medical University of Innsbruck | 0.26 | 0.44 | 0.03 | 0.14 | 0.50 | 0.06 | 0.16 | 0.03 |
| Medical University of Vienna | 0.24 | 0.36 | 0.12 | 0.25 | 0.45 | 0.25 | 0.11 | 0.00 |
| Montanuniversität Leoben | 0.14 | 0.31 | 0.06 | 0.26 | 0.54 | 0.17 | 0.17 | 0.00 |
| Other | 0.36 | 0.47 | 0.18 | 0.28 | 0.31 | 0.15 | 0.07 | 0.02 |
| Graz University of Technology | 0.20 | 0.40 | 0.06 | 0.16 | 0.48 | 0.16 | 0.14 | 0.01 |
| Vienna University of Technology | 0.21 | 0.42 | 0.12 | 0.17 | 0.44 | 0.28 | 0.09 | 0.01 |
| University of Graz | 0.31 | 0.50 | 0.13 | 0.21 | 0.33 | 0.18 | 0.11 | 0.00 |
| University of Innsbruck | 0.27 | 0.51 | 0.14 | 0.21 | 0.38 | 0.18 | 0.09 | 0.02 |
| University of Klagenfurt | 0.36 | 0.38 | 0.19 | 0.17 | 0.38 | 0.18 | 0.14 | 0.04 |
| University of Linz | 0.27 | 0.51 | 0.12 | 0.19 | 0.36 | 0.19 | 0.10 | 0.02 |
| University of Salzburg | 0.16 | 0.51 | 0.04 | 0.24 | 0.32 | 0.19 | 0.08 | 0.01 |
| University of Vienna | 0.32 | 0.52 | 0.14 | 0.22 | 0.32 | 0.15 | 0.13 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.14 | 0.57 | 0.00 | 0.00 | 0.14 | 0.14 | 0.14 | 0.29 |
| University of Music and Performing Arts Graz | 0.20 | 0.67 | 0.13 | 0.33 | 0.40 | 0.13 | 0.07 | 0.00 |
| University of Music and Performing Arts Vienna | 0.45 | 0.47 | 0.21 | 0.34 | 0.34 | 0.11 | 0.08 | 0.03 |
| University of Applied Arts Vienna | 0.49 | 0.38 | 0.15 | 0.28 | 0.30 | 0.13 | 0.06 | 0.00 |
| University of Arts and Design Linz | 0.39 | 0.33 | 0.17 | 0.33 | 0.28 | 0.11 | 0.22 | 0.11 |
| University of Veterinary Medicine Vienna | 0.18 | 0.49 | 0.07 | 0.17 | 0.34 | 0.22 | 0.09 | 0.01 |
| Vienna University of Economics and Business | 0.30 | 0.52 | 0.19 | 0.28 | 0.40 | 0.25 | 0.12 | 0.04 |
| Austrian Academy of Sciences | 0.34 | 0.43 | 0.05 | 0.23 | 0.48 | 0.16 | 0.04 | 0.02 |
| **Sum of answers** | 0.28 | 0.47 | 0.12 | 0.21 | 0.37 | 0.18 | 0.11 | 0.02 |

Table 99: Which data archive would you preferably use? Answers per option, relative distribution per institution, n=5373

| Institution | International multidisciplinary data archive | International discipline specific data archive | National multidisciplinary data archive | National discipline specific data archive | Centralized data archive in my institution | Decentralized data archive in my institution | I do not use a data archive | Other |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.17 | 0.28 | 0.07 | 0.21 | 0.21 | 0.07 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.14 | 0.19 | 0.06 | 0.17 | 0.28 | 0.14 | 0.03 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.23 | 0.36 | 0.02 | 0.00 | 0.21 | 0.04 | 0.11 | 0.02 |
| Medical University Graz | 0.16 | 0.36 | 0.00 | 0.12 | 0.24 | 0.00 | 0.12 | 0.00 |
| Medical University of Innsbruck | 0.16 | 0.27 | 0.02 | 0.09 | 0.31 | 0.04 | 0.10 | 0.02 |
| Medical University of Vienna | 0.13 | 0.20 | 0.07 | 0.14 | 0.25 | 0.14 | 0.06 | 0.00 |
| Montanuniversität Leoben | 0.09 | 0.19 | 0.03 | 0.16 | 0.33 | 0.10 | 0.10 | 0.00 |
| Other | 0.20 | 0.26 | 0.10 | 0.15 | 0.17 | 0.08 | 0.04 | 0.01 |
| Graz University of Technology | 0.12 | 0.25 | 0.04 | 0.10 | 0.30 | 0.10 | 0.09 | 0.01 |
| Vienna University of Technology | 0.12 | 0.24 | 0.07 | 0.10 | 0.25 | 0.16 | 0.05 | 0.01 |
| University of Graz | 0.18 | 0.28 | 0.07 | 0.12 | 0.19 | 0.10 | 0.06 | 0.00 |
| University of Innsbruck | 0.15 | 0.28 | 0.08 | 0.12 | 0.21 | 0.10 | 0.05 | 0.01 |
| University of Klagenfurt | 0.19 | 0.21 | 0.10 | 0.09 | 0.21 | 0.10 | 0.08 | 0.02 |
| University of Linz | 0.15 | 0.29 | 0.07 | 0.11 | 0.21 | 0.11 | 0.05 | 0.01 |
| University of Salzburg | 0.10 | 0.33 | 0.03 | 0.16 | 0.21 | 0.12 | 0.05 | 0.01 |
| University of Vienna | 0.18 | 0.29 | 0.08 | 0.12 | 0.17 | 0.08 | 0.07 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.10 | 0.40 | 0.00 | 0.00 | 0.10 | 0.10 | 0.10 | 0.20 |
| University of Music and Performing Arts Graz | 0.10 | 0.34 | 0.07 | 0.17 | 0.21 | 0.07 | 0.03 | 0.00 |
| University of Music and Performing Arts Vienna | 0.22 | 0.23 | 0.10 | 0.17 | 0.17 | 0.05 | 0.04 | 0.01 |
| University of Applied Arts Vienna | 0.27 | 0.21 | 0.08 | 0.15 | 0.17 | 0.07 | 0.04 | 0.00 |
| University of Arts and Design Linz | 0.20 | 0.17 | 0.09 | 0.17 | 0.14 | 0.06 | 0.11 | 0.06 |
| University of Veterinary Medicine Vienna | 0.11 | 0.31 | 0.05 | 0.11 | 0.22 | 0.14 | 0.05 | 0.01 |
| Vienna University of Economics and Business | 0.14 | 0.25 | 0.09 | 0.13 | 0.19 | 0.12 | 0.06 | 0.02 |
| Austrian Academy of Sciences | 0.19 | 0.24 | 0.03 | 0.13 | 0.28 | 0.09 | 0.02 | 0.01 |
| **Sum of answers** | 0.16 | 0.27 | 0.07 | 0.12 | 0.21 | 0.10 | 0.06 | 0.01 |

Table 100: Which support options for handling research data would you use at your institution? Answers per discipline, absolute, n=3026

| Discipline | Helpdesk | Technical infrastructure | Specific support for data management | Legal advice | Training courses | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Not specified | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 31 | 31 | 25 | 18 | 19 | 2 | 0 | 43 | 126 |
| Biology | 132 | 189 | 145 | 97 | 102 | 21 | 1 | 287 | 687 |
| Chemistry | 45 | 107 | 71 | 53 | 45 | 19 | 1 | 167 | 341 |
| Humanities | 333 | 388 | 344 | 322 | 326 | 63 | 5 | 685 | 1781 |
| Geoscience (including Geography) | 42 | 80 | 63 | 34 | 35 | 8 | 3 | 118 | 265 |
| Electrical and System Engineering | 85 | 220 | 142 | 166 | 100 | 37 | 3 | 324 | 753 |
| Mathematics | 42 | 56 | 24 | 32 | 20 | 22 | 0 | 104 | 196 |
| Medicine | 95 | 135 | 143 | 122 | 95 | 25 | 1 | 220 | 616 |
| Physics | 56 | 135 | 80 | 50 | 50 | 26 | 6 | 204 | 403 |
| Other | 139 | 207 | 171 | 162 | 123 | 48 | 3 | 381 | 853 |
| Social and Behavioural Sciences | 229 | 276 | 265 | 221 | 195 | 46 | 3 | 491 | 1235 |
| **Sum of answers** | 1229 | 1824 | 1473 | 1278 | 1110 | 318 | 26 | 3026 | 7258 |

Table 101: Which support options for handling research data would you use at your institution? Answers per person, relative distribution per discipline, n=3026

| Discipline | Helpdesk | Technical infra-structure | Specific support for data management | Legal advice | Training courses | None | Other |
|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.72 | 0.72 | 0.58 | 0.42 | 0.44 | 0.05 | 0.00 |
| Biology | 0.46 | 0.66 | 0.51 | 0.34 | 0.36 | 0.07 | 0.00 |
| Chemistry | 0.27 | 0.64 | 0.43 | 0.32 | 0.27 | 0.11 | 0.01 |
| Humanities | 0.49 | 0.57 | 0.50 | 0.47 | 0.48 | 0.09 | 0.01 |
| Geoscience (including Geography) | 0.36 | 0.68 | 0.53 | 0.29 | 0.30 | 0.07 | 0.03 |
| Electrical and System Engineering | 0.26 | 0.68 | 0.44 | 0.51 | 0.31 | 0.11 | 0.01 |
| Mathematics | 0.40 | 0.54 | 0.23 | 0.31 | 0.19 | 0.21 | 0.00 |
| Medicine | 0.43 | 0.61 | 0.65 | 0.55 | 0.43 | 0.11 | 0.00 |
| Physics | 0.27 | 0.66 | 0.39 | 0.25 | 0.25 | 0.13 | 0.03 |
| Other | 0.36 | 0.54 | 0.45 | 0.43 | 0.32 | 0.13 | 0.01 |
| Social and Behavioural Sciences | 0.47 | 0.56 | 0.54 | 0.45 | 0.40 | 0.09 | 0.01 |
| **Sum of answers** | 0.41 | 0.60 | 0.49 | 0.42 | 0.37 | 0.11 | 0.01 |

