

DC-NDL 2026: An Improved Metadata Schema Based on the Dublin Core

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Abstract

The National Diet Library's extended Dublin Core schema, or DC-NDL, was revised in April 2026. Details of this revision are shown in this poster. This update maintains the existing Admin-Bib-Item structure of the DC-NDL but expands the role of the Item level to record some of the information corresponding to the Manifestation level in IFLA LRM. In addition, new properties were added for recording provenance information and rights information of metadata. These changes are expected to enable more effective information retrieval and to improve the efficiency of metadata reuse.

1. Background

The National Diet Library (NDL) has sought to facilitate metadata interoperability among libraries and academic institutions in Japan by employing a metadata schema in which our own extensions were added to the Dublin Core. Called the National Diet Library Dublin Core Metadata Description (DC-NDL), this schema employs metadata in a three-layer structure: Admin, Bib, and Item, corresponding respectively to metadata management information, the information necessary for identifying resources, and information about individual items held by institutions. DC-NDL has undergone repeated revisions that have been intended to add metadata terms and redefine their usage in response to updates to Dublin Core, changes in NDL services, and other factors [1].

The NDL Search, which has been in operation since 2012, aggregates metadata for library materials, digital resources, and other materials nationwide and makes it widely available in the DC-NDL format through a GUI and API. Although NDL Search manages metadata internally using a JSON-based format, the metadata is converted to DC-NDL when exchanging data with external databases via APIs.

2. Issues to be addressed

In recent years, e-books and digitized materials based on print originals have become increasingly widespread. The basic record unit in DC-NDL/NDL Search, which is Bib level, corresponded to the Manifestation level in IFLA LRM. As a result, multiple records existed for each type of media, even for resources that end-users would regard as essentially identical, such as printed materials and their digitized versions. Furthermore, links between related records were insufficient, leading to inefficient information retrieval, such as end-users being unaware of digitized materials available online.

In addition, with the development of metadata distribution guidelines by the NDL and other aggregators in Japan [2], the importance of metadata reliability and reusability has increased. Explicitly indicating provenance and rights status is essential for auto-

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mated use and secondary utilization of metadata, and DC-NDL has therefore been required to expand its properties to describe these.

3. Improvements

The latest revision includes two major changes: expansion of Item level and addition of new vocabulary.

3.1. Expansion of Item level

In light of the need to allow users to obtain necessary information from diverse options, the role of the Item level was reexamined, and some of the information corresponding to the Manifestation level is now stored in Item. When both a print resource and its digitized version exist, bibliographic information common to both is consolidated into a single Bib record, which is then linked to separate items representing the print and digital versions, each containing its own information. DC-NDL had previously defined two unique properties, `dcndl:digitizedPublisher` and `dcndl:dateDigitized`, for describing digitized materials [1]. In this revision, however, the use of these properties has been discontinued, and relevant information is now described using `dcterms:publisher` or `dcterms:date` at the Item level. We have adapted the Work–Expression–Manifestation–Item (WEMI) classification from IFLA LRM into a unique metadata schema in the creation of a user-oriented search platform.

3.2. Addition of new vocabulary

New properties were added to describe metadata reuse conditions using URIs and to record the original database and institution that provided the metadata.

4. Conclusion

Metadata conforming to the revised schema is now being made available through the NDL Search API. The revised schema is expected to enhance information discovery for a variety of users—such as GUI users of the NDL Search, API users, and external services that consume metadata via the API—as well as to improve the efficiency of metadata reuse.

References

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