



Implementation of the CoreTrustSeal

The CoreTrustSeal board hereby confirms that the Trusted Digital repository Tilburg University Dataverse complies with the guidelines version 2017-2019 set by the CoreTrustSeal Board.

The afore-mentioned repository has therefore acquired the CoreTrustSeal on April 26, 2018.

The Trusted Digital repository is allowed to place an image of the CoreTrustSeal logo corresponding to the guidelines version date on their website. This image must link to this file which is hosted on the CoreTrustSeal website.

Yours sincerely,

The CoreTrustSeal Board

Assessment Information

Guidelines Version:	2017-2019 November 10, 2016
Guidelines Information Booklet:	CTS Requirements 2017-2019
All Guidelines Documentation:	Documentation
Repository:	Tilburg University Dataverse
Seal Acquiry Date:	Apr. 26, 2018
For the latest version of the awarded CoreTrustSeal for this repository:	https://www.coretrustseal.org/why-certification/certified-repositories/
Previously Acquired Seals:	None
This repository is owned by:	Tilburg University, Library and IT Services Goossens Building P.O. Box 90153 5000 LE Tilburg The Netherlands T +31 13 466 2146 F +31 13 466 3370 E lis-secretariaat@uvt.nl W https://www.tilburguniversity.edu/about/university-library/

Assessment

0. Context

Applicant Entry

Self-assessment statement:

Repository Type: Institutional repository

Repository's Designated Community: Tilburg University Dataverse is a research data repository for scientists affiliated at Tilburg University, the Netherlands. This concerns researchers in the fields of the social sciences (including economics and law) and humanities.

Level of Curation Performed:

-A. Content distributed as deposited

-B. Basic curation – e.g., brief checking, addition of basic metadata or documentation

<https://dataverse.nl/dataverse/tiu>

Outsource partner:

DANS (Data Archiving and Networked Services) is the Netherlands Institute for permanent access to digital research resources. DANS has been managing the DataverseNL network since 2014. DataverseNL is a network of data repositories, which uses software developed by Harvard University. Tilburg University, as one of the participating institutes, is responsible for managing the deposited data in the Tilburg University Dataverse.

Agreements:

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DANS and Tilburg University have signed three agreements:

- A collaboration agreement, in which are written down the agreed functionalities, as well as the roles, responsibilities and liabilities of all parties involved. Technical and application management, as well as data storage are outsourced to DANS. Functional management and front office are at Tilburg University. The procedure for archiving data and support offered for this process are also managed by Tilburg University;
- A processor agreement, in which the (IT) security measures and the technical and legal obligations of the parties involved are laid down. Through this agreement, DANS and Tilburg University comply with the European General Data Protection Regulation (GDPR);
- A Service Level Agreement, in which the mutual obligations in service level are agreed, e.g. updates, downtime, customer support, technical infrastructure and development.

These documents are available upon request.

In relation to the SWORD interface to transfer data from DataverseNL to certified long-term storage (longer than ten years) in EASY, a Front Office / Back Office service agreement will be signed between DANS and Tilburg University concerning the use of EASY.

Brief history of Tilburg University Dataverse:

Tilburg University Dataverse originates in the Open Data and Publications (ODaP) project in 2011 carried out by Library and IT Services of Tilburg University. The ODaP project linked Harvard Dataverse Network to data within the institutional publications repository. Researchers were able to link their datasets to their publications, allowing an integrated front-end to deliver an enhanced publication, available for re-use.

Based on the need to store research data under Dutch legislation, a cooperation agreement was concluded with Utrecht University in August 2012, to use the Dutch Dataverse Network (DDN). Other universities and research institutes joined DDN over the years, until in 2014 the management of the network was transferred to DANS. DANS performs back office tasks, including server and software maintenance and administrative support. The participating institutions are responsible for managing the deposited data. The name of the network changed to DataverseNL to reflect the national scope as well as the URL of the website.

Tilburg University promotes sustained access to digital research information and encourages researchers to durably archive and reuse their data. To this end, the strategic choice was made to set up the deposit procedures compliant to CoreTrustSeal to safeguard data, ensure high quality and to guide reliable management of data for the future.

With a certified institutional repository, with low-threshold support services from the Research Data Office for on campus training, consultancy, and practical support when depositing data, Tilburg University wants to create the best possible conditions to encourage researchers to archive and reuse data in a sustainable manner. Datasets of researchers are linked to their publication in TiU Research Portal (Pure) and co-located with datasets of researchers of the same university department.