Table 102: Which support options for handling research data would you use at your institution? Answers per option, relative distribution per discipline, n=7258

| Discipline | Helpdesk | Technical infra-structure | Specific support for Data Management | Legal advice | Training courses | None | Other |
|---|---|---|---|---|---|---|---|
| Not specified | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.25 | 0.25 | 0.20 | 0.14 | 0.15 | 0.02 | 0.00 |
| Biology | 0.19 | 0.28 | 0.21 | 0.14 | 0.15 | 0.03 | 0.00 |
| Chemistry | 0.13 | 0.31 | 0.21 | 0.16 | 0.13 | 0.06 | 0.00 |
| Humanities | 0.19 | 0.22 | 0.19 | 0.18 | 0.18 | 0.04 | 0.00 |
| Geoscience (including Geography) | 0.16 | 0.30 | 0.24 | 0.13 | 0.13 | 0.03 | 0.01 |
| Electrical and System Engineering | 0.11 | 0.29 | 0.19 | 0.22 | 0.13 | 0.05 | 0.00 |
| Mathematics | 0.21 | 0.29 | 0.12 | 0.16 | 0.10 | 0.11 | 0.00 |
| Medicine | 0.15 | 0.22 | 0.23 | 0.20 | 0.15 | 0.04 | 0.00 |
| Physics | 0.14 | 0.33 | 0.20 | 0.12 | 0.12 | 0.06 | 0.01 |
| Other | 0.16 | 0.24 | 0.20 | 0.19 | 0.14 | 0.06 | 0.00 |
| Social and Behavioural Sciences | 0.19 | 0.22 | 0.21 | 0.18 | 0.16 | 0.04 | 0.00 |
| **Sum of answers** | 0.17 | 0.25 | 0.20 | 0.18 | 0.15 | 0.04 | 0.00 |

Table 103: Which support options for handling research data would you use at your institution? Answers per institution, absolute, n=3026

| Institution | Helpdesk | Technical infrastructure | Specific support for Data Management | Legal advice | Training courses | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 7 | 11 | 9 | 10 | 10 | 0 | 0 | 15 | 47 |
| Vienna Chamber of Labour | 11 | 8 | 12 | 2 | 8 | 1 | 1 | 21 | 43 |
| Institute of Science and Technology (IST Austria) | 11 | 16 | 15 | 7 | 14 | 4 | 0 | 33 | 67 |
| Medical University Graz | 3 | 8 | 8 | 5 | 4 | 4 | 0 | 17 | 32 |
| Medical University of Innsbruck | 26 | 40 | 40 | 31 | 29 | 12 | 1 | 70 | 179 |
| Medical University of Vienna | 103 | 134 | 125 | 110 | 87 | 18 | 1 | 212 | 578 |
| Montanuniversität Leoben | 5 | 19 | 17 | 11 | 17 | 4 | 0 | 35 | 73 |
| Other | 44 | 43 | 52 | 51 | 41 | 14 | 3 | 102 | 248 |
| Graz University of Technology | 32 | 89 | 56 | 56 | 46 | 21 | 1 | 152 | 301 |
| Vienna University of Technology | 90 | 243 | 166 | 149 | 93 | 46 | 2 | 352 | 789 |
| University of Graz | 112 | 147 | 111 | 89 | 91 | 24 | 0 | 240 | 574 |
| University of Innsbruck | 75 | 161 | 130 | 108 | 85 | 23 | 2 | 257 | 584 |
| University of Klagenfurt | 37 | 57 | 45 | 43 | 25 | 7 | 0 | 84 | 214 |
| University of Linz | 35 | 63 | 36 | 42 | 31 | 13 | 1 | 105 | 221 |
| University of Salzburg | 39 | 43 | 29 | 34 | 22 | 8 | 1 | 75 | 176 |
| University of Vienna | 420 | 506 | 417 | 356 | 354 | 95 | 9 | 888 | 2157 |
| University of Natural Resources and Life Sciences Vienna | 3 | 3 | 5 | 3 | 3 | 1 | 2 | 7 | 20 |
| University of Music and Performing Arts Graz | 6 | 11 | 9 | 7 | 9 | 1 | 0 | 15 | 43 |
| University of Music and Performing Arts Vienna | 15 | 28 | 22 | 17 | 10 | 1 | 1 | 38 | 94 |
| University of Applied Arts Vienna | 19 | 25 | 22 | 25 | 23 | 3 | 0 | 47 | 117 |
| University of Arts and Design Linz | 7 | 9 | 8 | 11 | 5 | 3 | 0 | 18 | 43 |
| University of Veterinary Medicine Vienna | 50 | 60 | 52 | 39 | 45 | 3 | 0 | 94 | 249 |
| Vienna University of Economics and Business | 48 | 58 | 56 | 46 | 41 | 12 | 0 | 93 | 261 |
| Austrian Academy of Sciences | 31 | 42 | 31 | 26 | 17 | 0 | 1 | 56 | 148 |
| **Sum of answers** | 1229 | 1824 | 1473 | 1278 | 1110 | 318 | 26 | 3026 | 7258 |

Table 104: Which support options for handling research data would you use at your institution? Answers per person, relative distribution per institution, n=3026

| Institution | Helpdesk | Technical infra-structure | Specific support for data management | Legal advice | Training courses | None | Other |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.47 | 0.73 | 0.60 | 0.67 | 0.67 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.52 | 0.38 | 0.57 | 0.10 | 0.38 | 0.05 | 0.05 |
| Institute of Science and Technology (IST Austria) | 0.33 | 0.48 | 0.45 | 0.21 | 0.42 | 0.12 | 0.00 |
| Medical University Graz | 0.18 | 0.47 | 0.47 | 0.29 | 0.24 | 0.24 | 0.00 |
| Medical University of Innsbruck | 0.37 | 0.57 | 0.57 | 0.44 | 0.41 | 0.17 | 0.01 |
| Medical University of Vienna | 0.49 | 0.63 | 0.59 | 0.52 | 0.41 | 0.08 | 0.00 |
| Montanuniversität Leoben | 0.14 | 0.54 | 0.49 | 0.31 | 0.49 | 0.11 | 0.00 |
| Other | 0.43 | 0.42 | 0.51 | 0.50 | 0.40 | 0.14 | 0.03 |
| Graz University of Technology | 0.21 | 0.59 | 0.37 | 0.37 | 0.30 | 0.14 | 0.01 |
| Vienna University of Technology | 0.26 | 0.69 | 0.47 | 0.42 | 0.26 | 0.13 | 0.01 |
| University of Graz | 0.47 | 0.61 | 0.46 | 0.37 | 0.38 | 0.10 | 0.00 |
| University of Innsbruck | 0.29 | 0.63 | 0.51 | 0.42 | 0.33 | 0.09 | 0.01 |
| University of Klagenfurt | 0.44 | 0.68 | 0.54 | 0.51 | 0.30 | 0.08 | 0.00 |
| University of Linz | 0.33 | 0.60 | 0.34 | 0.40 | 0.30 | 0.12 | 0.01 |
| University of Salzburg | 0.52 | 0.57 | 0.39 | 0.45 | 0.29 | 0.11 | 0.01 |
| University of Vienna | 0.47 | 0.57 | 0.47 | 0.40 | 0.40 | 0.11 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.43 | 0.43 | 0.71 | 0.43 | 0.43 | 0.14 | 0.29 |
| University of Music and Performing Arts Graz | 0.40 | 0.73 | 0.60 | 0.47 | 0.60 | 0.07 | 0.00 |
| University of Music and Performing Arts Vienna | 0.39 | 0.74 | 0.58 | 0.45 | 0.26 | 0.03 | 0.03 |
| University of Applied Arts Vienna | 0.40 | 0.53 | 0.47 | 0.53 | 0.49 | 0.06 | 0.00 |
| University of Arts and Design Linz | 0.39 | 0.50 | 0.44 | 0.61 | 0.28 | 0.17 | 0.00 |
| University of Veterinary Medicine Vienna | 0.53 | 0.64 | 0.55 | 0.41 | 0.48 | 0.03 | 0.00 |
| Vienna University of Economics and Business | 0.52 | 0.62 | 0.60 | 0.49 | 0.44 | 0.13 | 0.00 |
| Austrian Academy of Sciences | 0.55 | 0.75 | 0.55 | 0.46 | 0.30 | 0.00 | 0.02 |
| **Sum of answers** | 0.41 | 0.60 | 0.49 | 0.42 | 0.37 | 0.11 | 0.01 |

