



Assessment Information

[CoreTrustSeal Requirements 2017–2019](#)

Repository:	IDS Repository
Website:	http://repos.ids-mannheim.de/
Certification Date:	18 March 2019
This repository is owned by:	Institut für Deutsche Sprache

CoreTrustSeal Board

W www.coretrustseal.org

E info@coretrustseal.org



IDS Repository

Notes Before Completing the Application

We have read and understood the notes concerning our application submission.

True

Reviewer Entry

Reviewer 1

Comments:

Yes

Reviewer 2

Comments:

CORE TRUSTWORTHY DATA REPOSITORIES REQUIREMENTS

Background & General Guidance

Glossary of Terms

BACKGROUND INFORMATION

Context

R0. Please provide context for your repository.

Repository Type. Select all relevant types from:

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

Comments

References for R0 can be found at the end of section Other Relevant Information.

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

Brief Description of the Repository's Designated Community.

The Leibniz-Institut für Deutsche Sprache ('Institute for the German Language', IDS) [1] is the central non-university institution for the study and documentation of the contemporary usage and recent history of the German language. Together with 91 non-university research and service institutions, it belongs to the Leibniz Association, one of the four major research organizations in Germany.

The domain of the IDS repository [2] is the German language, mainly in its current form (contemporary New High German). Its designated community are national and international researchers in German and general linguistics. As an institutional repository, the repository provides long term archival of two important IDS projects: the Deutsches Referenzkorpus ('German Reference Corpus', DeReKo), which curates a large corpus of written German language, and the Archiv für Gesprochenes Deutsch ('Archive of Spoken German', AGD), which curates several corpora of spoken German.

In addition, the repository enables germanistic researchers from IDS and from other research facilities and universities to deposit their research data for long term archival of data and metadata arising from research projects.

An overview of the available corpora is available on the website of the repository [3]. All metadata available from the repository can be found through the Virtual Language Observatory (VLO) [4], which is also linked from the repository website [2].

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

Level of Curation Performed. Select all relevant types from:

B. Basic curation – e.g. brief checking; addition of basic metadata or documentation, C. Enhanced curation – e.g. conversion to new formats; enhancement of documentation, D. Data-level curation – as in C above; but with additional editing of deposited data for accuracy

Reviewer Entry**Reviewer 1**

Comments:
Accept

Reviewer 2

Comments:
Accept

Comments

The IDS repository itself carries out mainly basic and enhanced-level curation. This means that at the minimum Dublin Core Metadata encoded in CMDI [5] describing the resource is made available, and the availability of data in appropriate formats is assured, while original data is retained (see also R7 and R8). Data-level curation is mainly carried out for the corpora developed at IDS, viz. DeReKo and AGD (see R1), and in close cooperation with the respective projects.

Reviewer Entry**Reviewer 1**

Comments:
Accept

Reviewer 2

Comments:
Accept

Outsource Partners. If applicable, please list them.**CLARIN-D**

The repository is one of currently eight resource and service centres of CLARIN-D. As part of the CLARIN-D consortium, the repository has signed the "Kooperationsvereinbarung" - Cooperation Agreement - which states the rights and obligations of all CLARIN-D centres. A condensed version of this contract (in German only) is available at:

<https://www.clarin-d.net/de/ueber/zentren/zusammenarbeit>

A legally not binding summary in English is available under:

<https://www.clarin-d.net/en/about/centres/collaboration-agreement>

CLARIN-D offers several services to its member institutions, among them the following:

- The CLARIN-D HelpDesk (<https://support.clarin-d.de/mail/>): A central system for user support, which allows for the distribution of user questions and feedback to qualified personnel at the centres.
- The CLARIN-D website (<https://clarin-d.de/en/>): A starting point for researchers to find information on CLARIN-D and to access CLARIN-D services.
- The CLARIN-D wiki (<https://www.clarin-d.de/mwiki/index.php/Hauptseite>): A central platform for CLARIN-D- internal information.
- CLARIN central monitoring (<https://monitoring.clarin.eu/>): A monitoring service offered to all CLARIN-ERIC members and maintained by the resource centre Leipzig.

CLARIN-ERIC

CLARIN-D is a member of CLARIN'S European Research Infrastructure Consortium (ERIC). There is no formal SLA between the ERIC and its members.

CLARIN-ERIC offers central services to its members and users, as stated here: <https://www.clarin.eu/value-proposition>. The services are available to all centres (<https://www.clarin.eu/content/overview-clarin-centres>) in the member countries of the CLARIN-ERIC (<https://www.clarin.eu/content/overview-clarin-centres>). Most important services of the ERIC cover the search functionality for the German CLARIN-centres:

- The Virtual Language Observatory – VLO (<https://vlo.clarin.eu>): CLARIN's central metadata-based search engine, which contains metadata of all CLARIN-centres.
- Metadata harvesting: The VLO is kept up to date using the metadata harvester run by the CLARIN-ERIC.
- Federated Content Search – FCS (<https://www.clarin.eu/contentsearch>): Some centres, IDS included, provide the actual data of their resources for this central content search.

In addition, CLARIN-ERIC offers several further services such as central registries, user statistics management and, as an official EUDAT community, access to advanced EUDAT services for data and service management.

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

Other Relevant Information.

Larger context

As a CLARIN B centre [see <https://www.clarin.eu/node/3819>], IDS repository is fully committed to the CLARIN mission of creating an infrastructure that makes language resources and technology available and readily usable to scholars of all disciplines, in particular the humanities and social sciences.

CLARIN (“Common Language Resources and Technology Infrastructure”) [6,7] is a project developing a European research infrastructure for archiving and processing of language-related resources in the humanities and social sciences, and CLARIN is also used as a name for the resulting infrastructure. CLARIN was established in 2012 with the vision that all digital language resources and tools from all over Europe and beyond must be accessible through a single online environment for the support of researchers in the humanities and social sciences. Coordinated by the CLARIN-ERIC (CLARIN’s European Research Infrastructure Consortium), the CLARIN infrastructure is operational in many countries, and participating centres offer access to data, tools and expertise.