As part of its mission, Tilburg University actively supports the Open Science principles, while being aware of the fact that not all data can be freely available and without limitations ('open if possible, protected if necessary').

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

1. Mission/Scope

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The repository is managed by Tilburg University's Research Data Office (RDO), which operates under the department Research Support of Library and IT Services (LIS). The Research Data Office is the operational unit to provide support for Tilburg University's data management and data-archiving policy, which the university promulgates through its Research Data Management Regulations, available at:

<https://www.tilburguniversity.edu/about/tilburg-university/conduct-integrity/download-regulation-research-data-management.htm>

Supporting this policy, the Library and IT Services states its vision on digital archiving in the strategic plan 2014 - 2017:

"In 2017 Library and IT Services:

- Will provide an environment in which research data can be stored, used and shared;
- Research registration will be kept on the basis of alerts and self-service, and comprehensive management information on research results will be available;
- Will contribute to the valorisation of the institution by providing opportunities to publish articles and research data in open access."

More information on the mission of Research Data Office can be found at:
<https://www.tilburguniversity.edu/dataverse-nl/>

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

2. Licenses

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

Deposits

When a data package is deposited at Tilburg University Dataverse, the depositor agrees with the DataverseNL General Terms of Use in which the duties of the depositor and archive are stated. These terms of use are available at

https://dans.knaw.nl/en/about/services/archiving-and-reusing-data/DataverseNL/GeneralTermsofUseDataverseNL_DEF.pdf

Access to data

Tilburg University Dataverse gives researchers across the world the possibility to search for and access the deposited files. Tilburg University Dataverse currently defines the following access categories:

1. Open access: all registered users may download freely
2. Restricted access: registered users must first ask the depositor for permission

The data consumer needs to agree with the terms of use of DataverseNL each time he/she downloads a data file. The data consumer does this by clicking 'yes' for the checkbox statement 'I agree and accept these terms of use', which is given below the terms. The terms of use are available at https://dans.knaw.nl/en/about/services/archiving-and-reusing-data/DataverseNL/about?set_language=en (see on this page "general terms of use for DataverseNL").

In the event of demonstrable abuse users may be excluded from access to the Tilburg University Dataverse. Further, the Dutch law applies to the usage of the DataverseNL data.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

3. Continuity of access

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

3. In progress: We are in the implementation phase.

Self-assessment statement:

Dataverse was originally designed to store data during the research process and up to 10 years at least. However, Tilburg University Dataverse and its data protocol is designed for archiving data at the end of the research process and enabling longer data preservation.

For long-term archiving, consultation takes place with the organization Data Archiving and Networked Services (DANS) on the development of a Front Office / Back Office service agreement. DANS' archiving system for research data, EASY, already has been credited by Data Seal of Approval as well as DIN. Tilburg University Dataverse is among the first to engage in a pilot with DANS to enable a SWORD interface (interoperability standard) between Tilburg University Dataverse and EASY to secure long-term archiving. Both parties are committed to this pilot that has started in September 2017.

The pilot is planned for production in the second quarter of 2018. The project workflow is defined in the document "SWORD interface DataverseNL > EASY", version 2.0 dated November 11, 2017 (in Dutch). This document is available upon request.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

4. Confidentiality/Ethics

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

As stated in its Research Data Management Regulations, Tilburg University and the university researchers comply with the relevant codes of conduct and the regulations that contain standards and best practices regarding, among other things, research data, in particular

1. The Netherlands Code of Conduct for Scientific Practice. Principles of good academic education and research. Decreed 31 October 2014. VSNU:

[http://vsnu.nl/files/documenten/Domeinen/Onderzoek/The Netherlands Code%20of Conduct for Academic Practice 2004 \(version 2014\).pdf](http://vsnu.nl/files/documenten/Domeinen/Onderzoek/The_Netherlands_Code%20of_Conduct_for_Academic_Practice_2004_(version%202014).pdf)

2. Tilburg University Scientific Integrity Regulations, 2012:

<https://www.tilburguniversity.edu/about/tilburg-university/conduct-integrity/download-letter/>

3. Code of Conduct for the use of personal data in academic research, 2005:

www.tilburguniversity.edu/about/university-library/about-the-university-library/research-support/dataverse-nl/download-code-of-conduct/
code is under construction, taking into account the new European regulation about data protection)

A user who wants to access and use any stored Tilburg University's research data must agree to the conditions, specified per study for the use of the data and other research material. Research data may only be made available to third parties to the extent compatible with the ownership of the data, applicable legal provisions, or codes of conduct (e.g., the Personal Data Protection Act (Wet Bescherming Persoonsgegevens <http://wetten.overheid.nl/BWBR0011468>), the Code of Conduct for the Use of Personal Data in Scientific Research (Gedragscode voor het gebruik van persoonsgegevens in wetenschappelijk onderzoek <http://www.vsnul.nl/files/documenten/Domeinen/Accountability/Codes/Gedragscode%20persoonsgegevens.pdf>),

or any other obligation, e.g., of secrecy, with respect to the research data.

The new European regulations about data protection (General Data Protection Regulation, GDPR) are taken into account.

The General Terms of Use of Dataverse do not allow submission of any confidential or secret information. During the quality check of the data package, the Data Curator checks if any such information is in the data package.

See also:

Personal Data Protection Act (Unofficial translation from Dutch) <https://rm.coe.int/16806af297>

Code of Conduct for the Use of Personal Data in Scientific Research

<http://www.vsnul.nl/code-pers-gegevens.html>

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

5. Organizational infrastructure

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The repository is managed by Tilburg University's Research Data Office, which operates under the department Research Support of Library and IT Services (LIS). The Research Data Office consists of a dedicated data team that carries out the mission on research data support of LIS. This team consists of two data librarians, a Research Data Officer and functional application managers.

The FTE available for the Research Data Office is 2,4 on a structural basis:

- Data librarians 1,3 FTE
- Research Data Officer 0,9 FTE
- Additional functional application manager from the Research Support department 0,1 FTE
- Head of department 0,1 FTE

On a temporary basis the Research Data Office makes use of two student workers for reviewing data packages (0,3 FTE per week from March until July 2018).

Qualifications staff

- Data librarians – the two data librarians of the Research Data Office are information specialists by profession with a background in Library and Information Science. One information specialist also has a Master of Arts degree and obtained the certificate ‘Data Intelligence for Librarians’ (May 22, 2013), a four day training course organized by DANS KNAW and 3TU.Datacentrum (now 4TU.Datacentrum). She is member of the Research Data Alliance. The other information specialist is also functional application manager and is Tilburg University’s representative in the national application manager committee for DataverseNL. Additionally, he is GDPR (General Data Protection Regulation) representative for Tilburg University Library & IT Services. He has followed education in law and in IT management.
- Research Data Officer - The Research Data Officer has a PhD in social sciences and worked in a previous position as a Research Data Officer at the Behavioural Science Institute of Radboud University. In this position she provided guidelines and support to researchers how to store, manage and archive research data. She has obtained the certificate ‘Essentials 4 Data Support’ (May-June 2017, full course, online + two days face-to-face).
- Students workers – the hired student workers will receive in-house training by the staff of the Research Data Office and on-site training visits at DANS.

The purpose of the research data team is to facilitate archiving, recording and dissemination of research data. Specifically:

- The archiving of data sets in Tilburg University Dataverse

- Support with the archiving of datasets in other archives such as DANS EASY (<http://www.dans.knaw.nl/en>)
- Connect publications with the matching research data in the Tilburg University Repository
- Advising research departments in the preparation and implementation of a data management plan

More information on the organisational structure can be found at:

https://www.tilburguniversity.edu/upload/ea60fda7-8387-4cd4-b1b8-28ab9b8952c8_LIS%20web.jpg

As a central unit of the university, the Research Data Office is fully funded by the university. The RDO holds a permanent role and budget within the organization. The head of the department as well as the team members participate in national working groups and network events in the field of data management and preservation. The planning of professional trainings, such as the DANS 'Essentials 4 data' training, are evaluated in yearly performance reviews of the staff.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

6. Expert guidance

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

Within the university, the RDO holds close contact with the university's faculties, policy staff, legal department and privacy officer. The RDO staff has regular meetings with the university's legal advisors and privacy officer who are both linked to the RDO as advisor. The head of the department under which the RDO operates has regular meetings with the faculties' research policy coordinators. A systematic meeting with the RDO, the head of the department under which the RDO operates and the faculties' Research Ethics Committees is planned to be initiated as of the end of 2017. The goal of this organ is to form a bridge between the national developments in data archiving and management and the local needs for services in this field, but also to reflect upon the services at the RDO. Meetings for consultation on research data management related issues are already taking place.

In addition, the RDO staff participate in regular meetings organized by the Dutch universities' libraries, keeping close contact with the repository staff at other universities in the Netherlands. Also the staff at DANS and CentERdata are consulted for external advice.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

7. Data integrity and authenticity

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

Once deposited, data files are never changed. UNF (Universal Numerical Fingerprint) checksums are applied to ensure the integrity and authenticity of each dataset. Only corrections to the descriptive metadata of a study are allowed for a dataset.

When archived in Tilburg University Dataverse, the data files cannot be modified by the depositors or data users. If changes are needed, the depositor needs to submit a new version with a new version name. The new version of the dataset will obtain a new persistent identifier. The changes compared to the earlier version are documented in the data report.

Only employees at Tilburg University are allowed to deposit data in the Tilburg University Dataverse. When a dataset is deposited, the Data Curator checks that the deposit comes from a person at Tilburg University. For example, the depositor usually holds a university e-mail account.

During the quality check of the data package, the Data Curator also checks that the description of the content of the data file, included in the required data report, corresponds with the related data. If there are doubts about the authenticity of the data, the Curator will contact the depositor or the research policy employee of the research school/department at which the data were produced.

The data report is accessible by the users. A sample data report is available via the URL <https://www.tilburguniversity.edu/dataverse-nl/> (click 'Template data report' under 'How to deposit'). An example data report in Tilburg University Dataverse is available via <http://hdl.handle.net/10411/KL0X8C>.

Reviewer Entry

Accept or send back to applicant for modification:

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Accept

Comments:

8. Appraisal

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

Depositors are requested to follow the instructions on how to submit a data set. These instructions are available at: <https://www.tilburguniversity.edu/dataverse-nl/>

The depositors need to prepare a data report together with the data files. The data report should include all the necessary information about the data file and its production for third-party researchers to be able to replicate the study or to re-use the data. The template for the data report is available at: <https://www.tilburguniversity.edu/dataverse-nl/>

Depositors are requested to deliver their data in the preferred formats. As part of the deposit instructions, Tilburg University RDO has compiled a list of accepted data formats. This limited list is based on the most used data formats and existing format lists (e.g. that of DANS). The list of accepted data formats is available at <https://www.tilburguniversity.edu/dataverse-nl/>

Submitting other formats by depositors may be possible on request. The staff closely follows developments in the field of preservation in digital archiving to advise the data producer or author on the durability of different data formats.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

9. Documented storage procedures

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

DANS is responsible for a production server with sufficient performance and storage space, while data storage management has been outsourced. DANS has a Service Level Agreement (SLA) with its data storage management provider (KNAW), which includes a confidentiality statement. KNAW has a SLA with the storage provider VANCIS, the Dutch data center for higher education data services, which also includes a confidentiality statement.

The location used for the hardware is protected with advanced access control. Unauthorized personnel do not have access to these areas. Authorized personnel must have a confidentiality statement.

According to the Service Level Agreement, a double backup of the data and metadata is maintained. Backups are geographically separated at least 20 km from one another. The maximum back-up recovery time for the whole system and for the data in the system is one day.

DANS is committed to taking all necessary precautions to ensure the safety and security of the data it preserves. This includes a periodical technology vulnerability scan, a procedure for file fixity checking as well as a Declaration of Confidentiality for employees.

The stored data cannot be changed or deleted. At Tilburg University Research Office, functional application managers can make the data packages de-accessible, and create new versions.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

10. Preservation plan

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

3. In progress: We are in the implementation phase.

Self-assessment statement:

Dataverse is originally designed to store data during the research process and up to 10 years at least. However, Tilburg University Dataverse and its data protocol is designed for archiving data at the end of the research process and enabling longer data preservation.

For ensuring long-term preservation, consultation takes place with DANS (Data Archiving and Networked Services) on the development of a Front Office / Back Office service agreement. DANS' archiving system for research data, EASY, already has been credited by Data Seal of Approval as well as DIN. Tilburg University Dataverse are among the first to engage in a pilot with DANS to enable a SWORD interface between Tilburg University Dataverse and EASY. Both parties are committed to this pilot that has started in September 2017.

The pilot is planned for production in the second quarter of 2018. The project workflow is defined in the document "SWORD interface DataverseNL > EASY", version 2.0 dated November 11, 2017 (in Dutch). This document is available upon request. Once the pilot is completed, a contract will be signed between DANS and Tilburg University concerning the use of EASY.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

11. Data quality

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

When the RDO Data Curator has received the data, a quality check is carried out to ensure that the data and documentation meet the requirements. If the data package does not meet the requirements, the Curator will contact the depositor by email to ask for improvements.

The quality check includes controlling on the following aspects:

- Has the deposit agreement been confirmed?
- Are the files delivered in an accepted file format?
- Are the files readable or saved in a portable format?
- Do the files fall within the maximum data limit?
- Is there adequate documentation about the data and supplementary data? (Data Report template is provided to the depositors)
- In case of several files, is the folder structure clear to you and are all files included?

- Are the data files complete?

- Is the data free of any privacy sensitive information?

The quality check includes controlling the aspect of readability, accessibility, and use of the correct file format name.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

12. Workflows

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The RDO provides instructions for how to prepare the data package for deposit in Tilburg University Dataverse. These instructions are available at: <https://www.tilburguniversity.edu/dataverse-nl/>. The repository has defined a workflow from the data delivery up to archiving and dissemination. This workflow consists of packaging the resource, creating metadata and a quality check of data and metadata including DOI (persistent identifier) assignment. The procedure can be divided into seven steps:

1. Delivery notification

2. Confirmation of data reception

3. Data deposit check

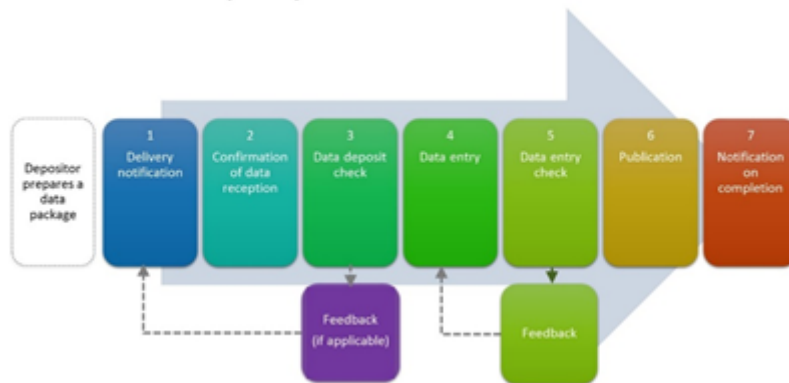
4. Data entry

5. Data entry check

6. Data publication

7. Notification on completion

Data deposit procedure for TiU Dataverse



When LIS Data Curator has received the data, he/she performs a quality check of metadata and - as much as possible - of object data. He/she checks that the data and documentation meet the requirements described in 'Instructions for depositing data in Tilburg University Dataverse', available at <https://www.tilburguniversity.edu/dataverse-nl/>. To do this, the Curator follows the instructions defined in an internal 'Data deposit procedure and checklist' document, which is available upon request.

If the data package does not meet the requirements, LIS Data Curator will contact the depositor by e-mail to ask for improvements. When the requirements are met, the data package will be archived in Dataverse and the new entry will be controlled. The Curator also ensures that a persistent identifier is assigned to the resource.

When the data archiving in Dataverse is completed, the data package is published conform the access status defined by the depositor in the data report.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

13. Data discovery and identification

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The website of Tilburg University Dataverse (<https://dataverse.nl/dataverse/tiu>) allows access to all published datasets. To enable data reference, a persistent identifier (DOI) is assigned to each dataset.

Tilburg University Dataverse can also be searched via NARCIS (National Academic Research and Collaborations Information System: <http://www.narcis.nl/about/Language/en>) and via search engines. All metadata in Tilburg University Dataverse can be harvested via the OAI-PMH protocol.

The metadata used to describe data in DataverseNL are in line with the Dublin Core and DDI metadata standards. A mapping between these metadata standards is available at

<http://guides.dataverse.org/en/latest/api/sword.html#dublin-core-terms-dc-terms-qualified-mapping-dataverse-db-element-crosswalk>

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

14. Data reuse

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

To deposit data in Tilburg University Dataverse, the depositor needs to prepare a data report, which includes an extended set of metadata of the data. The data, data report and any other appendices together form the data package. The data package needs to be complete before one starts the depositing procedure. The template of the data report is available at <https://www.tilburguniversity.edu/dataverse-nl/>.

Information specialists or Research Data Officer of Tilburg University Dataverse gather the metadata from the research data deposit of a research group and are responsible for ingesting the data.

Metadata are used according to the Data Documentation Initiative standard (<http://www.ddialliance.org/>). Data are described according to the 'Dataset Description Guidelines', version 0.1, Tilburg, April 16, 2013.

The fields include, among other:

- Title
- Author(s)
- Description of data

- Keywords
- Related publication(s)
- Language
- Producer
- Grant information
- Distributor
- Source of data
- Creation date
- Temporal coverage of data set
- Format
- Deposit date
- Access status and embargo

Only when the obligatory metadata are available, the information specialists or Research Data Officer will permit deposits of data. When compulsory metadata are missing or when there are questions pertaining the data sets, the information specialist or Research Data Officer always contacts the data producer for further information.

If necessary in order to facilitate the digital sustainability, distribution or re-use of the dataset, Tilburg University Dataverse will modify the format and/or functionality of the dataset. The information specialists and Research Data Officer will in principle follow the DANS guidelines and actions in this.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

15. Technical infrastructure

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

In August 2012, Tilburg Library and IT Services concluded an agreement with Utrecht University to set up DataverseNL. Goal of this cooperation was to offer scientists facilities for research data storage and publishing on Dutch soil and within the framework of Dutch Laws. By September 2013, several other universities and research institutes have joined this cooperation: Erasmus University in Rotterdam, Maastricht University, 3TU Data Center, University of Groningen, and the Netherlands Institute for Ecology (NIOO-KNAW, for its initials in Dutch). Nowadays, Data Archiving and Networked Services (DANS) has taken over the infrastructure of DataverseNL and coordinates the network.

Dataverse Network follows the guidance given in the OAIS reference model across the whole of the archival process. For example, the infrastructure supports separation between Supply Information Package, Archival Information Package and Dissemination Information Package.

The DataverseNL Advisory Board determines DataverseNL's policy and strategy. The Advisory Board provides asked and unsolicited advice to DANS about the development of the service. A work plan is submitted annually to the Advisory Board with the planned work and developments for the coming year. The advisory board evaluates the activities of the previous year on the basis of an annual report. The Advisory Board meets at least twice a year. Each institutional repository within DataverseNL delivers a delegate to the Dataverse Advisory Board. Each institutional repository has one vote in the Advisory Board.

In addition to the advisory board, DataverseNL has an Administrators' Board, which discusses issues that relate to shared functionality, such as quality of service, migration, acceptance tests, support users, reports. The Administrators' Board recommends the desired new functionality to Advisory Board. Each institutional repository designates at least one employee responsible for managing the data within the institute's local Dataverse: the local administrator (Admin). This administrator is the first point of contact for data producers and data consumers of the local Dataverse. The administrator provides information and provides guidance in using the local Dataverse. The local administrator is also a contact person for the communication with DANS about the daily routine.

The DANS service manager organizes and supervises the Administrators' Board. The Administrators' Board meets every second month per skype, or face-to-face if necessary.

CoreTrustSeal Board

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Tilburg University Dataverse follows the technical development of DataverseNL.

Dataverse software is developed at the Harvard University Institute for Quantitative Social Science (IQSS). The current version in use at DataverseNL is 4.6.1. In April/May 2018 version 4.8.2. will be implemented.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

16. Security

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Self-assessment statement:

The technical infrastructure including the operational servers are located in a secure data center, where only authorized employees have access to the equipment after identification. The systems are all provided with redundant power supplies that are located on separate power groups that are powered by (separate) UPS and generators, even if there is a power failure. The space in which the equipment is located has climate control and a gas extinguishing system and is located above sea level.

Backups are made to disk and then written to tape in Amsterdam within 4 hours and also in tape in another city in the Netherlands (Almere) within 24 hours, so data are also safe if the data center in Amsterdam is unexpectedly completely destroyed.

According to the Service Level Agreement, DANS will resolve incidents according to the prioritization as follows:

- Minor: Service is partially unavailable to $\leq 50\%$ of all institutional repositories: within 24 hours and try to resolve 80% of these incidents within 5 working days
- Middle: Whole service is unavailable to any of the institutional repositories: within 24 hours and try to resolve 100% of these incidents within 2 working days.
- Major: Whole service is unavailable to more than one of the institutional repositories or partially unavailable to $> 50\%$ of institutional repositories: within 4 working hours and try to resolve 100% of these incidents within 2 working days.

In case DANS receives an alert that any alleged unlawful and / or illegal content has been stored by a data producer in DataverseNL, DANS will unpublish this dataset immediately and will inform the local Admin of the concerned institutional repository on how to take further actions.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments:

17. Comments/feedback

Minimum Required Statement of Compliance:

0. N/A: Not Applicable.

Applicant Entry

Statement of Compliance:

0. N/A: Not Applicable.

Self-assessment statement:

We have no comments at this moment.

Reviewer Entry

Accept or send back to applicant for modification:

Accept

Comments: