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**Informatika in dokumentacija - Format MarcXchange**

Information and documentation - MarcXchange

Information et documentation - MarcXchange

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*Information et documentation — MarcXchange*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 25577 was prepared by Technical Committee ISO/TC 46, *Information and documentation*, Subcommittee SC 4, *Technical interoperability*.

## Introduction

In 2001, the U.S. Library of Congress developed a framework for working with MARC data in an XML environment. The core of the framework is a MARCXML schema that allows lossless round-trip conversion of an ISO 2709 MARC 21 record and an XML-encoded MARC 21 record.

MARCXML is tightly coupled to ISO 2709. It was obvious to generalize this to an XML-based alternative for ISO 2709 such that any existing format based on ISO 2709 could be represented.

This International Standard describes a schema which is a generalized version of, and with as few changes as possible to, MARCXML but which retains the original MARCXML structure. The resulting schema is an XML extension to ISO 2709. Thus, the original elements of MARCXML are reused and verbal links to the terminology of ISO 2709 have been added. MarcXchange is useable as a framework for conversion of all records using the ISO 2709 syntax into XML. Extensions to MarcXchange might be required to retain the definition and application of fields, subfields and control characters employed in data representation techniques specific to implementations of ISO 2709. The international exchange of records uses local variations of internationally recognized formats as much as it uses internationally recognized formats in the precise way in which they are prescribed for international exchange. MarcXchange, as an internationally recognized format, is mainly intended as a framework for making local schemas, or to which local extensions can be added. Experience has shown that there is a need for local deviations – even if MARC 21 or UNIMARC is chosen as the local format. This schema provides a specification for the development of local specific schemas, ensuring compatibility.

### Relationship to MARC and ISO 2709

The XML schema is constructed to contain MARC data. The schema can be used for the exchange of MARC records or to act as a “bus” to enable MARC data records to go through further transformations such as to Dublin Core and/or processes such as validation. The basic components of ISO 2709 are treated in the following way in the XML schema:

- the record label is treated as a simple string;
- the directory has no counterpart in the schema; when converting from MarcXchange to ISO 2709 the directory has to be recalculated;
- the record identifier field and the control fields are treated as elements with the tag as an attribute;
- data fields are treated as elements with the tag and indicators as attributes;
- subfields are treated as sub-elements with the subfield code as an attribute.