Table 105: Which support options for handling research data would you use at your institution? Answers per option, relative distribution per institution, n=7258

| Institution | Helpdesk | Technical infrastructure | Specific support for data management | Legal advice | Training courses | None | Other |
|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.15 | 0.23 | 0.19 | 0.21 | 0.21 | 0.00 | 0.00 |
| Vienna Chamber of Labour | 0.26 | 0.19 | 0.28 | 0.05 | 0.19 | 0.02 | 0.02 |
| Institute of Science and Technology (IST Austria) | 0.16 | 0.24 | 0.22 | 0.10 | 0.21 | 0.06 | 0.00 |
| Medical University Graz | 0.09 | 0.25 | 0.25 | 0.16 | 0.13 | 0.13 | 0.00 |
| Medical University of Innsbruck | 0.15 | 0.22 | 0.22 | 0.17 | 0.16 | 0.07 | 0.01 |
| Medical University of Vienna | 0.18 | 0.23 | 0.22 | 0.19 | 0.15 | 0.03 | 0.00 |
| Montanuniversität Leoben | 0.07 | 0.26 | 0.23 | 0.15 | 0.23 | 0.05 | 0.00 |
| Other | 0.18 | 0.17 | 0.21 | 0.21 | 0.17 | 0.06 | 0.01 |
| Graz University of Technology | 0.11 | 0.30 | 0.19 | 0.19 | 0.15 | 0.07 | 0.00 |
| Vienna University of Technology | 0.11 | 0.31 | 0.21 | 0.19 | 0.12 | 0.06 | 0.00 |
| University of Graz | 0.20 | 0.26 | 0.19 | 0.16 | 0.16 | 0.04 | 0.00 |
| University of Innsbruck | 0.13 | 0.28 | 0.22 | 0.18 | 0.15 | 0.04 | 0.00 |
| University of Klagenfurt | 0.17 | 0.27 | 0.21 | 0.20 | 0.12 | 0.03 | 0.00 |
| University of Linz | 0.16 | 0.29 | 0.16 | 0.19 | 0.14 | 0.06 | 0.00 |
| University of Salzburg | 0.22 | 0.24 | 0.16 | 0.19 | 0.13 | 0.05 | 0.01 |
| University of Vienna | 0.19 | 0.23 | 0.19 | 0.17 | 0.16 | 0.04 | 0.00 |
| Univ. of Natural Resources and Life Sciences Vienna | 0.15 | 0.15 | 0.25 | 0.15 | 0.15 | 0.05 | 0.10 |
| University of Music and Performing Arts Graz | 0.14 | 0.26 | 0.21 | 0.16 | 0.21 | 0.02 | 0.00 |
| University of Music and Performing Arts Vienna | 0.16 | 0.30 | 0.23 | 0.18 | 0.11 | 0.01 | 0.01 |
| University of Applied Arts Vienna | 0.16 | 0.21 | 0.19 | 0.21 | 0.20 | 0.03 | 0.00 |
| University of Arts and Design Linz | 0.16 | 0.21 | 0.19 | 0.26 | 0.12 | 0.07 | 0.00 |
| University of Veterinary Medicine Vienna | 0.20 | 0.24 | 0.21 | 0.16 | 0.18 | 0.01 | 0.00 |
| Vienna University of Economics and Business | 0.18 | 0.22 | 0.21 | 0.18 | 0.16 | 0.05 | 0.00 |
| Austrian Academy of Sciences | 0.21 | 0.28 | 0.21 | 0.18 | 0.11 | 0.00 | 0.01 |
| **Sum of answers** | 0.17 | 0.25 | 0.20 | 0.18 | 0.15 | 0.04 | 0.00 |

Table 106: What further action do you expect from your institution? Answers per discipline, absolute, n=3026

| Discipline | Guidelines/ Policies | Include research data management in the job responsibilities | Employ qualified Personnel | Include research data management in the curriculum | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Not specified | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 2 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 25 | 13 | 30 | 11 | 2 | 1 | 43 | 82 |
| Biology | 149 | 50 | 168 | 78 | 51 | 3 | 287 | 499 |
| Chemistry | 83 | 30 | 74 | 32 | 42 | 0 | 167 | 261 |
| Humanities | 359 | 111 | 398 | 190 | 124 | 9 | 685 | 1191 |
| Geoscience (including Geography) | 57 | 21 | 62 | 28 | 21 | 3 | 118 | 192 |
| Electrical and System Engineering | 176 | 59 | 157 | 63 | 86 | 5 | 324 | 546 |
| Mathematics | 40 | 11 | 30 | 10 | 44 | 2 | 104 | 137 |
| Medicine | 122 | 54 | 152 | 65 | 38 | 3 | 220 | 434 |
| Physics | 104 | 30 | 97 | 30 | 54 | 4 | 204 | 319 |
| Other | 191 | 62 | 187 | 80 | 88 | 10 | 381 | 618 |
| Social and Behavioural Sciences | 292 | 69 | 270 | 88 | 98 | 6 | 491 | 823 |
| **Sum of answers** | 1599 | 510 | 1625 | 675 | 649 | 46 | 3026 | 5104 |

Table 107: What further action do you expect from your institution? Answers per person, relative distribution per discipline, n=3026

| Discipline | Guidelines/Policies | Include research data management in the job responsibilities | Employ qualified personnel | Include research data management in the curriculum | None | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.50 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.58 | 0.30 | 0.70 | 0.26 | 0.05 | 0.02 |
| Biology | 0.52 | 0.17 | 0.59 | 0.27 | 0.18 | 0.01 |
| Chemistry | 0.50 | 0.18 | 0.44 | 0.19 | 0.25 | 0.00 |
| Humanities | 0.52 | 0.16 | 0.58 | 0.28 | 0.18 | 0.01 |
| Geoscience (including Geography) | 0.48 | 0.18 | 0.53 | 0.24 | 0.18 | 0.03 |
| Electrical and System Engineering | 0.54 | 0.18 | 0.48 | 0.19 | 0.27 | 0.02 |
| Mathematics | 0.38 | 0.11 | 0.29 | 0.10 | 0.42 | 0.02 |
| Medicine | 0.55 | 0.25 | 0.69 | 0.30 | 0.17 | 0.01 |
| Physics | 0.51 | 0.15 | 0.48 | 0.15 | 0.26 | 0.02 |
| Other | 0.50 | 0.16 | 0.49 | 0.21 | 0.23 | 0.03 |
| Social and Behavioural Sciences | 0.59 | 0.14 | 0.55 | 0.18 | 0.20 | 0.01 |
| **Sum of answers** | 0.53 | 0.17 | 0.54 | 0.22 | 0.21 | 0.02 |

Table 108: What further action do you expect from your institution? Answers per option, relative distribution per discipline., n=5104

| Discipline | Guidelines/Policies | Include research data management in the job responsibilities | Employ qualified Personnel | Include research data management in the curriculum | None | Other |
|---|---|---|---|---|---|---|
| Not specified | 0.50 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 |
| Agriculture, Forestry, Horticulture and Veterinary Medicine | 0.30 | 0.16 | 0.37 | 0.13 | 0.02 | 0.01 |
| Biology | 0.30 | 0.10 | 0.34 | 0.16 | 0.10 | 0.01 |
| Chemistry | 0.32 | 0.11 | 0.28 | 0.12 | 0.16 | 0.00 |
| Humanities | 0.30 | 0.09 | 0.33 | 0.16 | 0.10 | 0.01 |
| Geoscience (including Geography) | 0.30 | 0.11 | 0.32 | 0.15 | 0.11 | 0.02 |
| Electrical and System Engineering | 0.32 | 0.11 | 0.29 | 0.12 | 0.16 | 0.01 |
| Mathematics | 0.29 | 0.08 | 0.22 | 0.07 | 0.32 | 0.01 |
| Medicine | 0.28 | 0.12 | 0.35 | 0.15 | 0.09 | 0.01 |
| Physics | 0.33 | 0.09 | 0.30 | 0.09 | 0.17 | 0.01 |
| Other | 0.31 | 0.10 | 0.30 | 0.13 | 0.14 | 0.02 |
| Social and Behavioural Sciences | 0.35 | 0.08 | 0.33 | 0.11 | 0.12 | 0.01 |
| **Sum of answers** | 0.31 | 0.10 | 0.32 | 0.13 | 0.13 | 0.01 |

Table 109: What further action do you expect from your institution? Answers per institution, absolute, n=3026

| Institution | Guidelines/Policies | Include research data management in the job responsibilities | Employ qualified personnel | Include research data management in the curriculum | None | Other | Persons | Sum of answers |
|---|---|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 10 | 2 | 9 | 5 | 2 | 0 | 15 | 28 |
| Vienna Chamber of Labour | 12 | 5 | 11 | 1 | 7 | 0 | 21 | 36 |
| Institute of Science and Technology (IST Austria) | 19 | 7 | 14 | 8 | 4 | 0 | 33 | 52 |
| Medical University Graz | 6 | 2 | 11 | 5 | 5 | 1 | 17 | 30 |
| Medical University of Innsbruck | 38 | 17 | 42 | 24 | 13 | 2 | 70 | 136 |
| Medical University of Vienna | 123 | 45 | 145 | 52 | 33 | 1 | 212 | 399 |
| Montanuniversität Leoben | 24 | 6 | 14 | 5 | 6 | 0 | 35 | 55 |
| Other | 59 | 17 | 52 | 25 | 22 | 1 | 102 | 176 |
| Graz University of Technology | 81 | 33 | 59 | 27 | 44 | 2 | 152 | 246 |
| Vienna University of Technology | 181 | 62 | 176 | 83 | 86 | 3 | 352 | 591 |
| University of Graz | 108 | 31 | 134 | 42 | 58 | 5 | 240 | 378 |
| University of Innsbruck | 134 | 49 | 151 | 65 | 53 | 3 | 257 | 455 |
| University of Klagenfurt | 44 | 7 | 49 | 8 | 19 | 1 | 84 | 128 |
| University of Linz | 52 | 19 | 39 | 13 | 31 | 1 | 105 | 155 |
| University of Salzburg | 35 | 13 | 36 | 16 | 20 | 0 | 75 | 120 |
| University of Vienna | 471 | 135 | 461 | 223 | 187 | 19 | 888 | 1496 |
| University of Natural Resources and Life Sciences Vienna | 2 | 0 | 3 | 2 | 1 | 1 | 7 | 9 |
| University of Music and Performing Arts Graz | 6 | 2 | 11 | 5 | 3 | 0 | 15 | 27 |
| University of Music and Performing Arts Vienna | 19 | 8 | 23 | 9 | 7 | 0 | 38 | 66 |
| University of Applied Arts Vienna | 23 | 6 | 30 | 11 | 8 | 0 | 47 | 78 |
| University of Arts and Design Linz | 10 | 2 | 12 | 4 | 2 | 1 | 18 | 31 |
| University of Veterinary Medicine Vienna | 61 | 18 | 55 | 19 | 10 | 1 | 94 | 164 |
| Vienna University of Economics and Business | 53 | 13 | 53 | 18 | 19 | 2 | 93 | 158 |
| Austrian Academy of Sciences | 28 | 11 | 35 | 5 | 9 | 2 | 56 | 90 |
| **Sum of answers** | 1599 | 510 | 1625 | 675 | 649 | 46 | 3026 | 5104 |

Table 110: What further action do you expect from your institution? Answers per person, relative distribution per institution, n=3026

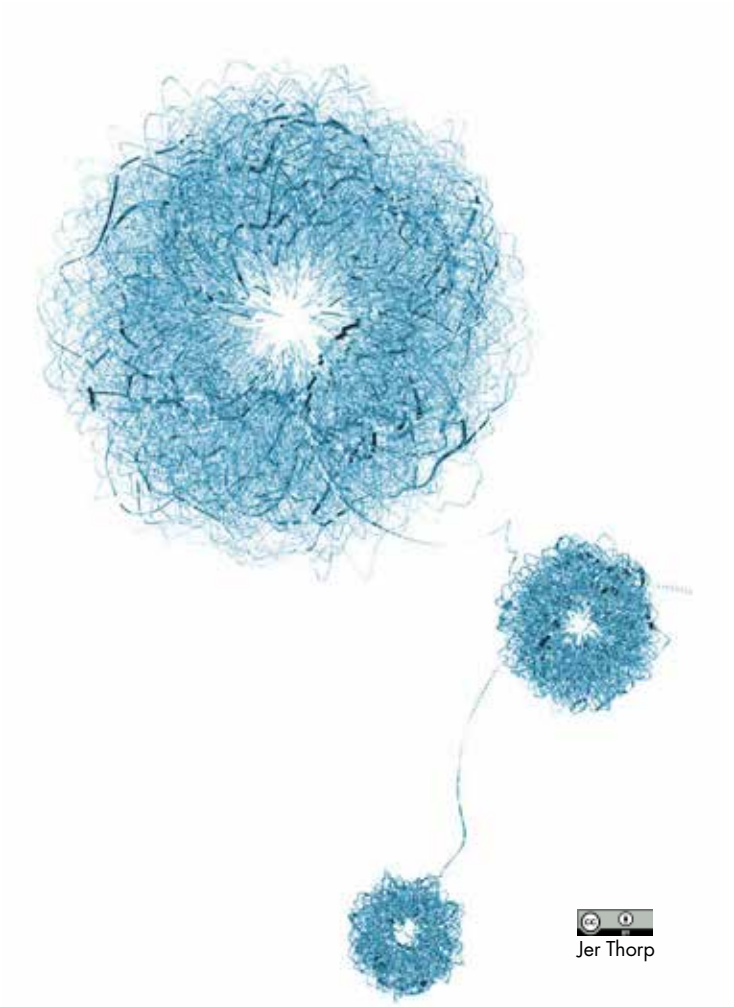
| Institution | Guidelines/Policies | Include research data management in the job responsibilities | Employ qualified personnel | Include research data management in the curriculum | None | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.67 | 0.13 | 0.60 | 0.33 | 0.13 | 0.00 |
| Vienna Chamber of Labour | 0.57 | 0.24 | 0.52 | 0.05 | 0.33 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.58 | 0.21 | 0.42 | 0.24 | 0.12 | 0.00 |
| Medical University Graz | 0.35 | 0.12 | 0.65 | 0.29 | 0.29 | 0.06 |
| Medical University of Innsbruck | 0.54 | 0.24 | 0.60 | 0.34 | 0.19 | 0.03 |
| Medical University of Vienna | 0.58 | 0.21 | 0.68 | 0.25 | 0.16 | 0.00 |
| Montanuniversität Leoben | 0.69 | 0.17 | 0.40 | 0.14 | 0.17 | 0.00 |
| Other | 0.58 | 0.17 | 0.51 | 0.25 | 0.22 | 0.01 |
| Graz University of Technology | 0.53 | 0.22 | 0.39 | 0.18 | 0.29 | 0.01 |
| Vienna University of Technology | 0.51 | 0.18 | 0.50 | 0.24 | 0.24 | 0.01 |
| University of Graz | 0.45 | 0.13 | 0.56 | 0.18 | 0.24 | 0.02 |
| University of Innsbruck | 0.52 | 0.19 | 0.59 | 0.25 | 0.21 | 0.01 |
| University of Klagenfurt | 0.52 | 0.08 | 0.58 | 0.10 | 0.23 | 0.01 |
| University of Linz | 0.50 | 0.18 | 0.37 | 0.12 | 0.30 | 0.01 |
| University of Salzburg | 0.47 | 0.17 | 0.48 | 0.21 | 0.27 | 0.00 |
| University of Vienna | 0.53 | 0.15 | 0.52 | 0.25 | 0.21 | 0.02 |
| University of Natural Resources and Life Sciences Vienna | 0.29 | 0.00 | 0.43 | 0.29 | 0.14 | 0.14 |
| University of Music and Performing Arts Graz | 0.40 | 0.13 | 0.73 | 0.33 | 0.20 | 0.00 |
| University of Music and Performing Arts Vienna | 0.50 | 0.21 | 0.61 | 0.24 | 0.18 | 0.00 |
| University of Applied Arts Vienna | 0.49 | 0.13 | 0.64 | 0.23 | 0.17 | 0.00 |
| University of Arts and Design Linz | 0.56 | 0.11 | 0.67 | 0.22 | 0.11 | 0.06 |
| University of Veterinary Medicine Vienna | 0.65 | 0.19 | 0.59 | 0.20 | 0.11 | 0.01 |
| Vienna University of Economics and Business | 0.57 | 0.14 | 0.57 | 0.19 | 0.20 | 0.02 |
| Austrian Academy of Sciences | 0.50 | 0.20 | 0.63 | 0.09 | 0.16 | 0.04 |
| **Sum of answers** | 0.53 | 0.17 | 0.54 | 0.22 | 0.21 | 0.02 |

Table 111: What further action do you expect from your institution? Answers per option, relative distribution per institution, n=5104

| Institution | Guidelines/Policies | Include research data management in the job responsibilities | Employ qualified personnel | Include research data management in the curriculum | None | Other |
|---|---|---|---|---|---|---|
| Academy of Fine Arts Vienna | 0.36 | 0.07 | 0.32 | 0.18 | 0.07 | 0.00 |
| Vienna Chamber of Labour | 0.33 | 0.14 | 0.31 | 0.03 | 0.19 | 0.00 |
| Institute of Science and Technology (IST Austria) | 0.37 | 0.13 | 0.27 | 0.15 | 0.08 | 0.00 |
| Medical University Graz | 0.20 | 0.07 | 0.37 | 0.17 | 0.17 | 0.03 |
| Medical University of Innsbruck | 0.28 | 0.13 | 0.31 | 0.18 | 0.10 | 0.01 |
| Medical University of Vienna | 0.31 | 0.11 | 0.36 | 0.13 | 0.08 | 0.00 |
| Montanuniversität Leoben | 0.44 | 0.11 | 0.25 | 0.09 | 0.11 | 0.00 |
| Other | 0.34 | 0.10 | 0.30 | 0.14 | 0.13 | 0.01 |
| Graz University of Technology | 0.33 | 0.13 | 0.24 | 0.11 | 0.18 | 0.01 |
| Vienna University of Technology | 0.31 | 0.10 | 0.30 | 0.14 | 0.15 | 0.01 |
| University of Graz | 0.29 | 0.08 | 0.35 | 0.11 | 0.15 | 0.01 |
| University of Innsbruck | 0.29 | 0.11 | 0.33 | 0.14 | 0.12 | 0.01 |
| University of Klagenfurt | 0.34 | 0.05 | 0.38 | 0.06 | 0.15 | 0.01 |
| University of Linz | 0.34 | 0.12 | 0.25 | 0.08 | 0.20 | 0.01 |
| University of Salzburg | 0.29 | 0.11 | 0.30 | 0.13 | 0.17 | 0.00 |
| University of Vienna | 0.31 | 0.09 | 0.31 | 0.15 | 0.13 | 0.01 |
| University of Natural Resources and Life Sciences Vienna | 0.22 | 0.00 | 0.33 | 0.22 | 0.11 | 0.11 |
| University of Music and Performing Arts Graz | 0.22 | 0.07 | 0.41 | 0.19 | 0.11 | 0.00 |
| University of Music and Performing Arts Vienna | 0.29 | 0.12 | 0.35 | 0.14 | 0.11 | 0.00 |
| University of Applied Arts Vienna | 0.29 | 0.08 | 0.38 | 0.14 | 0.10 | 0.00 |
| University of Arts and Design Linz | 0.32 | 0.06 | 0.39 | 0.13 | 0.06 | 0.03 |
| University of Veterinary Medicine Vienna | 0.37 | 0.11 | 0.34 | 0.12 | 0.06 | 0.01 |
| Vienna University of Economics and Business | 0.34 | 0.08 | 0.34 | 0.11 | 0.12 | 0.01 |
| Austrian Academy of Sciences | 0.31 | 0.12 | 0.39 | 0.06 | 0.10 | 0.02 |
| **Sum of answers** | 0.31 | 0.10 | 0.32 | 0.13 | 0.13 | 0.01 |

e-infrastructures austria

# Questionnaire
# National Research Data Survey



Jer Thorp

January 2015

Coordinator: Christian Gumpenberger, University of Vienna • Work-Package-Cluster B • e-Infrastructures Austria
Information on authors and contributors at www.e-infrastructures.at/en

# National Research Data Survey

Introduction to survey

**Participate in shaping future research data services in Austria!**

## The topic

The term **„research data"** in this survey refers to all data that make up the foundation of your research results (text, spreadsheets, video, audio, images, and soon), meaning data that are generated in the course of scientific research and artistic creation processes (including digitization, experiments, measurements, surveys, interviews and designs).

**The objective of the survey** is twofold, first to find out the status quo of managing research data in Austria, and second to determine the requirements for future research data services.

## The context

This survey is performed within the scope of **e-Infrastructures Austria**, which is a project sponsored by the Federal Ministry of Science, Research and Economy (BMWFW). All scientists from 21 universities and three non-university institutions are encouraged to participate.

**The goal of e-Infrastructures Austria** is the implementation of services, technical infrastructures and a knowledge network for the sharing and archiving of publications, multimedia, and other data from research and science.

Answering these questions is voluntary and **anonymous**, and should take approximately 15 minutes.

This survey comprises 26 questions. Mandatory questions are marked with an asterisk (*).

## DATA TYPES AND FORMATS

**Which types of digital content do you create when generating research data? ***

Please choose all that apply:

- ☐ Text documents (DOC, ODF, PDF, TXT, etc.)
- ☐ Structured text (HTML, JSON, TEX, XML etc.)
- ☐ Spreadsheets (XLS, ODS, CSV, SAS, Stata, SPSS, etc.)
- ☐ Databases (MS Access, MySql, Oracle etc.)
- ☐ Graphics/Images (JPEG, SVG, PNG, GIF, TIFF etc.)
- ☐ Audio (MP3, WAV, AIFF, OGG etc.)
- ☐ Video/Film (MPEG, AVI, WMV, MP4 etc.)
- ☐ Software applications Source code (CSS, JavaScript, Java etc.)
- ☐ Configuration data (INI, CONF etc.)
- ☐ Software applications
- ☐ Other: .....

**What percentage of your research data volume do you generate (estimated) in a digital format? ***

*Please also include designs, plans, sketches, illustrations, photographs, laboratory notebooks, field notes, etc.*

Please choose only one of the following:

○ > 75% ○ 50 – 75% ○ < 50% ○ I am not sure

## DATA ARCHIVING, BACKUP AND LOSS

### Where do you usually store your research data? *

Please choose all that apply:

- ☐ At an external data center
- ☐ In a cloud service
- ☐ Centrally on a server of the university (institutional repository)
- ☐ Centrally on a server of the institute
- ☐ Locally on my work computer
- ☐ Locally on my private computer
- ☐ On an external hard drive (also USB drive)
- ☐ On CDs/DVDs
- ☐ On magnetic tapes
- ☐ Directly on the machine or instrument
- ☐ Other: .....

### Please estimate the total volume of your research data based on the storage space you require (your estimated average per year). *

Please choose only one of the following:

- ○ Small (< 50 GB)
- ○ Medium (50 – 100 GB)
- ○ Large (101 GB – 1 TB)
- ○ Very large (1 TB – 1PB)
- ○ Massive (> 1 PB)
- ○ I am not sure.

### Do you normally document your research data? *

*«Document» refers to include information regarding how the data were collected, what they mean, their structure, and what changes and processes to clean up and analyze the data have been performed. Good documentation should be able to answer the questions: who, what, how, where, when and why.*

Please choose all that apply:

- ☐ Yes, using suitable standards
- ☐ Yes, individually and consistently
- ☐ Yes, individually and not consistently
- ☐ No
- ☐ I do not know
- ☐ Other: .....

## DATA ARCHIVING, BACKUP AND LOSS

**Who is responsible for the archiving of your research data? ***

Please choose all that apply:

- ☐ I myself
- ☐ Project/group manager
- ☐ Scientific employee
- ☐ Non-scientific employee
- ☐ Other .....
- ☐ University computer/IT center
- ☐ Library
- ☐ External service provider

**Have you already experienced research data loss? ***

Please choose only one of the following:

○ Yes ○ No

Make a comment on your choice here: .....

## ETHICAL AND LEGAL ASPECTS

**Do you use any external data (i.e. not generated by you) in your own research?***

Please choose all that apply:

- ☐ Immediately without any processing
- ☐ After minimal processing (cleaning, compilation, etc.)
- ☐ After substantial processing
- ☐ Never
- ☐ I do not know
- ☐ Other .....

**Do you have any legal concerns regarding the use of external data? ***

Please choose only one of the following:

○ Yes, often ○ Yes, sometimes ○ Sometimes ○ Never

Make a comment on your choice here: .....

**What normally happens with the research data you generated when you leave the institution? ***

Please choose all that apply:

- ☐ The data remain at the institution
- ☐ The data are taken
- ☐ The data are deleted
- ☐ I do not know
- ☐ Other .....

**Do you use or generate sensitive or confidential research data? ***

Please choose only one of the following:

○ Often ○ Sometimes ○ Hardy ever ○ Never ○ I do not know

## ACCESSIBILITY AND REUSE

### Whom do you grant access to your research data? *

This also refers to unpublished research data.

Please choose all that apply:

- ☐ The public
- ☐ The scientific community
- ☐ All members of my institution
- ☐ Selected members of my institution
- ☐ Interested persons by request
- ☐ No one
- ☐ Other .....

### How can others access your research data? *

Please choose all that apply:

- ☐ Via data archive/repository (research data-specific, disciplinary or institutional)
  Please provide the name of the data archive/repository:
  .....
- ☐ As linked supplementary material for publications
  Please provide the name of the journal:
  .....
- ☐ Via personal or institutional website
- ☐ Via remote server or share drives
- ☐ Via cloud applications (Dropbox, Google Docs, etc.)
- ☐ Via physical disks and/or email
- ☐ Not at all
- ☐ Other .....

### Are your research data reusable for others? *

*«Reusable» means that the data can be used and further processed, taking into account predefined rules of what is allowed to do with the data (for example by using a Creative Commons license).*

Please choose only one of the following:

○ Yes ○ Sometimes ○ No

Make a comment on your choice here: .....

## ACCESSIBILITY AND REUSE

**What type(s) of user agreements have been put in place? ***

Please choose all that apply:

- ☐ Open content licenses (e.g. Creative Commons License, General Public License, etc.)
- ☐ Individual license agreements
- ☐ Other .....
- ☐ Cooperation agreements
- ☐ None
- ☐ I do not know

**Which kind of incentives could motivate you to share your research data and make them (openly) accessible? ***

Please choose all that apply:

- ☐ Recognition in the scientific community
- ☐ Consideration of research data as relevant scientific output in research documentation, intellectual capital report and evaluations
- ☐ Increased visibility and impact of your own research (e.g. through co-authorships and/or citations in publications resulting from shared research data)
- ☐ New contacts and/or opportunities for cooperation with other scientists
- ☐ Financial incentives (bonus, expense allowance)
- ☐ Establishment of standards for accountability and appropriate use (Fair Use) of the data
- ☐ Support in the process of making the data accessible
- ☐ None
- ☐ Other .....

## ACCESSIBILITY AND REUSE

**What keeps you from sharing your research data with others? ***

Please choose all that apply:

- ☐ Privacy violation
- ☐ Other legal restrictions (e.g. copyright, patent law, trademark protection, use protection, etc.)
- ☐ Increased effort of time and/or cost
- ☐ Risk of misinterpretation and/or falsification of data
- ☐ Potentially undesired commercial use
- ☐ Danger of misuse
- ☐ Danger of misuse
- ☐ Increased competition in the „publish or perish" game
- ☐ Missing data standards
- ☐ Missing data processes
- ☐ Use of rare data formats
- ☐ Lack of motivation for sharing
- ☐ Sonstiges .....

## INFRASTRUCTURE AND SERVICES

### Which data archive would you preferably use? *

Please choose all that apply:

- ☐ International multidisciplinary Data Archive
- ☐ International discipline specific Data Archive
- ☐ National multidisciplinary Data Archive
- ☐ National discipline specific Data Archive
- ☐ Other .....
- ☐ Centralized Data Archive in my institution
- ☐ Decentralized Data Archive in my institution
- ☐ I don›t use a Data Archive

### What supportive options for handling research data would you use at your institution? *

Please choose all that apply:

- ☐ First Level Support (helpdesk)
- ☐ Technical infrastructure
- ☐ Specific support for data management (e.g. data processing, creating a data management plan, etc.)
- ☐ Other .....
- ☐ Legal advice
- ☐ Training courses
- ☐ None

### What further action do you expect from your institution? *

Please choose all that apply:

- ☐ Guidelines or policies for dealing with research data
- ☐ Include research data management in the job responsibilities
- ☐ Employ qualified personnel for research data management tasks
- ☐ Other .....
- ☐ Include research data management in the curriculum
- ☐ None

### Optional: Do you have any further comments or suggestions relating to research data?

.....

## ABOUT YOU

**Please select the institution where you are mainly employed. ***

Please choose only one of the following:

- ○ Academy of Fine Arts Vienna
- ○ Vienna Chamber of Labour
- ○ Institute of Science and Technology (IST Austria)
- ○ Medical University Graz
- ○ Medical University of Vienna
- ○ Medical University of Innsbruck
- ○ Montanuniversität Leoben
- ○ Austrian Academy of Sciences
- ○ Graz University of Technology
- ○ Vienna University of Technology
- ○ University of Applied Arts Vienna
- ○ University of Natural Resources and Life Sciences Vienna
- ○ University of Arts and Design Linz
- ○ University of Music and Performing Arts Graz
- ○ University of Music and Performing Arts Vienna
- ○ University of Graz
- ○ University of Innsbruck
- ○ University of Klagenfurt
- ○ University of Linz
- ○ University Mozarteum Salzburg
- ○ University of Salzburg
- ○ University of Vienna
- ○ University of Veterinary Medicine Vienna
- ○ Vienna University of Economics and Business
- ○ Other institution: .....

