Nestor Seal (DIN 31644)

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- ISO 16363: 2012 – 109 criteria
  - Certification process by external experts (ISO 16919)
- DIN 31644: 2012 – 34 criteria
  - Extended peer-reviewed self-assessment or certification by external experts
- Data seal of approval – 16 criteria
  - Peer-reviewed self-assessment

- *European Framework for Audit and Certification of Digitial Repositories*
  http://www.trusteddigitalrepository.eu

- Working groups at
  - DIN, the German Institute for Standardization
  - nestor, the German competence network for digital preservation (founded in 2002)

- Main results
  - Criteria catalogue (DIN 31644, predecessor at nestor)
  - Nestor Seal: Certification versus DIN 31644

- Purpose: Confirm the trustworthiness of archives
- No compulsory technical implementation
- 4 principles: Documentation, transparency, adequateness, measurablity
- 34 criteria

C 1	Selection of information objects and representations
The digital archive has defined criteria for the selection of information objects and representations. The scope is limited by legal regulations, by the institution's mission, and by further objectives.	
Published criteria for the selection	

- C1 Selection of information objects and their representations
- C2 Responsibility for preservation
- C3 Designated communities
- C4 Access
- C5 Interpretability
- C6 Legal and contractual basis
- C7 Legal conformity
- C8 Funding
- C9 Personnel
- C10 Organisation and processes
- C11 Preservation measures
- C12 Crisis / successorship management
- C13 Significant properties

- C14 Integrity: Ingest interface
- C15 Integrity: Functions of the archival storage
- C16 Integrity: user interface
- C17 Authenticity: Ingest
- C18 Authenticity: Preservation measures
- C 19 Authenticity: Use
- C20 Technical authority
- C21 Transfer packages
- C 22 Transformation of the transfer packages into archival packages
- C 23 Archival packages
- C 24 Interpretability of the archival packages
- C 25 Transformation of archival packages into access packages
- C26 Access packages
- C27 Identification
- C28 Descriptive metadata
- C29 Structural metadata
- C30 Technical metadata
- C31 Logging the preservation measures
- C32 Administrative metadata
- C33 IT infrastructure
- C34 Security

- Discussed since 2004

- Nestor working group on certification started in 2010

- Pilot certification of the German National Library

- Extended certification started in 2013

- Archive (men and machine) ✔
- Archiving workflow ✔
- Isolated processes ✖
- Software ✖
- Hardware ✖
- Provider of archiving services ✖

The digital repository has issued specifications regarding its transfer packages. The digital repository agrees with the producers on the transfer packages to be ingested (content data and metadata). The transfer packages are checked on the basis of the specifications.

- Which specifications does the digital repository have regarding transfer packages? Which content data are acceptable? Which metadata are required? Are there special requirements and processes for the creation of transfer packages?
- Which measures exist for validating the conformity of transfer packages?
- Will the repository reject defective transfer packages before ingesting, or will it take corrective measures within a defined work area?

- Mail to nestor
  - 2 contact persons
  - Definition of the scope
- Confirmation of nestor
  - Confirmation of the request
  - Naming of contact person
  - Deadlines are set

- On the basis of the explanatory notes
- First step: Applicability of the criteria?
  - If not: Explanation necessary.
- Second step: Questions for each applicable criterion
  - Current conditions?
  - Rating?
  - Documentation?

Preservation issues

- C1 Selection of information objects and their representations
- C2 Responsibility for preservation
- C3 Designated communities
- C4 Access
- C5 Interpretability
- C6 Legal and contractual basis
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- C8 Funding
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- The digital archive assumes responsibility for the long-term preservation of the information objects
  - What is the basis of the archive's preservation responsibility?
  - Which archiving tasks can be derived from this (documentation, storage, preservation of accessibility, access, ...)?
  - For which period does the archive assume this responsibility?

- The archive should take preservation measures

  - What form does the strategic planning of preservation measures take?

  - How does the planning correlate with the general objectives and the other aspects of the archive's work?

  - Example: Preservation plan

- The digital archive identifies and documents significant properties
    - What does the digital archive understand by significant properties and how does it handle them?
    - To what extent have the objectives of the digital archive been taken into consideration?
    - How does the archive strike the balance between the work involved and the performance of the system on the one hand and customers' usage interests on the other?
    - How have the significant properties of information objects been anchored in the system architecture, the data model and the workflow?

- The digital archive deploys methods which ensure the authenticity of the objects during implementation of the long-term preservation measures
  - Which processes have been specified to protect the authenticity of digital information objects during preservation?
  - How is the preservation of significant properties ensured in the migration process or in the implementation of new emulation environments? How is this monitorered (automatically/manually, for all representations/a random sample)?
  - How does the digital archive proceed if individual significant properties are not preserved, either in full or in part?

- The digital archive logs the preservation measures and any changes to the representations.

  - Which measures and changes are logged?

  - How are the measures and changes logged (e.g. automatically, manually)? Are the agents who are involved in the changes documented? Which standards are deployed?

  - What measures are taken to ensure that log entries remain readable, comprehensible and utilisable in the future?

Scale of applicability	Points	Description
Not yet actioned	0	No fulfilment plans or documents exist yet for the criterion.
Planned	3	A written plan for fulfilment of the criterion has been drawn up. The plan not only draws upon approaches published elsewhere, it also refers to the specific situation in the archive.
Planned in detail	6	The plans have been prepared in detail. All the necessary information and approvals have been provided or obtained for implementation, which has already commenced.
Implemented	10	The plans have been implemented organisationally and/or technically. The measures have been incorporated into the archive's ongoing operations.
NA/Not applicable	[empty]	The criterion is not applicable.

- C1 – C12   Each criterion 10 points (implemented)

- C 13 – C34   An average of 7 points

- For some criteria you can't get currently more than 3 points (e.g. C 13 Significant properties)

- The archive gives the contact person...
  - its answers and documentation and
  - the Contract
- The contact person gives all documents to the first reviewer.

- Archive has to collaborate
  - Provision of necessary information
  - Publication of information/documents
- Charge: 500 Euro
- Documents are kept confidential by nestor
- Nestor assumes no responsibility on damages in cause of the loss of data

- The first reviewer asks…
  - Does the information provided meet the criteria?
    - Is it complete, up-to-date and comprehensible?
  - Is the information presented internally consistent?
  - Are the solutions appropriate in terms of the digital archive's targets and tasks?
- Request of the archive if nesessary
- Writes a report

The second reviewer...

- Checks the report
- determines the final points
- decides decides about the awarding of the nestor Seal
- Writes a final report
  - Date and subject of review
  - Number of applicated criteria
  - attained in total and per criterion
  - Justification for excluded criteria

- The second reviewer informs the nestor office
- The contact person informs the archive
- The archive lodge an appeal with the nestor
- Certification working group
- Publication of the seal on the website of the archive
  - Including certification report, answers and documents of the archive
  - Inscription in the register of certified archives at the nestor office

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