

Digitized Newspaper Repository Assessment Scheme

The Center for Research Libraries has developed a preliminary scheme for assessing digitized newspaper repositories to objectively measure a repository's viability to provide persistent access to digitized news and to maintain the documentary integrity of that content over time. The scheme is based loosely on widely accepted sets of metrics for judging the trustworthiness of digital preservation repositories. Those metrics include [Trusted Repositories Audit and Certification \(TRAC\): A Checklist](#), [ISO Standard 16363: Audit and certification of trustworthy digital repositories](#), The Deutsche Forschungsgemeinschaft "Practical Guidelines on Digitization," and others. The framework is designed to measure how well documented the repository's content management processes are, the quality and adequacy of those processes for maintaining the integrity of digitized content over time, the transparency of the publisher's business practices, and other matters. Assessment results will be presented in the form of structured "repository profiles" to be shared with libraries and other newspaper digitization stakeholders.

The two primary purposes of the framework and the assessments based on it are:

1. To inform library decisions about the purchase and licensing of newspaper databases.
2. To support strategic library and publisher decisions on investing in the digitization, preservation and/or reformatting of newspaper collections.

The proposed assessment scheme presented below includes the principal elements of a repository profile using the preliminary scheme for measuring and "rating" repositories. Within each major section (Organizational Infrastructure, Planning and Management, Content Management, and Technical Infrastructure), the document outlines the criteria that will be used, the authoritative sources on which each criterion is based, the weight (percentage) of each criteria point to be used in "scoring" the assessment, and the corresponding section of the profile within which the assessment components are captured.

The criteria points in **highlighted in green** are the criteria that CRL has identified as the most essential to support a repository of digitized newspaper content.

For reference purposes, a sample assessment scheme capturing the evaluation of a fictional repository accompanies this document (See: "Part 2 Digitized Newspaper Repository - Sample Assessment"). A corresponding repository profile that describes in detail the findings and outcomes of the assessment is also available.

<u>Criteria</u>	<u>Source of criteria</u>	<u>Associated Profile Section</u>	<u>Weight (% of section score)</u>
I. Organizational Infrastructure		I. Organizational Infrastructure	
I.a. Formalized organizational commitment to sustaining content integrity and longevity, providing access, and managing digital material, as well as demonstrated mechanisms for receiving and addressing feedback from designated user community	TRAC A.1, A.1.1, A3.5 ISO 16363 3.1.1, 3.3.1, & 4.6.2.1	I.A. Background and Organizational Context I.B. Mission & goals	30
I.b. Level of specificity and formality of documented business continuity and succession plans	TRAC A1.2 ISO 16363 3.1.2.1	I.C. Governance	10
I.c. Evidence of staffing sufficient to support digital newspaper program/repository	TRAC A2.2 ISO 16363 3.2.1.2	I.D. Resource Allocation	15
I.d. Quality and comprehensiveness of business plans and strategies for securing and monitoring program financial sustainability	TRAC A4 ISO 16363 3.4.3	I.D. Resource Allocation	15
I.e. Quality and comprehensiveness of policies that address management of legal permissions and rights and evidence of secured rights necessary for the acquisition, long term maintenance, and management of the physical and intellectual properties of ingested material	TRAC A5 ISO 16363 3.5.1, 3.5.1.1, 3.5.2	I.E. Rights Management	25



I.f. Formalized procedures, policies and mechanisms for monitoring and addressing organizational and technological developments	TRAC A3.2 ISO 16363 3.3.2.1	I.F. Commitment to persistence of content	5
Green cell indicates that criteria point is essential for successful assessment			

<u>Criteria</u>	<u>Source of criteria</u>	<u>Associated Profile Section</u>	<u>Weight (% of section score)</u>
II. Planning and Management of Digital Newspaper Program		II. Planning and Management of Newspaper Products	
II.a. Formalized decision making guidelines for newspaper program	Deutsche Forschungsgemeinschaft <i>DFG Practical Guidelines on Digitisation</i> "1.2. Selection"; University of Utah Digital Newspapers <i>Project Handbook</i>	II.A. Product Implementation	30
II.b. Identified program scope and documented guidelines for the selection of content	Deutsche Forschungsgemeinschaft "DFG Practical Guidelines on digitization" 1.2. Selection/ Northeast Document Conservation Center, <i>Preservation Leaflets</i> "Reformatting 6.6 Preservation and Selection for Digitization"	II.A. Product Implementation	20
II.c. Specifications for digitization/refinement and quality control of content data objects	<i>ALCTS Minimum Digitization Capture Recommendations/ Library of Congress Technical Standards for Digital Conversion of Text and Graphic Materials</i>	II.B. Digitization & Refinement	20
II.d. Organizational framework for implementing storage and access to repository content	<i>Chronicles in Preservation Guidelines for Digital Newspaper Collection Preservation Readiness</i> "Inventorying Digital Newspapers"; "Organizing Digital Newspaper"	II.A. Product Implementation III. B. Digitization & Refinement	30
Green cell indicates that criteria point is essential for successful assessment			

<u>Criteria</u>	<u>Source of criteria</u>	<u>Associated Profile Section</u>	<u>Weight (% of section score)</u>
III. Content Management		III. Content Management	
III.a. Use of Open Archival Information System (OAIS) Reference Model concepts or other preservation workflow models for communicating and describing repository workflows	TRAC/OAIS (ISO 14721:2002)	III. Content Management	5
III.b. Formal prioritization of digital object properties for preservation	TRAC B1.1 ISO 16363 4.1.1	III.A. Workflow III.B. Metadata	7
III.c. Documented specifications for submission requirements of depositors/producers	TRAC B1.2 ISO 16363 4.1.2	II.B. Digitization & Refinement & III.A. Workflows	5
III.d. Quality and comprehensiveness of ingest workflow	TRAC B2 ISO 16363 4.2	III.A. Workflow	5
III.e. Specifications for archiving processes (transformation and creation of archival packages); and specifications for maintaining link between archival material to source material	TRAC B2.3 ISO 16363 4.2.2	III.A. Workflow	12
III.f. Specifications and standards for completed archival information packages and preservation master files	TRAC B2.1 and B2.2 ISO 16363 4.2.1.2	III.A. Workflow	12



III.g. Procedures for verification and validation of content information and archival master files	TRAC B2.11 and B2.12 ISO 16363 4.2.8, 4.2.9	III.A. Workflow	10
III.h. Specifications for the description and ongoing management of content data objects	TRAC B2.5, B2.6. B2.7, B2.8	III.A. Workflow	5
III.i. Procedures for monitoring archival material and its storage (specifications and management of information packages, awareness of possible format obsolescence, integrity of digital material) and evidence of initiatives to maintain archival material's viability within the developing digital preservation horizon	TRAC B3.2 and B4.4 ISO 16363 4.4.1.2	III.A. Workflows	10
III.j. Documented procedure for monitoring data corruption and loss	TRAC C1.5 ISO 16363 5.1.1.3	III.A. Workflows	12
III.k. Adequate metadata requirements; issue level metadata with provenance information and required title level metadata and identification as defined by designated user community (example of adequate scheme: METS/ALTO)	TRAC B5.1 and B5.2 ISO 16363 4.5.1 and 4.5.2	III.B. Metadata	12
III.l. Specifications for the creation and management of referential and descriptive information associated with digital objects	TRAC B5.3 and B5.4 ISO 16363 4.5.2	III.B. Metadata	5
Green cell indicates that criteria point is essential for successful assessment			



<u>Criteria</u>	<u>Source of criteria</u>	<u>Associated Profile Section</u>	<u>Weight (% of section score)</u>
IV. Technologies and Technical Infrastructure		IV. Technical Infrastructure	
IV.a. Stable operating systems	TRAC C1.1	IV.A. Technical Architecture	25
IV.b. Persistent and secure backup systems	TRAC C1.2 and C1.3 ISO 16363 5.1.1.2	IV.B. Hardware, Security & Backup System	25
IV.c. Quality and comprehensiveness of procedures for monitoring technologies and responding to changes in digital preservation	TRAC C2 ISO 16363 5.1.1, 5.1.1.1	III.A. Workflow & IV.B. Hardware, Security & Backup System	15
IV.d. Use of appropriate hardware and software technologies	TRAC C2/ ISO 16363 5.1.1.1.1, 5.1.1.1.5	IV.A. Technical Architecture IV.B. Hardware, Security & Backup systems	15
IV.e. Quality and comprehensiveness of procedures for testing, monitoring and updating hardware and software platforms	TRAC B3.3, C2.1, C2.2 ISO 16363 5.1.1.1.2, 5.1.1.1.4, 5.1.1.1.6, 5.1.1.1.8	IV.A. Hardware, Security & Backup systems	15
IV.f. Quality and comprehensiveness of disaster preparedness and recovery plans	TRAC C3.4 ISO 16363 5.2.4	IV.B. Hardware, Security & Backup systems	5
Green cell indicates that criteria point is essential for successful assessment			

<u>Sections</u>	<u>Weight (%) of section on final score</u>
Section I. Organizational Infrastructure	40
Section II. Planning and Management of Digital Newspaper Program	10
Section III. Content Management	25
Section IV. Technologies and Technical Infrastructure	25
Composite Score total possible points	100