## ABOUT YOU

**Please select your position at the institution selected above.**

Please choose only one of the following:

- ○ University professor
- ○ Assistant professor, Senior scientist, Senior artist, Senior lecturer
- ○ Assistant professor, Associate professor
- ○ Project staff
- ○ Lecturer
- ○ Doctoral candidate
- ○ Student assistant
- ○ Other .....

Make a comment on your choice here: .....

## ABOUT YOU

**Please select your main discipline. ***

*For more information please refer to: http://www.dfg.de/download/pdf/dfg_im_profil/gremien/fachkollegien/amtsperiode_2008_2011/Grafik_dfg_fachsystematik_en_2008_2011.pdf*

Please choose only one of the following:

- ○ Agriculture, Forestry, Horticulture and Veterinary Medicine
- ○ Biology

  OPTIONAL: Please specify the discipline

  Please choose only one of the following:

  - ○ Basic Biological and Medical Research
  - ○ Microbiology, Virology and Immunology
  - ○ Plant Sciences
  - ○ Zoology
  - ○ Other .....
- ○ Chemistry

  OPTIONAL: Please specify the discipline

  Please choose only one of the following:

  - ○ Analytical Chemistry, Method Development (Chemistry)
  - ○ Biological Chemistry and Food Chemistry
  - ○ Chemische Festkörper- und Oberflächenforschung
  - ○ Molecular Chemistry
  - ○ Physical and Theoretical Chemistry
  - ○ Polymer Research
  - ○ Other .....
- ○ Humanities

  OPTIONAL: Please specify the discipline

  Please choose only one of the following:

  - ○ Ancient Cultures
  - ○ Non-European Languages and Cultures, Social and Cultural Anthropology, Jewish Studies and Religious Studies
  - ○ History
  - ○ Fine Arts, Music, Theatre and Media Studies
  - ○ Literary Studies

- ○ Philosophy
- ○ Linguistics
- ○ Theology
- ○ Other .....

○ Geosciences (including Geography)

OPTIONAL: Please specify the discipline

Please choose only one of the following:

- ○ Atmospheric Science and Oceanography
- ○ Geochemistry, Mineralogy and Crystallography
- ○ Geography
- ○ Geology and Palaeontology
- ○ Geophysics and Geodesy
- ○ Water Research
- ○ Other .....

○ Electrical and System Engineering

OPTIONAL: Please specify the discipline

Please choose only one of the following:

- ○ Construction Engineering and Architecture
- ○ Electrical Engineering, Computer Science, Systems Engineering
- ○ Mechanical Engineering and Production Technology
- ○ Materials Engineering and Materials Science
- ○ Heat Energy Technology/Process Engineering
- ○ Other .....

○ Mathematics

○ Medicine

OPTIONAL: Please specify the discipline

Please choose only one of the following:

- ○ Anaesthesiology
- ○ Ocupational Medicine
- ○ Biological Psychiatry
- ○ Biomedical Technology and Medical Physics

## ABOUT YOU

- ○ Dermatology
- ○ Endocrinology, Diabetology
- ○ Developmental Neurobiology
- ○ Medical Biometry, Epidemiology, Medical Informatics
- ○ Nutritional Sciences
- ○ Gynaecology and Obstetrics
- ○ Gastroenterology, Metabolism
- ○ Vascular and Visceral Surgery
- ○ Gerontology and Geriatric Medicine
- ○ Otolaryngology
- ○ Hematology, Oncology, Transfusion Medicine
- ○ Cardiothoracic Surgery
- ○ Human Genetics
- ○ Cardiology, Angiology
- ○ Pediatrics
- ○ Clinical Chemistry and Pathobiochemistry
- ○ Clinical Neurosciences I - Neurology, Neurosurgery, Neuropathology
- ○ Clinical Neurosciences II - Psychiatry, Psychotherapy, Psychosomatics
- ○ Clinical Neurosciences III - Ophthalmology
- ○ Cognitive Neuroscience and Neuroimaging
- ○ Molecular Neurology
- ○ Molecular Neuroscience and Neurogenetics
- ○ Nephrology
- ○ Pathology and Forensic Medicine
- ○ Pharmacology and Toxicology
- ○ Pharmacy
- ○ Physiology
- ○ Pneumology, Clinical Infectiology, Intensive-care medicine
- ○ Public Health, Health Services Research and Community Medicine
- ○ Radiology, Nuclear Medicine, Radiotherapy

- ○ Radiation Oncology and Biology
- ○ Reproductive Medicine/Biology
- ○ Rheumatology, Clinical Immunology, Allergology
- ○ Systemic Neuroscience and Behaviour
- ○ Orthopaedics, Traumatology
- ○ Urology
- ○ Comparative Neurobiology
- ○ Dentistry, Oral Surgery
- ○ Cellular Neuroscience
- ○ Other .....

○ Physics

OPTIONAL: Please specify the discipline

Please choose only one of the following:

- ○ Astrophysics and Astronomy
- ○ Optics, Quantum Optics and Physics of Atoms, Molecules and PlasmasGeo
- ○ Condensed Matter Physics
- ○ Statistical Physics, Soft Matter, Biological Physics, Nonlinear Dynamics
- ○ Particles, Nuclei and Fields
- ○ Other .....

○ Social and Behavioural Sciences

OPTIONAL: Please specify the discipline

Please choose only one of the following:

- ○ Education Sciences
- ○ Psychology
- ○ Jurisprudence
- ○ Social Sciences
- ○ Economics
- ○ Other .....

○ Other discipline: .....

## ABOUT YOU

**Please select your age interval. ***

Please choose only one of the following:

○ <30 years ○ 30-50 years ○ >50 years

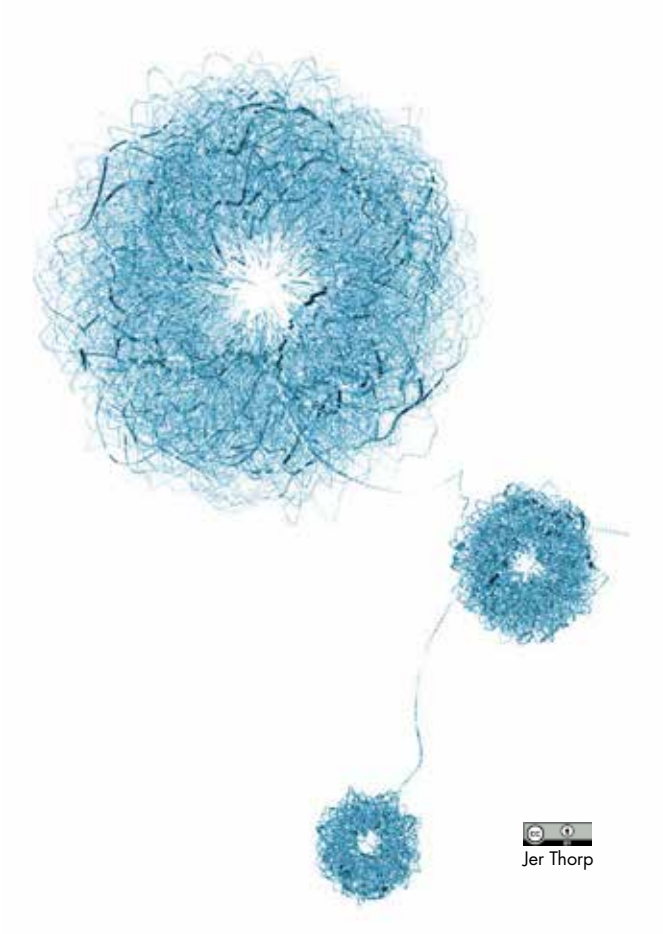
**Please select your gender. ***

Please choose only one of the following:

○ Male ○ Female ○ Other

e-infrastructures austria

# Fragebogen zur Österreichweiten Umfrage zu Forschungsdaten



Jer Thorp

Von 19. Januar bis 31. März 2015 erging an alle Wissenschafterinnen und Wissenschafter der teilnehmenden Projektpartner von e-Infrastructures Austria der Aufruf, sich an einer österreichweiten Umfrage zu Forschungsdaten zu beteiligen.

Dieses Dokument wurde im Rahmen des Projekts e-Infrastructures Austria von Cluster B erstellt.

Koordinator: Christian Gumpenberger, Universität Wien

Infos zu Autoren und Mitwirkenden finden Sie auf www.e-infrastructures.at

# Österreichweite Umfrage zu Forschungsdaten

Einleitungstext Umfrage

**Gestalten Sie das Serviceangebot an österreichischen Forschungseinrichtungen mit!**

## Das Thema

Unter dem Begriff „Forschungsdaten" sind alle Daten zu verstehen, die im Zuge wissenschaftlicher Forschungs- und künstlerischer Schaffensprozesse entstehen (z.B. Text, Tabellen, Video, Audio, Grafik etc.) und auf deren Grundlage Ihre Forschungsergebnisse und/oder Kunstwerke basieren – z.B. durch Experimente, Quellenforschungen, Messungen, Erhebungen, Digitalisate oder Entwürfe.

Das Ziel der Umfrage lautet einerseits, den Status Quo des Umgangs mit Forschungsdaten in Österreich zu ermitteln und andererseits, Anforderungen für zukünftige Forschungsdaten-Services abzuleiten.

## Der Kontext

Diese Umfrage wird im Rahmen des BMWFW-geförderten Projekts e-Infrastructures Austria durchgeführt. Alle WissenschafterInnen von 21 Universitäten und drei außeruniversitären Forschungseinrichtungen sind zur Teilnahme aufgefordert.

Ziel von e-Infrastructures Austria ist der Ausbau von Services, technischen Infrastrukturen und eines Wissensnetzwerks für die Verbreitung und Archivierung von Publikationen, Multimedia-Objekten und anderen Daten aus Forschung und Lehre.

Die Beantwortung der Fragen ist anonym, freiwillig und dauert ca. 15 Minuten.

Diese Umfrage enthält 51 Fragen. Pflichfelder sind mit einem Stern (*) gekennzeichnet.

## DATENTYPEN UND FORMATE

**Welche digitalen Inhalte fallen beim Generieren Ihrer Forschungsdaten an? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Textdokumente (z.B. DOC, ODF, PDF, TXT etc.)
- ☐ Strukturierter Text (z.B. HTML, JSON, TEX, XML etc.)
- ☐ Tabellenarbeitsblätter (z.B. CSV, ODS, XLS, SAS, Stata, SPSS etc.)
- ☐ Datenbanken (z.B. MS Access, MySql, Oracle etc.)
- ☐ Grafiken/Bilder (z.B. JPEG, SVG, PNG, GIF, TIFF etc.)
- ☐ Audio (z.B. MP3, WAV, AIFF, OGG etc.)
- ☐ Video/Film (z.B. MPEG, AVI, WMV, MP4 etc.)
- ☐ Quellcode (z.B. CSS, JavaScript, Java etc.)
- ☐ Konfigurationsdaten (z.B. INI, CONF etc.)
- ☐ Software Applikationen
- ☐ Sonstiges: .....

**Wie viel Prozent Ihres Forschungsdatenvolumens generieren Sie geschätzt in digitaler Form? ***

*Bedenken Sie dabei auch Entwürfe, Pläne, Skizzen, Abbildungen, Fotografien, Laborbücher, Feldnotizen etc.*

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ > 75% ○ 50 – 75% ○ < 50% ○ Ich kann es nicht einschätzen.

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

## DATENARCHIVIERUNG, -SICHERUNG UND -VERLUST

### Wo speichern Sie normalerweise Ihre Forschungsdaten ab? *

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Bei einem externen Datenzentrum
- ☐ Bei einem Cloudservice
- ☐ Zentral auf einem Server der Universität (institutionelles Repositorium)
- ☐ Zentral auf einem Server des Instituts
- ☐ Lokal auf meinem dienstlichen Rechner
- ☐ Sonstiges .....
- ☐ Lokal auf meinem privaten Rechner
- ☐ Auf einer externen Festplatte/ auf einem USB-Laufwerk
- ☐ CDs/DVDs
- ☐ Auf Magnetbändern
- ☐ Direkt am Gerät/Instrument

### Bitte schätzen Sie die Gesamtgröße Ihrer Forschungsdaten bezogen auf den benötigten Speicherplatz (geschätzter Durchschnittswert pro Jahr). *

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ○ Klein (< 50 GB)
- ○ Mittel (50 – 100 GB)
- ○ Groß (101 GB – 1 TB)
- ○ Sehr groß (1 TB – 1PB)
- ○ Riesig (> 1 PB)
- ○ Ich kann es nicht einschätzen.

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

### Werden Ihre Forschungsdaten in der Regel beschrieben? *

*„Beschreibung" bedeutet zu erklären, wie die Daten erfasst wurden, was sie bedeuten, wie ihre Struktur aussieht und welche Änderungen und Bearbeitungsschritte zur Bereinigung und Analyse der Daten durchgeführt worden sind. Eine gute Dokumentation sollte die Fragen nach dem Wer, Was, Wo, Wann, Wie und Warum beantworten können.*

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Ja, unter Verwendung geeigneter Standards
- ☐ Ja, individuell und einheitlich
- ☐ Weiß nicht
- ☐ Sonstiges .....
- ☐ Ja, individuell und nicht einheitlich
- ☐ Nein

## DATENARCHIVIERUNG, -SICHERUNG UND -VERLUST

**Wer kümmert sich um die Archivierung Ihrer Forschungsdaten? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Ich selbst
- ☐ Projekt-/GruppenleiterIn
- ☐ Wissenschaftliche(r) MitarbeiterIn
- ☐ Nicht-wissenschaftliche(r) MitarbeiterIn
- ☐ ZID/IT
- ☐ Bibliothek
- ☐ Externer Dienstleister
- ☐ Sonstiges .....

**Haben Sie bereits Erfahrungen mit Forschungsdatenverlust gemacht? ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ Ja ○ Nein

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

## ETHISCHE UND RECHTLICHE ASPEKTE

**Verwenden Sie Fremddaten (alle nicht selbst erhobenen Daten) für Ihre Forschungszwecke? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Sofort ohne jegliche Bearbeitung
- ☐ Nach geringfügiger Bearbeitung (z.B. Bereinigung, Kompilation etc.)
- ☐ Erst nach erheblicher Bearbeitung
- ☐ Nie
- ☐ Weiß nicht
- ☐ Sonstiges .....

**Ergeben sich für Sie aus einer etwaigen Fremddatennutzung rechtliche Unklarheiten? ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ Ja, oft ○ Ja, manchmal ○ Selten ○ Nie

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

**Was passiert in der Praxis mit den von Ihnen generierten Forschungsdaten, wenn Sie die Institution verlassen? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Die Daten verbleiben an der Institution.
- ☐ Die Daten werden mitgenommen.
- ☐ Die Daten werden gelöscht.
- ☐ Weiß nicht
- ☐ Sonstiges .....

**Verwenden oder generieren Sie Forschungsdaten sensibler oder vertraulicher Natur? ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ Oft ○ Manchmal ○ Kaum ○ Nie ○ Weiß nicht

## ZUGÄNGLICHKEIT UND NACHNUTZUNG

### Wem räumen Sie Zugang zu Ihren Forschungsdaten ein? *

*Gemeint sind auch die nicht publizierten Forschungsdaten.*

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Öffentlichkeit
- ☐ Fachöffentlichkeit
- ☐ Allen Angehörigen meiner Institution
- ☐ Ausgewählten Angehörigen meiner Institution
- ☐ InteressentInnen auf Anfrage
- ☐ Niemandem
- ☐ Sonstiges .....

### Wie können andere auf Ihre Forschungsdaten zugreifen? *

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Via Datenarchiv/Repositorium (spezifisch für Forschungsdaten, disziplinär oder institutionell)
  Machen Sie bitte nähere Angaben (Name des Datenarchivs/Repositoriums):
  .....
- ☐ Als verlinktes Supplementmaterial bei Publikationen
  Machen Sie bitte nähere Angaben (z.B. Zeitschriftentitel):
  .....
- ☐ Via persönliche oder institutionelle Website
- ☐ Via dezentrale Server oder Share-Laufwerke
- ☐ Via Cloud-Anwendungen (Dropbox, Google Docs etc.)
- ☐ Via physische Datenträger und/oder E-Mail
- ☐ Gar nicht
- ☐ Sonstiges .....

### Sind Ihre Forschungsdaten für andere auch nachnutzbar? *

*Nachnutzbarkeit geht über Zugänglichkeit hinaus. Nachnutzbar bedeutet, dass in der Regel genau festgelegt ist, ob und eventuell auch wie diese Daten weiterverwendet und bearbeitet werden dürfen (z.B. durch die Verwendung von Creative Commons Lizenzen).*

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ Ja ○ Manchmal ○ Nein

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

## ZUGÄNGLICHKEIT UND NACHNUTZUNG

**Welche Art(en) von Nutzungsvereinbarungen werden dabei geschlossen? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Open Content-Lizenzen (z.B. Creative Commons License, General Public License etc.)
- ☐ Individuelle Lizenzverträge
- ☐ Sonstiges .....
- ☐ Kooperationsverträge
- ☐ Keine
- ☐ Weiß nicht

**Welche Anreize könnten Sie dazu bewegen, Ihre Forschungsdaten zu teilen bzw. (offen) zugänglich zu machen? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Anerkennung in der Fachöffentlichkeit
- ☐ Berücksichtigung von Forschungsdaten als relevanter wissenschaftlicher Output in der Forschungsdokumentation, Wissensbilanz und bei Evaluationen
- ☐ Erhöhte Sichtbarkeit und Impact der eigenen Forschung (auch durch Ko-Autorenschaften und/oder Zitierungen bei Publikationen, die aus geteilten Forschungsdaten resultieren)
- ☐ Neue Kontakt- und/oder Kooperationsmöglichkeiten mit anderen WissenschafterInnen
- ☐ Finanzielle Anreize (Belohnung, Aufwandsentschädigung)
- ☐ Etablierung von Standards für die Nachvollziehbarkeit und angemessene Verwendung (Fair Use) der Daten
- ☐ Unterstützung bei Zugänglichmachung
- ☐ Keine
- ☐ Sonstiges .....

## ZUGÄNGLICHKEIT UND NACHNUTZUNG

**Was hält Sie davon ab, Ihre Forschungsdaten mit anderen zu teilen? ***

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Datenschutzverletzung
- ☐ Andere rechtliche Einschränkungen (z.B. Urheberrecht, Patentrecht, Markenschutz, Gebrauchsschutz etc.)
- ☐ Erhöhter Zeit- und/oder Kostenaufwand
- ☐ Gefahr der Fehlinterpretation und/oder Verfälschung der Daten
- ☐ Potenzielle unerwünschte kommerzielle Verwendung
- ☐ Gefahr der missbräuchlichen Verwendung
- ☐ Angst vor Kontrolle
- ☐ Erhöhung des Konkurrenzdrucks beim Publizieren
- ☐ Fehlende Datenstandards
- ☐ Fehlende Datenaufbereitung
- ☐ Verwendung von seltenen Datenformaten
- ☐ Fehlende Motivation zu teilen
- ☐ Sonstiges .....

## INFRASTRUKTUR UND SERVICES

### Welches Datenarchiv würden Sie bevorzugt nutzen? *

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Internationales multidisziplinäres Datenarchiv
- ☐ Internationales fachspezifisches Datenarchiv
- ☐ Nationales multidisziplinäres Datenarchiv
- ☐ Nationales fachspezifisches Datenarchiv
- ☐ Zentrales Datenarchiv meiner Institution
- ☐ Dezentrales Datenarchiv meiner Institution
- ☐ Keines
- ☐ Sonstiges .....

### Welche unterstützenden Angebote für den Umgang mit Forschungsdaten würden Sie an Ihrer Institution in Anspruch nehmen? *

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ First Level Support (Helpdesk)
- ☐ Technische Infrastruktur
- ☐ Spezifische Unterstützung beim Datenmanagement (z.B. Datenaufbereitung, Erstellung eines Datenmanagementplans etc.)
- ☐ Rechtsberatung
- ☐ Schulungsangebote
- ☐ Keine
- ☐ Sonstiges .....

### Welche weiteren Maßnahmen erwarten Sie von Ihrer Institution? *

*Bitte wählen Sie alle zutreffenden Antworten aus:*

- ☐ Leitlinien oder Policies zum Umgang mit Forschungsdaten
- ☐ Verankerung von Forschungsdatenmanagement in den Dienstpflichten
- ☐ Bereitstellung von qualifiziertem Personal für Forschungsdatenmanagement
- ☐ Verankerung von Forschungsdatenmanagement als Lehrinhalt im Curriculum
- ☐ Keine
- ☐ Sonstiges .....

### Optional: Haben Sie weitere Anmerkungen und Vorschläge zum Thema Forschungsdaten?

.....

## ZU IHRER PERSON

**Bitte wählen Sie die Institution aus, bei der Sie hauptsächlich beschäftigt sind. ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ○ Akademie der bildenden Künste Wien
- ○ Arbeiterkammer Wien
- ○ Institute of Science and Technology (IST Austria)
- ○ Medizinische Universität Graz
- ○ Medizinische Universität Wien
- ○ Medizinische Universität Innsbruck
- ○ Montanuniversität Leoben
- ○ Österreichische Akademie der Wissenschaften
- ○ Technische Universität Graz
- ○ Technische Universität Wien
- ○ Universität für angewandte Kunst Wien
- ○ Universität für Bodenkultur Wien
- ○ Universität für künstlerische und industrielle Gestaltung Linz
- ○ Universität für Musik und darstellende Kunst Graz
- ○ Universität für Musik und darstellende Kunst Wien
- ○ Universität Graz
- ○ Universität Innsbruck
- ○ Universität Klagenfurt
- ○ Universität Linz
- ○ Universität Mozarteum Salzburg
- ○ Universität Salzburg
- ○ Universität Wien
- ○ Veterinärmedizinische Universität Wien
- ○ Wirtschaftsuniversität Wien
- ○ Andere Institution: .....

## ZU IHRER PERSON

**Bitte wählen Sie Ihre Position an der oben ausgewählten Institution.**

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ○ UniversitätsprofessorIn
- ○ UniversitätsassistentIn, Senior Scientist, Senior Artist, Senior Lecturer
- ○ AssistenzprofessorIn, Assoziierte(r) ProfessorIn
- ○ ProjektmitarbeiterIn
- ○ LektorIn
- ○ DoktorandIn
- ○ Studentische(r) MitarbeiterIn
- ○ Sonstiges .....

Bitte schreiben Sie einen Kommentar zu Ihrer Auswahl .....

## ZU IHRER PERSON

**Bitte wählen Sie die Fachdisziplin aus, der Sie sich vorrangig zugehörig fühlen. ***

*Nähere Spezifikationen finden Sie hier: http://www.dfg.de/download/pdf/dfg_im_profil/gremien/fachkollegien/amtsperiode_2012_2015/fachsystematik_2012_2015_de_grafik.pdf*

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ○ Agrar-, Forstwissenschaften, Gartenbau und Tiermedizin
- ○ Biologie

  OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

  *Bitte wählen Sie nur eine der folgenden Antworten aus:*

  - ○ Grundlagen der Biologie und Medizin
  - ○ Mikrobiologie, Virologie und Immunologie
  - ○ Pflanzenwissenschaften
  - ○ Zoologie
  - ○ Sonstiges .....
- ○ Chemie

  OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

  *Bitte wählen Sie nur eine der folgenden Antworten aus:*

  - ○ Analytik / Methodenentwicklung
  - ○ Biologische Chemie und Lebensmittelchemie
  - ○ Chemische Festkörper- und Oberflächenforschung
  - ○ Molekülchemie
  - ○ Physikalische und Theoretische Chemie
  - ○ Polymerforschung
  - ○ Sonstiges .....
- ○ Geisteswissenschaften

  OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

  *Bitte wählen Sie nur eine der folgenden Antworten aus:*

  - ○ Alte Kulturen
  - ○ Außereuropäische Sprachen und Kulturen, Sozial- und Kulturanthropologie, Judaistik und Religionswissenschaft
  - ○ Geschichtswissenschaften
  - ○ Kunst-,Musik-, Theater- und Medienwissenschaften
  - ○ Literaturwissenschaft

- ◯ Philosophie
- ◯ Sprachwissenschaften
- ◯ Theologie
- ◯ Sonstiges .....

◯ Geowissenschaften (einschl. Geographie)

OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ◯ Atmosphären- und Meeresforschung
- ◯ Geochemie, Mineralogie und Kristallographie
- ◯ Geographie
- ◯ Geologie und Paläontologie
- ◯ Geophysik und Geodäsie
- ◯ Wasserforschung
- ◯ Sonstiges .....

◯ Ingenieurwissenschaften

OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ◯ Bauwesen und Architektur
- ◯ Elektrotechnik, Informatik und Systemtechnik
- ◯ Maschinenbau und Produktionstechnik
- ◯ Materialwissenschaft und Werkstofftechnik
- ◯ Wärmetechnik/Verfahrenstechnik
- ◯ Sonstiges .....

◯ Mathematik

◯ Medizin

OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ◯ Anästhesiologie
- ◯ Arbeitsmedizin
- ◯ Biologische Psychiatrie
- ◯ Biomedizinische Technik und Medizinische Physik

- ◯ Dermatologie
- ◯ Endokrinologie, Diabetologie
- ◯ Entwicklungsneurobiologie
- ◯ Epidemiologie, Medizinische Biometrie, Medizinische Informatik
- ◯ Ernährungswissenschaften
- ◯ Frauenheilkunde und Geburtshilfe
- ◯ Gastroenterologie, Stoffwechsel
- ◯ Gefäß- und Viszeralchirurgie
- ◯ Gerontologie und Medizinische Geriatrie
- ◯ Hals-Nasen-Ohrenheilkunde
- ◯ Hämatologie, Onkologie, Transfusionsmedizin
- ◯ Herz- und Thoraxchirurgie
- ◯ Humangenetik
- ◯ Kardiologie, Angiologie
- ◯ Kinder- und Jugendmedizin
- ◯ Klinische Chemie und Pathobiochemie
- ◯ Klinische Neurowissenschaften I - Neurologie, Neurochirurgie, Neuropathologie
- ◯ Klinische Neurowissenschaften II - Psychiatrie, Psychotherapie, Psychosomatik
- ◯ Klinische Neurowissenschaften III - Augenheilkunde
- ◯ Kognitive Neurowissenschaft und Neuroimaging
- ◯ Molekulare Neurologie
- ◯ Molekulare Neurowissenschaft und Neurogenetik
- ◯ Nephrologie
- ◯ Pathologie und Gerichtliche Medizin
- ◯ Pharmakologie und Toxikologie
- ◯ Pharmazie
- ◯ Physiologie
- ◯ Pneumologie, Klinische Infektiologie, Intensivmedizin
- ◯ Public Health, medizinische Versorgungsforschung, Sozialmedizin
- ◯ Radiologie und Nuklearmedizin

- ◯ Radioonkologie und Strahlenbiologie
- ◯ Reproduktionsmedizin/ -biologie
- ◯ Rheumatologie, Klinische Immunologie, Allergologie
- ◯ Systemische Neurowissenschaft, Computational Neuroscience, Verhalten
- ◯ Unfallchirurgie und Orthopädie
- ◯ Urologie
- ◯ Vergleichende Neurobiologie
- ◯ Zahnheilkunde, Mund-, Kiefer- und Gesichtschirurgie
- ◯ Zelluläre Neurowissenschaft
- ◯ Sonstiges .....

◯ Physik

OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ◯ Astrophysik und Astronomie
- ◯ Optik, Quantenoptik und Physik der Atome, Moleküle und Plasmen
- ◯ Physik der kondensierten Materie
- ◯ Statistische Physik, Weiche Materie, Biologische Physik, Nichtlineare Dynamik
- ◯ Teilchen, Kerne und Felder
- ◯ Sonstiges .....

◯ Sozial- und Verhaltenswissenschaften

OPTIONAL: Bitte bestimmen Sie Ihre Fachdisziplin näher.

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

- ◯ Erziehungswissenschaft
- ◯ Psychologie
- ◯ Rechtswissenschaften
- ◯ Sozialwissenschaften
- ◯ Wirtschaftswissenschaften
- ◯ Sonstiges .....

◯ Andere Fachdisziplin: .....

## ZU IHRER PERSON

**Bitte wählen Sie Ihr Altersintervall. ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ <30 Jahre ○ 30-50 Jahre ○ >50 Jahre

**Bitte geben Sie Ihr Geschlecht an. ***

*Bitte wählen Sie nur eine der folgenden Antworten aus:*

○ Männlich ○ Weiblich ○ Anderes