CLARIN-D [8] is the German branch and also a founding member of CLARIN. Hence, it is a member of the CLARIN-ERIC. The IDS repository is one of currently eight German CLARIN-D Resource and Service Centres which form a web- and centre-based research infrastructure for the social sciences and humanities.

References:

- [1] Institut für Deutsche Sprache (Institute for the German Language, IDS): <http://www1.ids-mannheim.de>
(English introduction: <http://www1.ids-mannheim.de/index.php?id=1491&L=1>)
- [2] IDS repository: <http://repos.ids-mannheim.de/>
- [3] Overview of available corpora: <http://repos.ids-mannheim.de/corporaoverview.html>
- [4] VLO, listing all metadata from IDS:
<https://vlo.clarin.eu/search;jsessionid=20FA00EF0DC0A8D3AF7C0B32BCD17BDF?0&fqType=collection:or&fq=collection%3AInstitut+f%C3%BCr+Deutsche+Sprache,+CLARIN-D+Zentrum,+Mannheim&fq=collection:AGD&fq=collection:Archiv+f%C3%BCr+Gesprochenes+Deutsch>
- [5] Component Metadata Infrastructure: <https://www.clarin.eu/content/component-metadata>
- [6] Krauwer, S. (2008). CLARIN: Common language resources and technology infrastructure. Proceedings of the Sixth International Language Resources and Evaluation (LREC'08)
- [7] <https://www.clarin.eu/>
- [8] <https://www.clarin-d.net/en/>

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

ORGANIZATIONAL INFRASTRUCTURE

I. Mission/Scope

R1. The repository has an explicit mission to provide access to and preserve data in its domain.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The mission of the IDS repository is to serve as the repository of a CLARIN-D resource centre. The mission of CLARIN-D is to provide “linguistic data, tools and services in an integrated, interoperable and scalable infrastructure for the social sciences and humanities” (<http://de.clarin.eu/en/home-en.html>). Therefore, every resource centre must operate a repository in which data, tools and according metadata is archived on a long term basis.

This mission is in line with the general mission of IDS, which states: “The foundation pursues the purpose of scientifically researching and documenting the German language in its contemporary use and its recent history. It cooperates with other national and international institutions with a similar goal, and also provides scientific services.” (Satzung des Instituts für Deutsche Sprache, §2(1) [1]).

References:

[1] <http://www.ids-mannheim.de/org/pdf/Satzung-IDS.pdf>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

II. Licenses

R2. The repository maintains all applicable licenses covering data access and use and monitors compliance.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

All CMDI metadata are provided without access restrictions according to CLARIN-D recommendations.

Part of the actual data is also provided without access restrictions, but a significant part is protected. For some data, the user can get access using single sign-on with a central Authentication and Authorization Infrastructure, for some data a personal account needs to be registered with the respective service to get access to the data. For some data sets, explicit permission from the depositor is needed. For a large part of the data, the data consumer needs to agree with a code of conduct, which also contains licensing terms.

An example of a protected resource is DeReKo. Access to a large part of the actual data of DeReKo is only possible via COSMAS II, the IDS repository's own search engine [1]. In order to access the public parts of DeReKo, an end user license agreement has to be signed [2]. However, for some sub-corpora of DeReKo, access is further restricted to IDS-internal use only (see [3] for a list).

Some smaller parts of DeReKo are also freely available for download, namely corpora derived from Wikipedia data and the corpus "Reden und Interviews" (speeches and interviews) (see [4]). These are licensed under Creative Commons (CC-BY-SA). Further corpora available for download are under a special license that allows non-commercial scientific use only and prohibits redistribution (Mannheimer Korpus 1 and 2, Bonner Zeitungskorpus; see [4] again).

Access to the IDS repository is governed by its terms of use [5], which details terms of service, privacy policy, and regulations for data deposit and data access. The terms of use provide a link to a draft for a depositor agreement.

In case of noncompliance to the terms of use, consequences include the termination of personal user account, blacklisting scientific accounts, report scientific misconduct to the relevant scientific board and further legal measures. However, for intellectual property rights infringement or violation of privacy, the involved parties need to take action themselves.

References:

[1] <http://cosmas2.ids-mannheim.de/>

- [2] <http://www.ids-mannheim.de/cosmas2/projekt/registrierung/>
- [3] <http://www.ids-mannheim.de/kl/projekte/korpora/archiv.html>
- [4] <http://www.ids-mannheim.de/kl/projekte/korpora/verfuegbarkeit.html#Download>
- [5] <http://repos.ids-mannheim.de/tou.html>

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

III. Continuity of access

R3. The repository has a continuity plan to ensure ongoing access to and preservation of its holdings.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:
4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:
4 – The guideline has been fully implemented in the repository

Response:

IDS is legally registered as a non-profit association and is sponsored jointly by the German federal government and the German federal states according to Article 91b of the German federal constitution. Funding in accordance with Article 91b is assigned in seven-year cycles. The last evaluation was carried out in 2017, the next evaluation is scheduled for 2024. As a member of the Leibniz Association [1], the umbrella organization to currently 91 research institutions which “conduct research and provide infrastructure for science and research and perform research-based services – liaison, consultation, transfer – for the public, policy-makers, academia and business”, IDS is part of a strong network of publicly funded research institutions. As IDS is the most important institution with its current focus, and the only one on a federal German

level, and because linguistic resources are central to both IDS-internal work and linguistic research in general, a shift in interest is highly unlikely.

All archived resources are preserved for the long-term, i.e. in perpetuity.

Currently no formal succession plan is in place, but the IDS repository is stably established with dedicated staff in IDS's programme area Forschungskoordination und Forschungsinfrastrukturen ('research coordination and research infrastructure') and vital to the operation of many other programmes. Therefore, the only relevant threat would be a cut of funding for the whole institute, which is unlikely as well, as explained above. Before funding of IDS through the Leibniz Association can be ceased, a complicated and time-consuming procedure with many steps has to be passed, starting with an evaluation of the whole Leibniz Institute. In case that after this procedure and subsequent negotiations an end of funding is recommended, financial support will end within the budget year. After that an interim funding for a maximum of three years (with 100% for the first two years and, if no other decision is made, for the third year, too) is provided. Thus, in case of a withdrawal of funding, the IDS repository would be able to use this period of more than two years to organise the transfer of its holdings to another appropriate institution.

As the IDS repository is integrated into the CLARIN project network and its technical infrastructure, a transfer of the repository content to another institution is in principle possible any time. All CLARIN centres commit to ensuring long-term availability, access and to preservation of datasets submitted to their repositories [2], as set out in their mission statements. CLARIN centres are set up as a distributed network, where each centre institution brings its own financial resources into CLARIN-D, which ensures continued availability. In case of a withdrawal of funding for a repository, the repository content will be transferred to another CLARIN centre according the memorandum of understanding[3]. The legal aspects of the process of relocating data to another institution is addressed by templates of license agreements provided in CLARIN. Such a step has not yet been necessary. CLARIN ERIC is currently working on a formalization of the transfer processes of holdings between CLARIN centres.

References

[1] Leibniz Association: <https://www.leibniz-gemeinschaft.de/en/home/>

[2] <https://www.clarin.eu/node/3542>

[3] <https://www.clarin-d.net/en/about/centres/mou-taking-other-centre-s-data>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

IV. Confidentiality/Ethics

R4. The repository ensures, to the extent possible, that data are created, curated, accessed, and used in compliance with disciplinary and ethical norms.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

IDS complies with the norms regarding language data issued by the Deutsche Forschungsgemeinschaft (DFG) [1].

Guidelines and model contracts are provided for both, depositors and users in the IDS repository Terms of Use [2]. The Terms of Service and Privacy Policy specify the IDS as the legal entity. Model contracts for Depositors are tailored individually for each depositor.

Data depositors to the IDS repository must sign an agreement stating that they respect intellectual property rights and privacy issues and that they own all necessary rights required to deposit the data. In particular, data must be anonymized when applicable. Examples for the declaration of consent of interviewees are available, taken from IDS's FOLK Corpus [5,6].

Depositors can choose the level of access restriction that is necessary: Data can be publicly available, restricted to academics, or to individual users. In the latter case, the depositor will have to admit each user individually, and users will need to sign a formal contract. Drafts of such a contract can be found in the section 'terms of use' of the repository website [2]. As explained in R2, the Authentication and Authorization Infrastructure technically enforces the restrictions. The IDS repository does not accept ethically dubious data [4], and currently also does not include data with disclosure risk. As anonymization takes place before ingest and no data with disclosure risk are present in the repository, no corresponding procedures are in place in the repository.

Data is checked for compliance with these guidelines by IDS staff, to the extent this is feasible. In case non-compliance is reported after importing the data, appropriate sanctions will be taken: Data will be removed from the repository, and legal action will be taken if necessary.

Users must confirm that they will use resources only in the intended way. In addition, the IDS repository requires data consumers to comply with the DFG code of conduct for good scientific practice [3]

References:

[1] http://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/informationen_fachwissenschaften/geisteswissenschaften/standards_recht.pdf

[2] <http://repos.ids-mannheim.de/tou.html>

[3] http://www.dfg.de/foerderung/grundlagen_rahmenbedingungen/gwp/

[4] http://repos.ids-mannheim.de/resources/LZA_IDS_Depositing_Policy.pdf

[5] Declaration of Consent FOLK audio recordings (in German)

http://repos.ids-mannheim.de/resources/EINVERSTAENDNISERKLAERUNG_FOLK.pdf

[6] Declaration of Consent FOLK video recordings (in German)

http://repos.ids-mannheim.de/resources/EINVERSTAENDNISERKLAERUNG_FOLK_Zusatz_Video.pdf

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

V. Organizational infrastructure

R5. The repository has adequate funding and sufficient numbers of qualified staff managed through a clear system of governance to effectively carry out the mission.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The repository's funding is through IDS and CLARIN-D funding. As certification is a requirement for CLARIN-D centres (<https://www.clarin.eu/node/3542>) and is also in the interest of IDS, funding for the repository is assured.

The IDS repository is part of IDS's central research infrastructure. IDS is legally registered as a non-profit association and is sponsored jointly by the federal government and the federal states according to Article 91b of the German Federal Constitution. Funding in accordance with Article 91b is assigned in seven-year cycles. The last evaluation was carried out

in 2017, the next evaluation is scheduled for 2024. As a member of the Leibniz Association [1], the umbrella organization to currently 91 research institutions which “conduct research and provide infrastructure for science and research and perform research-based services – liaison, consultation, transfer – for the public, policy-makers, academia and business”, IDS is part of a strong network of publicly funded research institutions.

With its active archives DeReKo (Deutsches Referenzkorpus, German Reference Corpus), whose predecessor was founded in 1969) and AGD (Archiv Gesprochenes Deutsch, Archive for Spoken German), whose predecessor Deutsches Spracharchiv (DSA) was founded in 1932, and has been part of IDS since 1971, IDS has long standing experience in collecting and curating German Language Resources. The IDS repository was established in 2011 to complement these active archives with long term archival. For its first 5 years it was partially funded by the German Research Foundation (DFG) in the LIS programme (Literature Information Systems), and is now internally funded in the IDS programme area Zentrale Forschung ('Central Research').

In addition to the Leibniz network, the IDS repository also maintains strong ties with both the European CLARIN project and its German branch CLARIN-D, serving as a CLARIN centre, and thus committed and enabled to provide the staff members with access to training on data management, metadata, long-term preservation and professional development (offered by CLARIN-D and CLARIN-ERIC). This includes regular developer meetings, mobility grants for sharing of expertise, conferences, meetings with their respective scientific communities in discipline-specific working groups as well as a centralized knowledge base (user guide, wiki, bug tracker and mailing lists). CLARIN has a wide field of expertise in its collaborative network of centres, which come from within their respective fields of digital humanities.

By being part of the CLARIN-D consortium the repository also gains access to funding for running and further developing a sustainable repository and resource centre to support these goals. Besides staff resources this includes a budget for attending national and international meetings such as conferences, workshops or internal developer meetings and meetings with the subject-specific working groups.

Currently CLARIN-D is funded by the Bundesministerium für Bildung und Forschung (BMBF, German Federal Ministry of Education and Research). The current project phase has a runtime of 4 years and is funded until 30/09/2020. As an alternative to project-based funding, CLARIN-D currently endeavours to obtain permanent funding.

IDS is further an active member in nestor. “As a network [nestor] brings together a disparate array of institutions affected by digital preservation, experts and active project participants, all committed to the exchange of information, the distribution of tasks, the development of standards and the exploitation of synergy effects” [2].

The repository staff participates in regular training and exchange in CLARIN-D, nestor and DINI [3].

IDS allocated a 2 FTE positions for managing the repository and the curation of data. The repository is further supported by IDS's IT department.

References:

- [1] Leibniz Association: <https://www.leibniz-gemeinschaft.de/en/home/>
- [2] nestor: http://www.langzeitarchivierung.de/Subsites/nestor/EN/Home/home_node.html
- [3] DINI: <https://www.dini.de/startseite/>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

VI. Expert guidance

R6. The repository adopts mechanism(s) to secure ongoing expert guidance and feedback (either inhouse or external, including scientific guidance, if relevant).

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The IDS repository relies on several sources of guidance: First and foremost, as a CLARIN centre, the IDS repository draws on the expert guidance provided by the external advisory committees of CLARIN-D (the International Advisory Board and the joint Technical Advisory Board with DARIAH-DE); this is detailed below. Moreover, the IDS repository is regularly evaluated by the periodic evaluations of the IDS as a Leibniz Institute. Internally, the IDS repository works closely with the two IDS projects DeReKo and AGD on the technical aspects of long term archival, including metadata design and ingest processes.

The International Advisory Board (IAB), CLARIN-D's scientific advisory board, is a group of CLARIN-D external experts who are consulted on new developments and discuss strategic and content related developments, also with a bird's-eye view of other developments in the communities. With experienced experts from various backgrounds, a high-profile international committee was formed for this purpose. Members of the IAB are currently: Helen Aristar-Dry, Christiane Fellbaum, Björn Granström, Helge Kahler, Jan Christoph Meister, John Nerbonne, Heike Renner-Westermann and Achim Streit.

The joint Technical Advisory Board (TAB) of CLARIN-D and DARIAH-DE is a committee that supports collaboration on the fundamental technical level between these two large research infrastructures (viz. CLARIN-D and DARIAH-DE) for the

humanities and social sciences. The issues of the Collaboration are: questions of technical protocols, infrastructural requirements on the level of archiving, interconnection, search, etc. Based on requirements, small working groups (for example on persistent identifiers, authorization and identification) are formed in areas with an overlap of requirements. This avoids duplication of developments and allows an increased efficiency in implementation, but also interoperability where overlaps exist. This includes for example an option to grant access to one infrastructure for users of the other. Members of the Technical Advisory Board are currently: Jonas Beskow (University of Stockholm), Carol Goble (University of Manchester), Jan Hajic (Head of the Prague CLARIN Centre), Ed Hovy (University of Southern California), Michael Lautenschlager (German Research Centre for Geosciences, Potsdam), Gerhard Schneider (University of Freiburg), Toma Tasovac (Digital Humanities Centre, Belgrade), Melissa Terras (University College London) and Claire Warwick (University College London).

The main line of communication of the IDS repository with its designated community is again via CLARIN(-D). CLARIN provides access to language resources and technology for researchers and scholars in the humanities and social sciences. To overcome the traditional gap between the humanities on the one hand and the language technology community on the other, CLARIN-D established discipline-specific working groups [1]. Their main role is to advise CLARIN-D during the development and implementation of the infrastructure, thus acting as representatives of their (sub)communities. The working group chairs further coordinate dissemination of general information and best practices regarding CLARIN-D services in their communities. Currently eight working groups are active, in total comprising more than one hundred academic professionals.

CLARIN-D organizes the activities of the working groups as well as the communication between CLARIN-D centres and the working groups as well as within groups. Activities include working group meetings, specialized and interdisciplinary workshops and the compilation of reports. Communications include virtual meetings, which are held on a monthly basis, publishing information on the curation projects and activities of the working groups on the CLARIN-D Website [1], and – for internal communication – mailing lists and a wiki.

To provide information and incentives for feedback to community members not directly involved in the workgroups, the IDS repository and its resources have been presented at a number of conferences and in journals (e.g. [2,3,4]).

References:

- [1] <https://www.clarin-d.net/en/disciplines>
- [2] P. Fankhauser, O. Pfefferkorn, A. Witt: From TUSTEP to TEI in Baby Steps. TEI Conference 2013, Rome, Italy.
- [3] P. Fankhauser, N. Fiedler, A. Witt: Forschungsdatenmanagement in den Geisteswissenschaften am Beispiel der germanistischen Linguistik. Zeitschrift für Bibliothekswesen und Bibliographie. 60. pp. 296-306. Dec. 2013.
- [4] P. Fankhauser: Kuration und Exploration des Korpus „Diskurs in der Weimarer Republik“. DHD 2016, Leipzig, Germany.

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

DIGITAL OBJECT MANAGEMENT

VII. Data integrity and authenticity

R7. The repository guarantees the integrity and authenticity of the data.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The repository in principle makes the original deposited objects available in an unmodified way, if the objects are in one of the accepted file types and encodings. For corpora of written language, the repository uses the I5 document format [1], which is a customization of the XML-based TEI-P5 format. For corpora of spoken language, the repository follows the standards of the AGD [2]. In addition, all resources are equipped with metadata in the CMDI Framework. Metadata are validated for completeness and schema compliance.

Upon ingest, the repository creates MD5 and SHA1 checksums for all resources and their metadata, which are regularly checked for data integrity. In case of changes by the data producer, the repository creates a new digital object with a new persistent identifier (PID) and whose metadata refer to the previous version via the original PID. For workflow details regarding integrity checks etc., see also R9. In the case the repository has to change the data, e.g., because a file format becomes obsolete and superseded, the original data and the PID are kept.

The repository only accepts works from the original data producers, who are acknowledged as such by means of elements in Dublin Core, or equivalent elements with according CLARIN-EU Concept Registry [4] categories in CMDI. We use CMDI relations (depending on the profile) to link between objects within a collection, and providing links from objects to additional information. An example CMDI record for the "Mannheimer Korpus historischer Zeitungen und Zeitschriften" is available at [3]. For more technical details on the underlying data modelling see R8 and on the ingest processes which generate these interrelated objects see R12.

External deposits are only accepted after a due diligence process involving a check of the identity of depositors and

clarification of all legal issues along the lines described in R2 and R4.

References

- [1] <http://www1.ids-mannheim.de/kl/projekte/korpora/textmodell.html>
- [2] <http://agd.ids-mannheim.de/uebernahme.shtml>
- [3] <http://hdl.handle.net/10932/00-01B8-AE41-41A4-DC01-5>.
- [4] <http://www.clarin.eu/CCR>

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

VIII. Appraisal

R8. The repository accepts data and metadata based on defined criteria to ensure relevance and understandability for data users.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:
4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:
4 – The guideline has been fully implemented in the repository

Response:

Policies and criteria for depositing spoken and written corpora, and other German language resources are available in [1]. Only resources that comply with CLARIN guidelines or are created in peer-reviewed scientific projects (with respect to scientific and scholarly quality) are considered for deposit. The depositor is required to sign an agreement stating that these guidelines are met (see also R2 and R4; for metadata quality, see also R14).

Following general CLARIN standards, metadata for the IDS repository must be provided in the CMDI format with unique references to the actual resources. Comprehensive documentation on how to create CMDI compliant metadata profiles

and instances is available at [2].

The creation of metadata files (instances) can be performed with any standard XML Editor, e.g. the XML Editor ARBIL [3] that comes with CMDI support. Additionally, a set of tools is provided that allow data producers to create new or adapt existing metadata to the CMDI standard. This includes customizable transformation scripts for converting existing metadata in a variety of formats (Dublin Core, generic XML, comma separated tables) to CMDI, and extracting metadata from text data.

The granularity of CMDI metadata and objects is chosen by the (meta)data producer. The IDS repository itself is able to handle a high granularity of metadata and objects.

Metadata elements must be compliant to the standards set in CMDI. Since CMDI is a component-based approach which allows (meta)data producers to create custom tailored metadata profiles, users are not restricted to a predefined schema. In order to be visible and useable in the CLARIN infrastructure CMDI metadata added to the IDS repository needs to contain a minimum set of attributes (linked to data categories stored in the CLARIN-EU Concept Registry [4]), which is enforced by the quality checks as part of the automated ingest and delivery procedures of the IDS repository.

For the actual data the IDS repository recommends to use formats listed in the CLARIN standard recommendations [5]. The encoding for textual sources (plain text, XML, etc.) should be Unicode. In addition, for spoken corpora, the data formats of FOLKER (Documentation in German [6], XML Schema at [8]) and EXMARaLDA (Documentation [9], DTDs[10]) are currently accepted (see also [6]).

For other formats we offer advice for conversion. However, digital data will also be stored in their original format in order to minimize the risk of conversion loss.

References:

- [1] http://repos.ids-mannheim.de/resources/LZA_IDS_Depositing_Policy.pdf (Draft, in German)
- [2] <http://www.clarin.eu/cmdi>
- [3] <https://tla.mpi.nl/tools/tla-tools/arbil/>
- [4] <http://www.clarin.eu/CCR>
- [5] <http://www.clarin.eu/recommendations>
- [6] <http://agd.ids-mannheim.de/download/FOLKER-Datenmodell.pdf>
- [7] <http://agd.ids-mannheim.de/uebernahme.shtml>
- [8] http://agd.ids-mannheim.de/download/Folker_Schema.xsd
- [9] <http://jtei.revues.org/142>
- [10] <http://www.exmaralda.org/downloads.html#dtd>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

IX. Documented storage procedures

R9. The repository applies documented processes and procedures in managing archival storage of the data.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The IDS repository uses documented storage procedures [1]. The repository runs on a three-node virtualization cluster hosted by IDS. The necessary storage is provided by a redundant storage system. The machines are housed in a modern data centre that was completely overhauled in 2014. It provides redundant air conditioning and redundant uninterrupted power supplies, early fire detection and fire suppression system using Novec 1230 as suppression agent. Access to the data centre is limited to authorized staff. A team of trained personnel performs maintenance of the systems.

Access to the virtual server is restricted by a firewall. The storage hardware and hardware for virtual machines is replaced at regular intervals to the latest state of art.

The IDS repository, that is data and operating system, is backed up Monday through Thursday with incremental backups. Backups are performed on Fridays, full (4th Friday of the month) and differential (1st, 2nd, 3rd, 5th Friday) ones, respectively. Backups have a retention period of three months and are stored on a dedicated backup server on disks and tapes. The backup system is co-located in the data centre of the Mannheim University, which resides in a different part of the city.

In the future, the IDS plans to keep a mirror of the most valuable data with a third party (Mannheim University), but legal, technical, and financial issues still need to be settled.

The IDS repository virtual machine, the backup server and other critical infrastructure are monitored with Icinga [2], a network and service monitoring software.

Integrity of the data is ensured by the version control feature in the Fedora Commons backend. Metadata is a data stream within the digital object, and as such is version-controlled like object data. CLARIN subscribes to the idea of reproducible research. Therefore, updates or new versions of resources typically are equipped with a new persistent identifier (PID). Only marginal changes to CMDI metadata are versioned without registering a new PID.

Part of the archiving workflow is the integrity check of the data and the metadata by the archive manager. This is done both manually and automatically. The metadata is parsed for syntactic correctness and manually evaluated for completeness and soundness. The object data is tested for syntactic correctness if possible. All data streams and versions are equipped with a MD5 checksum, which is checked in coordination with the backups as described above. For further details of the ingest part of the archiving workflow see also R12.

[1] <http://repos.ids-mannheim.de/reposdescription.html>

[2] <https://www.icinga.com/>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

X. Preservation plan

R10. The repository assumes responsibility for long-term preservation and manages this function in a planned and documented way.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The strategies for preservation are documented in the description of the repository on the website of the repository under the section “Making Data Future-Proof” [1].

When depositing data [2], the depositor retains all intellectual property rights to their data. The depositor must grant

distribution rights to the IDS repository and choose an access model (public, academic, individuals). Access models are provided by the repository, and distribution rights are specified in the data provision contract.

Crisis management is based on the technical solutions described in R9. In addition, the IDS repository archives all metadata and data in such a way that they can be easily migrated to and mirrored at other CLARIN resource centres. All metadata and data have a persistent identifier (PID), and are stored as self-contained XML files. Legal aspects of the process of relocating data to another institution is addressed by templates of license agreements provided in CLARIN. The following measures are taken to enhance the chance of future interpretability of the data. The number of accepted file formats is small and well documented (see R8), to make future conversions to other formats more feasible. As much as possible, open (non-proprietary) file formats are used. For textual resources, XML formats are used whenever possible, to ensure future interpretation of the files even if the tool that was used to create them no longer exists. Text is encoded in Unicode to ensure future interpretability.

When a particular file format is in danger of becoming obsolete, appropriate curation steps take place.

All resources in the IDS repository (metadata and actual data) are equipped with a checksum, which is checked on a regular basis in coordination with the backup schedule described in R9.

References

[1] <http://repos.ids-mannheim.de/reposdescription.html>

[2] <http://repos.ids-mannheim.de/resources/DepositorsAgreement.pdf>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

XI. Data quality

R11. The repository has appropriate expertise to address technical data and metadata quality and ensures that sufficient information is available for end users to make quality-related evaluations.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The IDS repository is integrated into the Common Language Resources and Technology Infrastructure (CLARIN), which implements several channels through which members of the designated communities can give feedback on data and metadata hosted by its certified centres.

Researchers interested in including their resources into the IDS repository are invited to develop a data management plan [1] in coordination with the staff of the CLARIN centre, which is offered as a free service already in early states of their projects. Otherwise, actual data currently is only accepted when data depositors can be trusted (see R8: Appraisal).

Metadata may be submitted by the data depositor or will be created in coordination with the Stuttgart CLARIN centre – in any case, it will be thoroughly checked and discussed by experienced centre staff.

The metadata portal CLARIN Virtual Language Observatory [2] harvests the CMDI metadata of all CLARIN centres and displays the large amount of available resources through faceted browsing and search facilities. Both in the overview, i.e. when browsing or searching for relevant resources, and on the individual resource pages displaying further information on a specific resource, the user can report an issue or give feedback on metadata records or resources using a designated button connected via a form to the CLARIN-D Help Desk. Furthermore, workflows ensure that metadata adhere to the relevant schemata (see R9).

The CLARIN-D Help Desk, maintained by the CLARIN centre at the University of Hamburg, manages support and feedback workflows for national centres and various international services, such as the CLARIN VLO. Depending on the type of feedback, help desk agents can thus both forward issues directly to the responsible CLARIN centre and, for issues with a wider impact, contact relevant institutions and bodies at the European level, such as the CLARIN Metadata Curation Taskforce, which is responsible for improving and harmonising metadata within the infrastructure.

Furthermore, communities can provide more general input and feedback on data and metadata through the channel of the discipline-specific working groups within the CLARIN-D project (see also R8 and [3]), thus ensuring CLARIN-D centres provide relevant resources and resource descriptions.

References:

[1] <https://www.clarin-d.net/de/aufbereiten/datenmanagementplan-entwickeln>

[2] <https://vlo.clarin.eu>

[3] <https://www.clarin-d.net/en/disciplines>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

XII. Workflows

R12. Archiving takes place according to defined workflows from ingest to dissemination.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The IDS repository uses Fedora Commons as an underlying repository system.

The ingest workflows of the IDS repository are built on top of the batch ingest utilities provided by Fedora Commons.

These workflows carry out extensive technical validation and automated curation during ingesting CMDI metadata and the underlying data, including:

1. Validation against CMDI Schemas before the ingest.
2. Integrity check for all referenced data.
3. Generation of an actionable URL for all CMDI records and data, and registration of the URL in a handle system (<http://hdl.handle.net/>).
4. Validation based on the validation procedures of the underlying Fedora Commons backend.
5. Validation of CMDI Records delivered by the OAI-PMH Provider, using the underlying validation of the Fedora Commons PROAI provider.

When necessary, restricted access to data due to copyright or privacy concerns is realized via the central Authentication and Authorization Infrastructure.

For dissemination, the IDS repository uses the OAI-PMH Provider of Fedora Commons, which is harvested by the Virtual Language Observatory of CLARIN.

A more detailed description of the functional architecture and ingest pipelines of the IDS repository is available at [2]

References:

[1] <https://duraspace.org/fedora/>

[2] <http://repos.ids-mannheim.de/reposdescription.html>

Reviewer Entry

Reviewer 1

Comments:

Accept

Reviewer 2

Comments:

Accept

XIII. Data discovery and identification

R13. The repository enables users to discover the data and refer to them in a persistent way through proper citation.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The most important way of indexing is within the CLARIN infrastructure, but the IDS repository is also indexed by other registries (e.g. [7]), and maintains its own access infrastructure provided by the repository software (see [9] as a start page).

Catalogue services are a vital component of CLARIN's infrastructure. All CLARIN centres [1] provide their metadata in the CMDI format. The Component MetaData Infrastructure (CMDI) [2] was initiated by CLARIN to provide a flexible framework for describing metadata based on components and concepts. Each metadata record is based on a profile that is registered in the CLARIN CMDI Component Registry [3]. Profiles can make use of components. Those building blocks are also registered in the CMDI Component Registry and describe specific aspects or properties of a resource. Elements of CMDI records link to concept definitions that are stored in external registries, e.g. the CLARIN Concept Registry [4]. Since different communities use different names for the same concepts, linking CMDI elements to concepts enables communities to stick to their terminology while enabling users to find concepts independent of the naming.

A strict requirement for CLARIN centres is to make their metadata available through the established and well-documented

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) [5]. This standard enables harvesting of the metadata from the repository via http(s).

The CLARIN Virtual Language Observatory (VLO) [6] harvests the metadata in CMDI format from all CLARIN centres via OAI-PMH. Metadata from all CLARIN centres (and other relevant archives and repositories) are browsable and searchable via the VLO website. CLARIN has defined a set of facets to narrow down the selection of resources in the VLO. These facets are again based on concept sets and allow access to potential heterogeneous metadata stocks. The search in the VLO combines a full text query with a selection of (multiple) values in facets.

Moreover, the IDS repository is also indexed by other registries (e.g. [7]).

The IDS repository offers PIDs in form of a handle system [8], and encourages to cite resources via their PIDs. To this end, IDS has acquired a Handle prefix and runs its own Handle server for persistent identifiers. IDS anticipates to have their prefix mirrored by ePIC[10] and is currently negotiating this issue with ePIC. The IDS repository itself does not offer a persistent identifier service on its own but relies on the IDS Handle server. The usage of PIDs is mandatory for resources and their CMDI metadata in CLARIN, thus all resources added to the repository can be referenced using PIDs.

References:

- [1] <https://www.clarin.eu/content/overview-clarin-centres>
- [2] <https://www.clarin.eu/content/component-metadata>
- [3] <https://catalog.clarin.eu/ds/ComponentRegistry>
- [4] <http://www.clarin.eu/CCR>
- [5] <https://www.openarchives.org/pmh/>
- [6] <https://vlo.clarin.eu>
- [7] <https://www.re3data.org/repository/r3d100010382>
- [8] <https://www.handle.net>
- [9] Overview of available corpora: <http://repos.ids-mannheim.de/corporaoverview.html>
- [10] <https://www.pidconsortium.eu/>

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

XIV. Data reuse

R14. The repository enables reuse of the data over time, ensuring that appropriate metadata are available to support the understanding and use of the data.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

The IDS repository closely follows the recommendations for standards and tools for compiling language corpora [1, in German] issued by Deutsche Forschungsgemeinschaft (DFG). The corpora compiled at the IDS are all available in digitized form, but differ widely in terms of available metadata, method of storage, and legal terms of use. Archiving these corpora typically involves further curation to complement and standardize metadata, unify dataformats, and ensure availability of legal information.

Following [1], the major requirements for accepting resources for long term archival are:

(a) Metadata: Every resource must be provided in a standardized format. If data has to be provided in a proprietary format, exhaustive documentation must be provided. At least for the whole resource, a minimum set of Metadata in Dublin Core (DC:title, DC:description, DC:publisher and/or DC:creator, DC:legalStatus) must be provided. Moreover, comprehensive documentation must be provided which describes – depending on the resource – provenance of data, procedure of curation, necessary tools, formats, and a bibliography of publications about the resource.

If the resource consists of several parts, for example a collection of papers, provision of metadata for the individual parts in appropriate form is strongly encouraged. Ideally, these metadata are provided in CMDI, but other forms from which CMDI metadata can be generated such as well-documented comma separated tables are accepted.

The IDS currently uses 15 different CMDI profiles[2]. The choice of the right profile is guided by the structure of the data and coordinated between data depositor and the repository.

(b)

Data sharing and reuse is promoted by providing access to the data (download, webservices) within the bounds of applicable licenses and free access to metadata (via the OAI-PMH protocol). The CLARIN infrastructure contains software components such as the VLO (<http://www.clarin.eu/vlo/>) which enable users to browse and search through combined catalogs that contain metadata of all CLARIN repositories.

The IDS participation in relevant networks like e.g. CLARIN and nestor enables steady information about recent

developments in file formats and encodings. Plans to migrate or convert files will be developed if new standards arise; all relevant features of the old formats will be preserved employing reliable procedures.

References

[1] Empfehlungen zu datentechnischen Standards und Tools bei der Erhebung von Sprachkorpora. http://www.dfg.de/download/pdf/foerderung/grundlagen_dfg_foerderung/informationen_fachwissenschaften/geisteswissenschaften/standards_sprachkorpora.pdf

[2] IDs of the CMDI profiles, as recorded in the CMDI Component registry, <https://catalog.clarin.eu/ds/ComponentRegistry/>

- clarin.eu:cr1:p_1498745062850
- clarin.eu:cr1:p_1456409483189
- clarin.eu:cr1:p_1369752611624
- clarin.eu:cr1:p_1455633534543
- clarin.eu:cr1:p_1320657629644
- clarin.eu:cr1:p_1361876010680
- clarin.eu:cr1:p_1387365569663
- clarin.eu:cr1:p_1288172614026
- clarin.eu:cr1:p_1430905751615
- clarin.eu:cr1:p_1430905751614
- clarin.eu:cr1:p_1369140737145
- clarin.eu:cr1:p_1366895758244
- clarin.eu:cr1:p_1388512733002
- clarin.eu:cr1:p_1290431694581
- clarin.eu:cr1:p_1366895758247

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

TECHNOLOGY

XV. Technical infrastructure

R15. The repository functions on well-supported operating systems and other core infrastructural software and is using hardware and software technologies appropriate to the services it provides to its Designated

Community.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:

4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:

4 – The guideline has been fully implemented in the repository

Response:

IDS built a new data centre in 2014, which houses the infrastructure and servers, which are used to implement the repository. The datacentre is equipped with redundant air conditioning, two independent uninterruptable power supplies, an early fire detection system and a fire suppression using the Novec 1230 fire suppression agent. Only authorized personnel can access the data centre. Infrastructure status (air condition, power, etc.) and data centre environment is constantly monitored and in case of an abnormal situation support personnel is notified.

The backup infrastructure, i.e. the backup server and the tape library, are co-located with the data centre of Mannheim University. The data centre is similar, except no early fire detection and fire suppression are in place. The backup server is connected via dedicated network link to the main data centre, so network traffic is passed on IDS's own infrastructure. Servers and storage media are refreshed about every five to seven years. The repository runs on a current and supported version of CentOS/RHEL on a node VMware vSphere cluster. The ESX hosts run on HPE servers and a dual controller NetApp appliance provides the necessary storage. The data paths between those systems are redundant. Software and firmware updates for all components are regularly applied. The servers, storage systems and networking equipment are constantly monitored for availability and performance.

The IDS repository complies with the OAIS reference model's tasks and functions [1]. The repository uses the Fedora Commons software, which is compliant with the Reference Model for an Open Archival Information System (OAIS) due to its ability to ingest and disseminate Submission Information Packages (SIPS) and Dissemination Information Packages (DIPS) in standard container formats. The data consumer has direct access to the archived objects via the web, provided that access requirements have been met. A more detailed description of the IDS repository Functional Architecture along the OAIS reference model is available in [2].

References:

[1] Reference Model for an Open Archival Information System (OAIS), Recommended Practice, CCSDS 650.0-M-2 (Magenta Book) Issue 2, June 2012 <http://public.ccsds.org/publications/archive/650x0m2.pdf>

[2] Functional Architecture and Ingest Pipelines. <http://repos.ids-mannheim.de/reposdescription.html>

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

XVI. Security

R16. The technical infrastructure of the repository provides for protection of the facility and its data, products, services, and users.

Compliance Level:

4 – The guideline has been fully implemented in the repository

Reviewer Entry

Reviewer 1

Comments:
4 – The guideline has been fully implemented in the repository

Reviewer 2

Comments:
4 – The guideline has been fully implemented in the repository

Response:

The IDS IT department is responsible for providing the infrastructure for running the repository, i.e. it administers the servers and the virtualization infrastructure, and it takes care of backups. Security and risk management in the IDS repository is therefore carried out in close co-operation with the IT department.

The following protection measures are in place:

- 1) Physical protection measures:
 - a. Access to the data centre is restricted to authorized personnel
 - b. Redundant air conditioning and redundant uninterruptable power supplies, early fire detection and fire suppression are in place. Data centre and server status and performance is constantly monitored.
- 2) Backup infrastructure is located at a different data centre. Data is backed up daily to disk and tape media.

Together with the documented workflows, the backup enables full recovery of the open-source-based repository (see R9). In the future, IDS plans to keep an additional mirror of the most valuable data with a third party (Mannheim University), but

legal, technical, and financial issues still need to be settled.

The repository runs on a virtual machine that is hosted on redundant virtualization cluster in the data centre of IDS. In case of hardware failure, the running virtual machine will move to another node in the cluster. Primary disk storage for the repository is provided by a high performance storage system that uses triple parity raid and redundant controllers. The operating system and software are kept up to date by daily routines. The server is monitored with specialized software that monitors all important services and the general state of the system. The server is protected by a firewall. Only a small group of people can log into the system from within the internal network. The hardware is hosted in the local data centre that is protected against unauthorized access. The data centre houses redundant power supply and climate control units, early fire detection and a fire suppression system— and is supplementary to the workflows documented in R9 (Documented storage procedures).

Currently a formal IT security concept and detailed disaster plan are being developed. IDS is considering adoption of BSI IT-Grundsatz [1], a recommendation of the German Federal Office for Information Security.

[1] BSI:https://www.bsi.bund.de/DE/Themen/ITGrundsatz/ITGrundsatzKataloge/Inhalt/_content/m/m01/m01.html

Reviewer Entry

Reviewer 1

Comments:
Accept

Reviewer 2

Comments:
Accept

APPLICANT FEEDBACK

Comments/feedback

These requirements are not seen as final, and we value your input to improve the core certification procedure. To this end, please leave any comments you wish to make on both the quality of the Catalogue and its relevance to your organization, as well as any other related thoughts.

Response:

NA

Reviewer Entry

Reviewer 1

Comments:

Reviewer 2

Comments: