Specification for the E-ARK Content Information Type Specification for Electronic Records Management Systems (CITS ERMS)

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1 Preface

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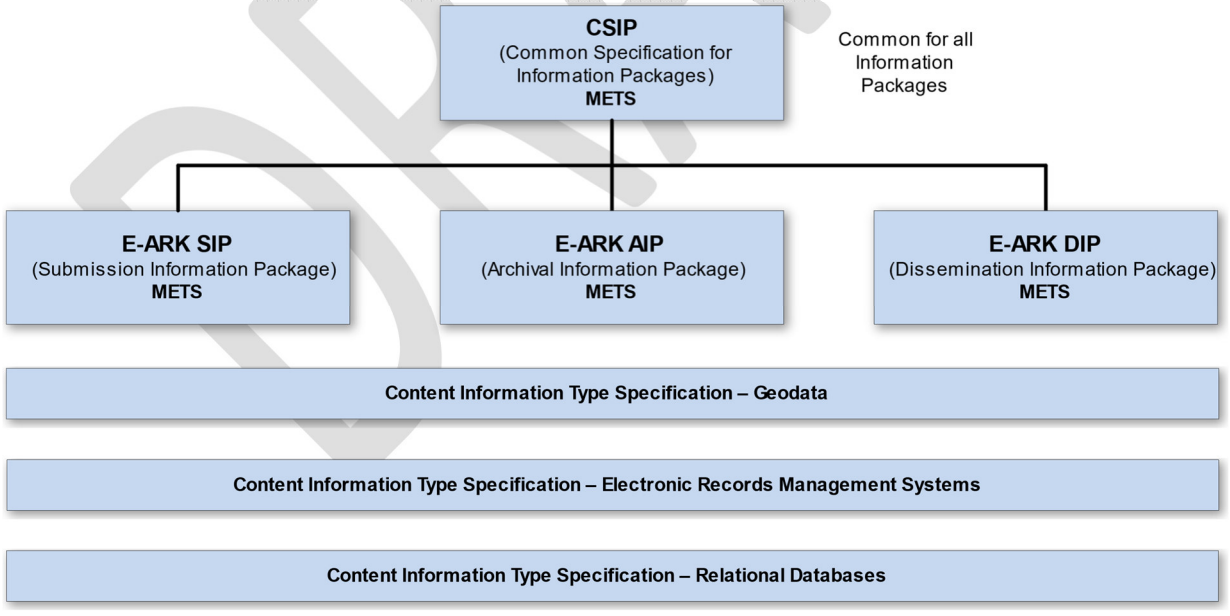
1.1 Aim of the specification

This E-ARK specification is part of a family of specifications that provide a common set of requirements for packaging digital information. These specifications are based on common, international standards for transmitting, describing and preserving digital data. They have been produced to help data creators, software developers and digital archives tackle the challenge of short-, medium- and long-term data management and reuse in a sustainable, authentic, cost-efficient, manageable and interoperable way.

The foundation for these specifications is the Reference Model for an Open Archival Information System (OAIS) which has Information Packages at its core. Familiarity with the core functional entities of OAIS is a prerequisite for understanding the specifications. A visualisation of the current specification network can be seen here:



The E-ARK specification dependency hierarchy

Specification	Aim and Goals
Common Specification for Information Packages	This document introduces the concept of a Common Specification for Information Packages (CSIP). Its three main purposes are to:

	• Establish a common understanding of the requirements which need to be met in order to achieve interoperability of Information Packages. • Establish a common base for the development of more specific Information Package definitions and tools within the digital preservation community. • Propose the details of an XML-based implementation of the requirements using, to the largest possible extent, standards which are widely used in international digital preservation. Ultimately the goal of the Common Specification is to reach a level of interoperability between all Information Packages so that tools implementing the Common Specification can be adopted by institutions without the need for further modifications or adaptations.
E-ARK SIP	The main aims of this specification are to: • Define a general structure for a Submission Information Package format suitable for a wide variety of archival scenarios, e.g. document and image collections, databases or geographical data. • Enhance interoperability between Producers and Archives. • Recommend best practices regarding metadata, content and structure of Submission Information Packages.
E-ARK AIP	The main aims of this specification are to: • Define a generic structure of the AIP format suitable for a wide variety of data types, such as document and image collections, archival records, databases or geographical data. • Recommend a set of metadata related to the structural and the preservation aspects of the AIP as implemented by the reference implementation eArchiving ToolBox (formerly earkweb). • Ensure the format is suitable to store large quantities of data.
E-ARK DIP	The main aims of this specification are to: • Define a generic structure of the DIP format suitable for a wide variety of archival records, such as document and image collections, databases or geographical data. • Recommend a set of metadata related to the structural and access aspects of the DIP.
Content Information Type Specifications	The main aim and goal of a Content Information Type Specification is to: • Define, in technical terms, how data and metadata must be formatted and placed within a CSIP Information Package in order to achieve interoperability in exchanging specific Content Information. The number of possible Content Information Type Specifications is unlimited.

1.2 Organisational support

This specification is maintained by the Digital Information LifeCycle Interoperability Standards Board (DILCIS Board). The DILCIS Board (http://dilcis.eu/) was created to enhance and maintain the draft specifications developed in the European Archival Records and Knowledge Preservation Project (E-ARK project) which concluded in January 2017 (http://eark-project.com/). The Board consists of eight members, but there is no restriction on the number of participants in the work. All Board documents and specifications are stored in GitHub

(https://github.com/DILCISBoard) while published versions are made available on the Board webpage. Since 2018 the DILCIS Board has been responsible for the core specifications in the Connecting Europe Facility eArchiving Building Block (https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eArchiving).

1.3 Authors

A full list of contributors to this specification, as well as the revision history can be found in Appendix 1.

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1.1 Purpose and Scope

The purpose of this document is to describe the Content Information Type Specification for ERMS (Electronic Records Management Systems) using a limited number of elements and attributes available in the ERMS XML-schema. The specification is designed to be used for the transfer to archives as well as for records exchange between different ERMS systems. This specification is supported by an XML-schema and a Schematron document which further enhances the validation capabilities of the XML-schema.

There are two options for extracting information from a producer's system:

1. **Extracting data in a relational database structure**
   The ERMS can be stored in a relational database and thus extracting data from a relational database into a long-term database preservation format (SIARD) that preserves the properties of the relational database so that the data can be further imported into a relational database management system (RDBMS) at the time of access. Access can happen through database queries or via a search field. The main access use cases are:

   a. The producer wishes to retrieve their data for business purposes and/or re-use.
   b. The consumer wishes to consult the data for research purposes.
   c. The archivist wishes to retrieve the data for professional treatment: to check and, if necessary, perform preservation actions, etc.

   d. The original database system software does not need to be licensed and preserved

   The SIARD specification together with a Content Information Type Specification for SIARD represents the SIP profile for the relational databases content type. More information about this option is available in the CITS SIARD. The specification and the SIARD standard can be found at https://dilcis.eu/content-types/siard

2. **Extracting data and metadata as aggregations or records**
   Extracting records from the system and normalising them to a standard XML format. This means that the records are semantically marked up using metadata. Being technically valid and complying with this specification makes them directly accessible for validation, data management, indexing and searching. The structured semantic metadata description is explicit rather than hidden inside an RDBS. The main advantages over the RDBS representation are that:

   a. Records from different sources can be merged.
   b. Search and access is possible across all records from all sources.

c. Records can be managed and accessed individually and uniformly.
d. The original records system software does not need to be licensed and preserved.

It is this particular case (i.e. specifying the semantically marked-up metadata profile) that will be discussed and described in the remainder of this ERMS specification.

This specification is expected to be implemented in tools that:

- Extract metadata and data from the native producer systems.
- Validate that the metadata and data:
  - conform to the specification
  - are complete, and
  - are internally consistent.
- Receive the metadata and data in another producer system.
- Create a Submission Information Package (SIP) package from the extracted data and metadata.
- Transfer the SIP to the archive.
- Receive the SIP in the archive.
- Create an Archival Information Package (AIP) from the SIP.
- Validate that the AIP:
  - conforms to the specification,
  - is complete, and
  - is internally consistent.
- Ingest the AIP into archival storage.
- Manage AIPs within the archive.

1.2 Methodology based upon the E-ARK project

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The ERMS specification is based on the work of the E-ARK project (2014–2017) which studied specific use cases and requirements to be implemented by export tools for electronic records systems. During the process of developing the specification, decisions were made about:

- Which metadata elements to support
- Which additional ones were needed
- How they are to be implemented.

The choice about which entities and metadata elements to adopt in the ERMS specification was made according to two broad criteria. First, only accepted metadata standards that were in frequent use were adopted for the required functions in the ERMS and archive communities.

Second, not every entity or metadata element defined in these standards was adopted. Adoption was limited to those that were relevant for the ERMS scenario in order to meet submission use cases and were:

- in use in all archives in the E-ARK project or
- in use in most archives in the E-ARK project or
- required by national regulation and legislation or, to a lesser extent, required by policy decisions within the national archives and related institutions. The former results in mandatory data entities, metadata elements and processes.

From this, it was possible to identify which requirements, processes, entities and metadata elements were mandatory for every use of the ERMS specification.

Rather than adopting any particular metadata standard existing ones were adopted if and as necessary. For example, the mandatory MoReq requirements for metadata elements were relaxed if they could not be supplied in practice. Extension points were defined so that other metadata elements can be added to support local needs.

Note: the ERMS metadata and data validates correctly with the standard supplied ERMS-schema.

1.3 Scope

The following are out of the scope of this document:

- Proprietary extraction formats, even if they were accompanied by their extraction schema, and functional or records system specification. These types of formats have different:
  - use cases resulting in different metadata needs (for original users who want to use the records again in the same form in which they were submitted; for archive management; for future users with new access patterns and content use),
  - amounts of metadata associated with them,
  - degrees of authenticity,
  - dependencies on knowledge about the functionality of the system in which the record can be used.
- The ERMS XML schema is accompanied by a Schematron document with extra rules for conformance. Schematron and how to apply the rules are not described in this document (http://schematron.com).

For simplicity, this document does not discuss optimisations with respect to packaging and storage. The data model and metadata element definitions only discuss what information is needed, not how it is packaged, stored and optimised for handling instead only placement in the package following CSIP is shown.

2 Layered Data Model

This section introduces the structure of the data model, which is based on a layered approach for information package definitions (Figure 1). The Common Specification for Information Packages (CSIP) forms the outermost layer. The general SIP, AIP and DIP specifications add, respectively, submission, archiving and dissemination information to the CSIP specification. These two layers are not part of this document. The third layer of the model represents specific content type specifications, such as this ERMS specification. Additional layers for business-specific specifications and local variant implementations of any specification can be added.

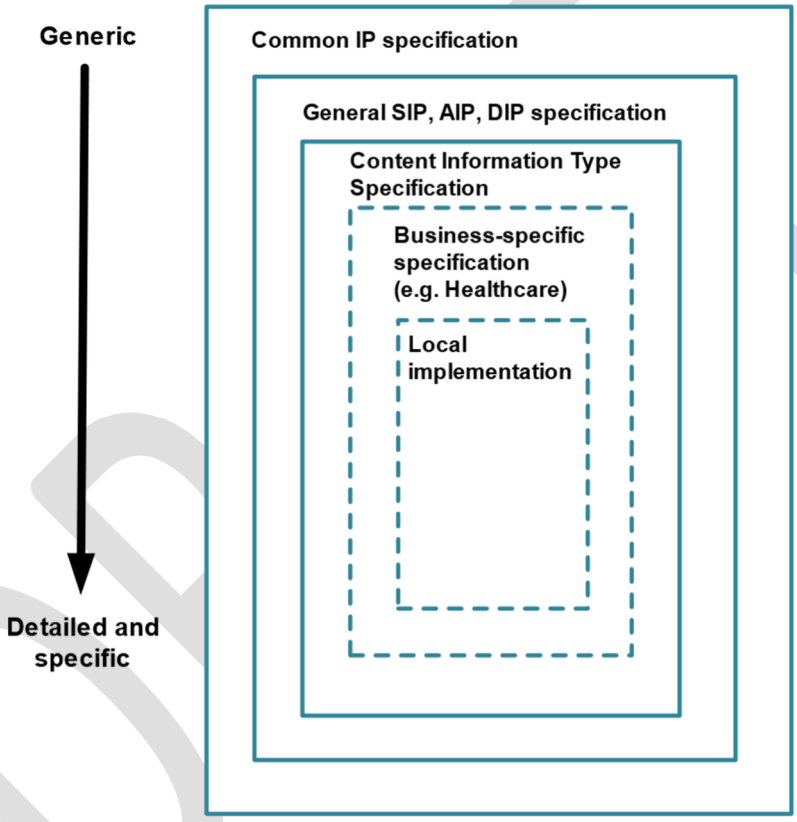

Figure 1: Data Model Structure

The ERMS specification omits all information that is specific to a business area (such as social security) or a specific content-type (such as healthcare). However, these specific types of information may be needed by users of the ERMS specification. This need is addressed by providing extension mechanisms in the ERMS specification so that local (e.g. national) extensions to accommodate local requirements can be added by users.

Every level inherits metadata entities and elements from the higher levels. In order to increase adoption, a flexible schema has been developed. This will allow for extension points where the schema in each layer can be extended to accommodate additional information on the next

specific layer until, finally, the local implementation can add specific entities or metadata elements to satisfy very specific local needs. Extension points can be implemented via:

- Embedding foreign extension schemas (in the same way as supported by METS [http://www.loc.gov/standards/mets/] and PREMIS [http://www.loc.gov/standards/premis/]). These support both increasing the granularity of existing metadata elements by using more detailed data structures as well as adding new types of metadata.
- Single extra metadata elements (as supported by using MoReq contextual metadata elements) without the need to define foreign extension schemas.

The structure allows the addition of more detailed requirements for metadata entities, for example by:

- Increasing the granularity of metadata elements by using more detailed data structures, or
- Adding local controlled vocabularies.

For consistency, design principles are reused between layers as much as possible.

3 Metadata and Mapping

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Metadata can be obtained in several ways that are not mutually exclusive:

- automatically from the source system;
- extracted from the content;
- added manually during submission agreement or ingest.

Ideally, metadata should be created or captured as close to its source as possible where it can be most easily or exclusively obtained.

The balance of manual versus automated creation of metadata, as well as the origin of metadata (producer versus archive), varies greatly because of different best-practices and legal environments at the local level. However, in most cases, the metadata is a mixture of metadata created manually and in an automated fashion, by both the archive and the producer.

In the case of an ERMS export, the specification builds mainly on the MoReq2010 metadata and export service. However, there are some differences between the MoReq export and an archive transfer service:

- There are entities and metadata elements in the MoReq export schema that are not needed for archive export, because:

  - Most existing production systems are not MoReq Compliant Records Systems (MCRS) and may not be in a position to export according to the semantics and syntax described in the MoReq export schema.
  - The archive does not support the full functionality for an MCRS, including records creation and corresponding workflows, and does not support original technical access restriction management, or manage retention periods.
- There are entities and metadata elements that are needed for archive export (SIP export) but not in the MoReq export, because:
  - Archives may have additional functionality. For example, they may wish to merge records from multiple sources. They then need to map the disparate local producer implementations to a normalised archive implementation. Metadata is needed for this.
  - Archives need additional metadata to address long-term preservation, in particular technical and additional provenance metadata.

Therefore, the MoReq export schema (XML Export Schema https://www.moreq.info/specification) is used as an inspiration for a transfer service (the MoReq export schema is not being adopted but built upon).

3.1 Moreq2010 Entities and Metadata for the ERMS Specification

In MoReq2010 each core service manages entities belonging to a specified number of entity types, and each entity must belong to only one of the entity types. The MoReq2010 core services refer to the following entity types:

- **Aggregations**

  What is the entity?

  Aggregation is a core entity in MoReq2010 which defines aggregations as "…accumulations of related record entities that, when combined, may exist at a level above that of a single record". Aggregations can be of individual records or higher-level aggregation of aggregations of records. Note that MoReq2010 does not distinguish between the archival terms Fonds, Sub-fonds, Series, File and Sub-files. These are all categorised as aggregations at various, specifiable levels. They all can be mapped to the MoReq2010 aggregation entity.

  How are aggregations dealt with in the ERMS specification?

  Different institutions use various combinations and patterns of values for this Entity type. Also, some partners are obliged by law to use specific terms for aggregation levels. Therefore, the vocabulary for titles of the aggregation entity is not controlled by the ERMS but can be freely chosen by the users. It should be controlled locally in the organisation. Aggregations used in agencies/ERMS are not necessarily the same ones as

required/wished for by the archive. It is recommended that ISAD-G (in the form of EAD) is used for contextual descriptions in the archive. See section 3.2 for more details.

- **Class**

  What is the entity?

  Class is a core entity in MoReq2010 and in all E-ARK partner implementations. Class is defined in MoReq2010 as "a unit of classification that may be associated with an aggregation or a record". It is a business classification applied to records and aggregations of records. In a somewhat circular definition, MoReq2010 defines classification as "the act of associating a class from a classification scheme to an aggregation or record." A unit of classification is not defined.

  How is class dealt with in the ERMS specification?

  The vocabulary for titles of the Class entity is not controlled by this specification but can be freely chosen by users and stated using the relevant elements in the XML-schema.

- **Component**

  What is the entity?

  In MoReq2010, a record can have more than one discrete resource making up its content, and these different resources may even be stored in different locations. MoReq2010 defines a component as "a part of a record that represents a discrete item of content". The association between a record and its content is provided by component entities. Each record can have one or more components. Each referenced component is a single item of content. A component can either be electronic (referring to a digital resource such as a datafile) or physical (referring to a real-world object such as a paper document or DVD).

  How is component dealt with in the ERMS specification?

  The metadata for this entity type is presented in appendices as a part of a record. It is important to note that each component must belong to only one record (Figure 2) as stated in MoReq2010. Observe that these components are placed in a representation in the representations data folder of a package following the CSIP and SIP specifications.

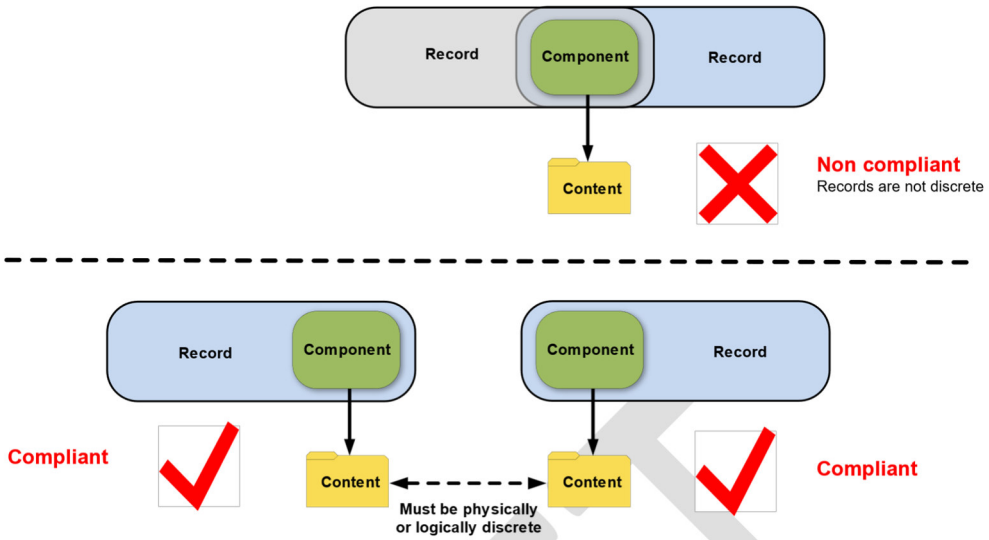

Figure 2: Components

- **Metadata element definitions**

  What is the entity?

  In MoReq2010 a metadata element definition sets out the semantics of a metadata element with a list of the required properties of the element. MoReq2010 allows for specialised subtypes of this entity type and divides metadata element definitions into:
  - system metadata element definitions.
  - contextual metadata element definitions.

  How are metadata element definitions dealt with in the ERMS specification?

  While specialised elements are not within the scope of this ERMS specification, they might still be valid for use by systems as well as archives. Possible use of specialised metadata elements is something every individual needs to consider and describe in Submission Agreements.

- **Disposal holds**

  What is the entity?

  A disposal hold is a legal or other administrative order that interrupts the normal disposal process and prevents the destruction of some of an organisation's records while the disposal hold is in place. According to MoReq2010, if the disposal hold is associated with an individual record, it prevents the destruction of that record while the disposal hold remains active.

How are disposal holds dealt with in the ERMS?

Since disposal holds can apply to records in archive custody as well, metadata about disposal holds need to be included in the extraction XML using the relevant elements from this specification about disposal.

- **Disposal schedules**

What is the entity?

Disposal schedules are used to manage the life cycles of records in all MCRS solutions. According to MoReq2010, disposal schedules are critical to managing records because a record in an MCRS may only be destroyed as part of a disposal process governed by the disposal schedule applicable to that record. A record's disposal schedule determines how long a record is retained and how it is subsequently disposed of at the end of its retention period.

How are disposal schedules dealt with in the ERMS specification?

When the records are transferred to an archive the disposal schedules do not possess the same importance for the archive's records preservation activities, they will only be archived as metadata, and their ERMS functionality is not supported in the archive. When using the specification for transfer between different ERMS systems, this information needs to be included in the extension point being described with the metadata for disposal.

- **Events**

What is the entity?

Events are defined in MoReq2010 as "an entity that is generated by performing a function". Events are not independent entities insofar as all entities, except access control lists and events will have an associated event history in the MCRS, consisting of a description of all the events in which the entity has participated.

How are events dealt with in the ERMS?

To simplify the MoReq2010 model and make it easier to understand events, the descriptions are stored with its record entity, instead of as a separate entity.

- **Function definitions**

What is the entity?

These are definitions of functions that can be performed with an entity by a user. Function definitions are used to define operational functions and are represented as entities. Function definitions are used for both access control (roles, users, groups) and

in events that are generated by performing functions. When events are generated, the function definition of the function that was performed is included in the event.

How are function definitions dealt with in the ERMS specification?

Functions are described as part of events or actions in another entity description (instead of being a stand-alone entity) as function definitions only define functions which can be performed with an entity by a user in MCRS. This means that the actions performed with a record are described with the help of the metadata describing actions.

- **Groups, Roles and Users**

What is the entity?

In MoReq2010 these are separate entity types, but for ERMS purposes their use in the ERMS specification is described together. MoReq2010 allows for specifying individual users who participated in events, as well as their roles. Different use cases require keeping different kinds of information about such entities. Role-based event information may suffice for records of archival value. User-level event information is needed if archived materials are used for legal reasons (legal deposit, other legal scenarios such as discovery orders).

- A group is an entity type that usually represents a team or business unit within the organisation and has various user entities as members.
- A role is an entity representing a set of function definitions. Granting a role to a user or group in relation to an entity enables that user, or any member of that group, to perform that role on the entity and its descendants. Roles are generally constructed to mirror the tasks of a staff member filling a particular position within the organisation. For example, different roles may be constructed around each of the following usage types: office clerk, local records officer, senior records manager, personnel manager, sales representative, auditor, external contractor, guest or office temp, executive personal assistant, senior executive officer, etc.
- A user is a person or system with an account which enables access to and use of an MCRS. The user does not have to be a human and could be another business system. Users must be authenticated before they can use an MCRS.

How does the ERMS specification deal with these entities?

Groups should be exported by MoReq as individual Users because the Group Entity type as a functional entity is not supported in all implementations. Roles and Users will only be archived as metadata (if they are related to some actions/events), but their functionality is not supported in the archive.

- **Record**

  What is the entity?

  A record is a core entity in MoReq2010 and is defined as any "information created, received and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business" (ISO 15489-1:2001, 3.15). It is a record of a business transaction made up of one or more components that are managed atomically.

  How is record dealt with in the ERMS specification?

  The record entity, being at the heart of MCRS functionality and of archival holdings is described fully by this specification.

- **Service**

  What is the entity?

  A service is a logical subset of the total functionality of an MCRS that focuses on managing only one or a small group of entity types. For example, the disposal scheduling service only manages disposal schedules. There is an export service sub-type of the MoReq2010 service entity type that specifies the process of exporting records and metadata from a MoReq Compliant Records System to another MCRS.

  How is service dealt with in the ERMS specification?

  The export service is used as a basis for defining the format to be used when exchanging records between the ERMS and the archives.

- **Template**

  What is the entity?

  According to MoReq2010, a template is a set of contextual metadata element definitions that can be used to add contextual metadata elements to entities at creation or later. Contextual metadata is defined as "metadata that is not mandated by MoReq2010 but is created within an MCRS in a local context to support the local business needs and operations of an organisation".

  How is template dealt with in the ERMS specification?

  The ERMS specification does not use the MoReq2010 metadata templates, as such metadata, if it exists in the MCRS, it will be recorded by other means: for example in an extension.

3.2 Translating MoReq2010 Class and Aggregation Values

As well as general descriptive and administrative metadata, there are two important metadata entities in MoReq2010 which can be successfully incorporated into the export document to maintain contextual information needed for provenance and authenticity. MoReq2010 specifies both *class* and *aggregation* as entity types used for managing and accessing records in a MCRS. *Class* is a unit of classification that can be associated with a record or an aggregation and is used to relate records and aggregations to the business activity (functions, activities, transactions, etc.) which produced the records. Although class values can usually be organised hierarchically (Figure 3), it is not mandatory (and sometimes unnecessary) to do so (Figure 4).

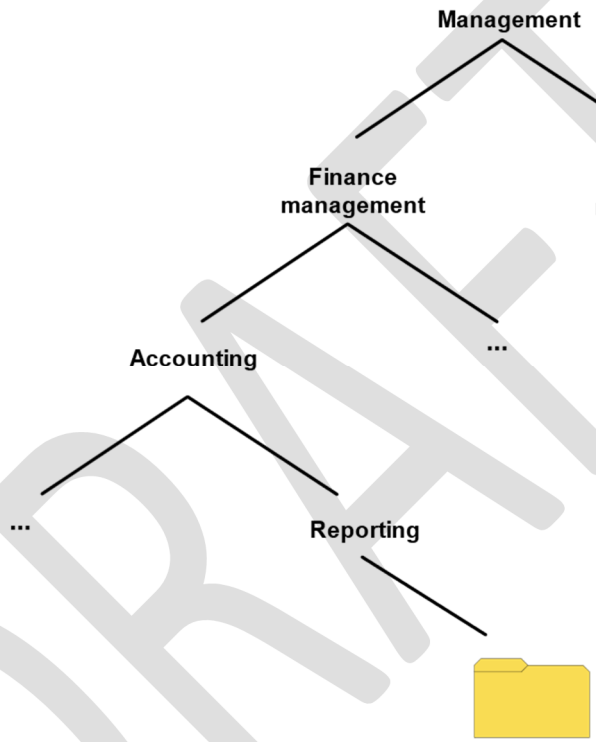

Figure 3: Hierarchical classes

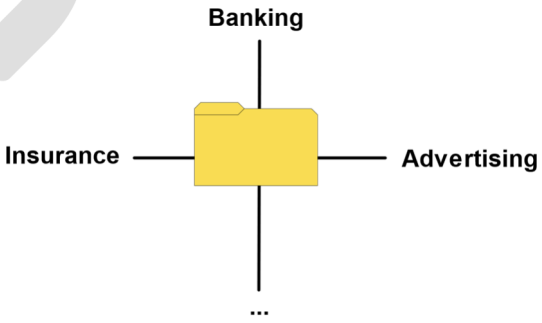

Figure 4: Non-hierarchical classes

An *aggregation* is any accumulation of record entities at a level above the record object such as folder, series, fonds, etc. (see Figure 5, this example is based on the ISAD(G) General International Standard Archival Description. See https://www.ica.org/en/isadg-general-international-standard-archival-description-second-edition).

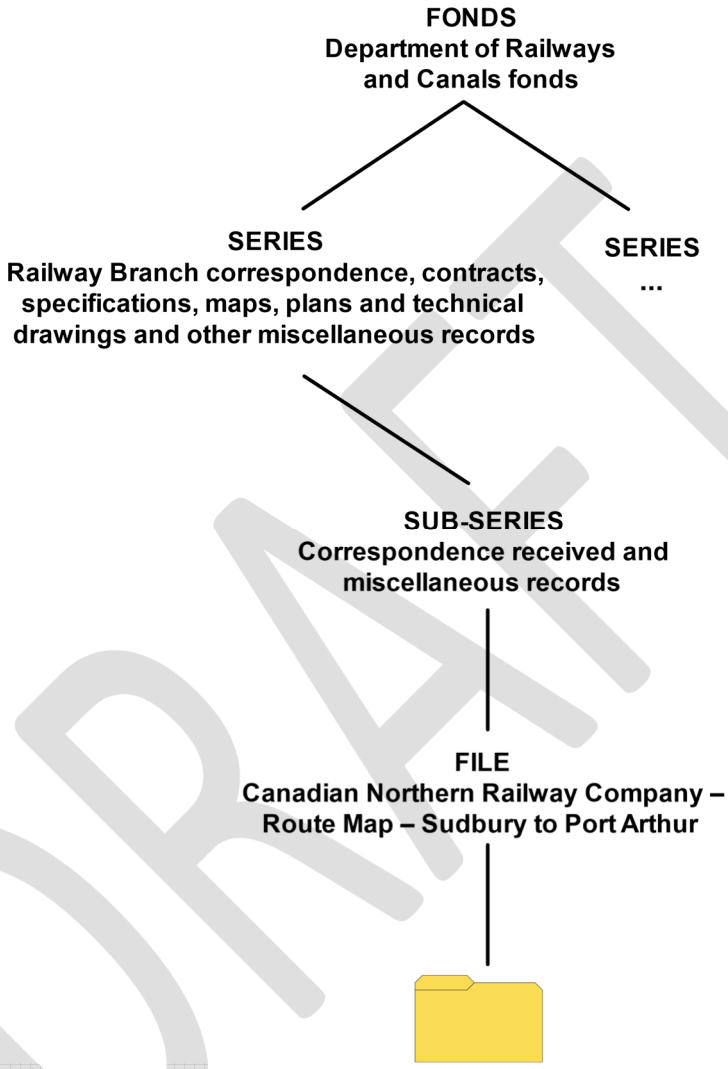

Figure 5: Aggregation

It is important to note that classification is not a way of structuring records but is a way of categorising records for management and access purposes. In contrast, aggregation is a way of structuring records to place them into the context of their creation and use. Because the records in aggregations arise out of business activities, information about both the aggregation to which a record belongs and the business activity which caused the record to be created is required to fully understand the context of a record. Such metadata must accompany the SIP and be incorporated into the systems in use by the receiving archive.

Section 3 above specifies that class hierarchies and aggregation structures are to be represented using ERMS metadata. Many of the aspects of the submissions from producers are governed by law or existing constraints. Producers may, for example, not be able to submit

complete aggregation information with a record, or may not be able to choose whether they submit a single record or a whole series, or may be obliged to record information from several classification schemes. In these cases, it is not possible to specify a mandatory requirement for implementing tools in one specific way or specify rigid metadata structures that are mandatory.

The most common ones found in the stakeholder analysis have been captured. The aim is not to specify a catch-all solution but provide guidelines for the most critical issues.

3.2.1 Mapping between ERMS and Archive Aggregations

When producer class and aggregation values are received in a SIP, they can be used by the archive in a number of ways. They can be:

- Incorporated as raw values into the Encoded Archival Description (EAD) record for the AIP.
- Mapped and translated into the archive's EAD profile.
- Incorporated into the archive's EAD profile by extending the EAD profile.
- Archived as an ERMS document containing the class and aggregations values referenced in the archival description or EAD profile.

EAD uses aggregation values as the "level" attribute on the elements <archdesc> and <c>, to specify the aggregation level at which description belongs (Example 1).

Note: The ERMS specification presents only one mechanism (using ERMS metadata) for how MCRS aggregation values can be translated to archival aggregation values, and do not restrict the use of any other method (i.e. adding all relevant class values as keywords to each individual record).

Example 1:

```
<archdesc level="fonds">
        ...
        <dsc>
                <c level="series">
                        ...
                        <c level="file">
                                Records and computer files
                        </c>
                </c>
        </dsc>
</archdesc>
```

The names of aggregation levels depend on the agreements between data producers and archives. EAD3 has defined a set of values (class, collection, file, fonds, item, otherlevel, recordgrp, series, subfonds, subgrp, subseries) for that purpose, but it allows other values to be used as well if they are defined as “otherlevel” (Example 2).

Example 2:

```
<archdesc level="collection">
        ...
        <dsc>
                <c level="series">
                        ...
                        <c otherlevel="case"> <!--A new aggregation level-->
                                Records and computer files
                        </c>
                </c>
        </dsc>
</archdesc>
```

4 Glossary

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Table 2: Glossary

Name	Description
Aggregation	Aggregations of records are accumulations of related record entities that, when combined, may exist at a level above that of a single record. Aggregations of records may reflect relationships such as shared characteristics or attributes, or the existence of sequential relationships between related records.
AIP	Archival Information Package.
Class	A unit of classification that may be associated with an aggregation or a record. In MoReq2010, classes always have a default disposal schedule, which is inherited by any record they classify, in accordance with the principle in ISO 15489 that "Classification of business activities acts as a powerful tool to assist the conduct of business and in many of the processes involved in the management of records including … determining appropriate retention periods and disposition [i.e. disposal] actions for records" (ISO 15489 −1:2001, 9.5.1).
Component	A part of a record that represents a discrete item of content. For completeness, a record, including all its components and their content, must be managed atomically.
Contextual Metadata	Metadata that is not mandated by MoReq2010 but is created within an MCRS in a local context to support the local business needs and operations of an organisation.
Contextual metadata element definition	Contextual metadata element definitions must be exported whenever contextual metadata is exported to ensure that an MCRS that imports the export data can interpret the metadata element and represent it correctly.
DIP	Dissemination Information Package.
EAD	Encoded Archival Description. A non-proprietary de facto standard for the encoding of finding aids for use in a networked (online) environment based on ISAD(G). Finding aids are inventories, indexes, or guides that are created by archival and manuscript repositories to provide information about specific collections. While the finding aids may vary somewhat in style, their common purpose is to provide a detailed description of the content and intellectual organisation of collections of archival materials. EAD allows the standardisation of collection information in finding aids within and across repositories. See http://www.loc.gov/ead
EAC-CPF	Encoded Archival Context – Corporate bodies, Persons, and Families (EAC-CPF). A non-proprietary de facto standard for encoding the names of creators of archival materials and related information. EAC-CPF is based on ISAAR(CPF). See http://eac.staatsbibliothek-berlin.de/
Entity	Entities represent individual and discrete units of information within an information system. In an MCRS, each entity must be of a particular entity type and have some, or all, of the following:

	• system metadata, • contextual metadata, • access control list, • event history. The system metadata, and sometimes the contextual metadata, link the entity to other entities, forming relationships.
ERMS	Electronic Records Management System.
IP	Information Package.
MCRS	MoReq Compliant Records System.
METS	Metadata Encoding and Transmission Standard. A de facto standard for describing information packages. See http://www.loc.gov/standards/mets/
MoReq2010	MoReq2010: Modular Requirements for Records Systems. See https://www.moreq.info/files/moreq2010_vol1_v1_1_en.pdf
PREMIS	PREservation Implementation Strategies. A de facto standard for preservation metadata. See http://www.loc.gov/standards/premis/
Record	Any "information created, received and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of business (ISO 15489‑1:2001, 3.15)". In MoReq2010, a record may be further characterised as follows. • It has an extensible set of metadata that describes it. • It has one or more components that represent its content. • It is classified with a business classification. • It has a disposal schedule that describes explicitly if, how and when it will be disposed of or destroyed. • It belongs to an aggregation of records. • Access to it is controlled and limited to authorised users. • Its destruction may be prevented by a disposal hold. • It may be exported to another MCRS while retaining all of the characteristics listed above.
SIP	Submission Information Package.

5 Using the CITS ERMS in a package

It is possible to place the ERMS export result in the form of one or more XML-documents and attachment files into an information package utilised with the Common Specification for Information Packages (CSIP). The package with its principles and requirements is described in the CSIP specification, available at http://earkcsip.dilcis.eu/.

5.1 Specific fields to use in CSIP

When CSIP is used these high-level metadata elements describing the content information type specification being used need to be set to the values found in Table 1.

Table 1: Specific fields to use in CSIP

Element name	METS path	Value
General content type	mets/@TYPE	Dataset
Specific content type	mets/@csip:CONTENTINFORMATIONTYPE	ERMS
Specific content type	fileGrp/@csip:CONTENTINFORMATIONTYPE When the FileGrp describes a Representation	ERMS

5.2 Placement of data in a CSIP Information Package

The ERMS document is placed as a representation data file following the principles and requirements in CSIP and explained in the following figure 6. Following the figure its possible to see that the export from the ERMS is the data transferred and thus placed in the data-folder of the package.

If segmentation is needed, please refer to the section in the CSIP specification to gain insight into the splitting of files into several packages. The recommendation is to keep the ERMs XML-document in the main package and only segment the attachment into different IP's.

If the transfer contains information regarding the archival information and preservation metadata for the content these XML-documents are placed in the folders prescribed by CSIP and the XML-documents themselves follows the instruction sin their respectively CITS documents.

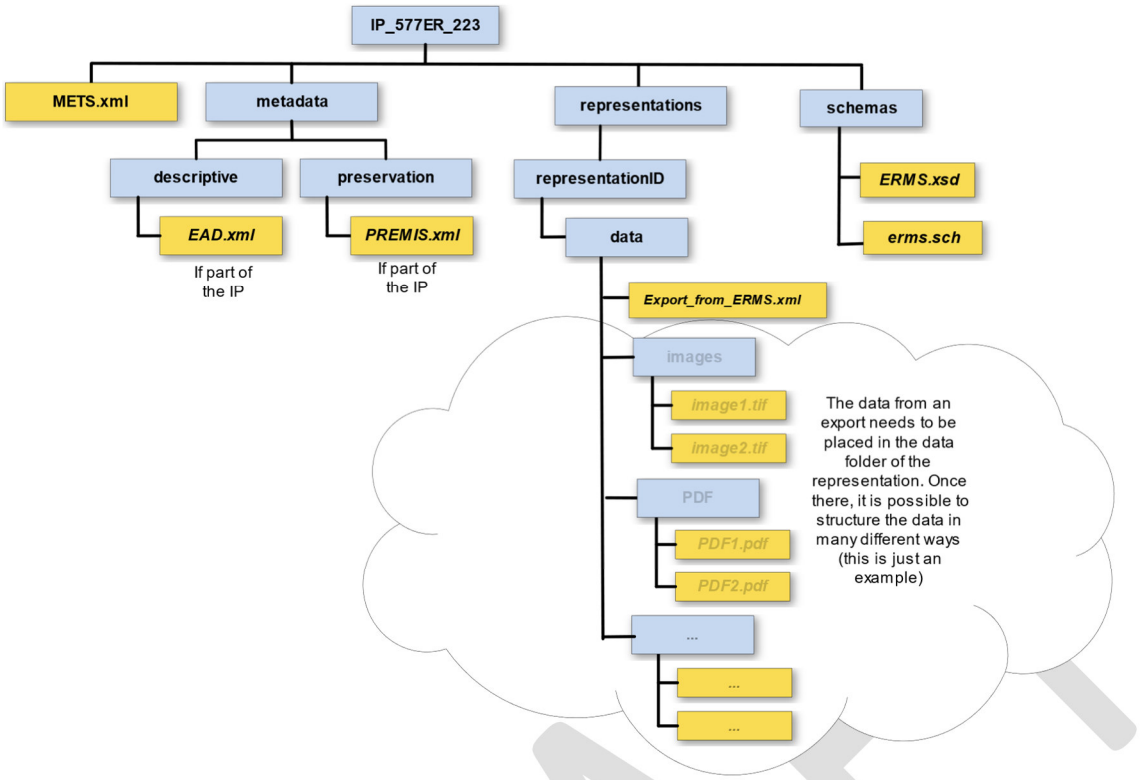

Figure 6: ERMS content and its placement in the information package

6 Metadata

NOTE THAT THERE WILL BE AN EXAMPLE ADDED IN THE GUIDELINE

6.1 Model picture

The ERMS XML-schema contains the high-level entities seen in figure 7 and have the in the figure seen possibilities of including data exported from an ERMS. As seen, its possible to export just one record or to export an aggregation.

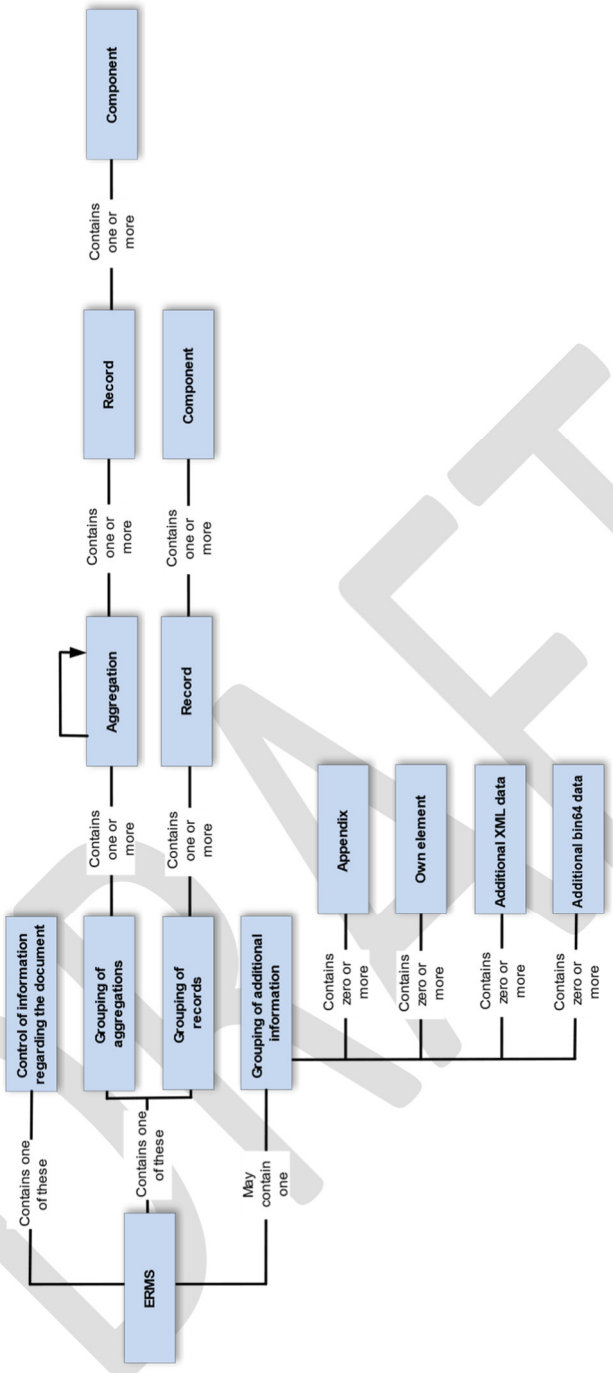

Figure 7: Components of the ERMS XML-format

6.2 Metadata for the Control element

Each XML document containing ERMS information has a mandatory “Control” element to use in an ERMS transfer. The element describes information regarding the ERMS file and export of content.

Table 3: Control element

ID	Name and location	Description and usage	Cardinality Level
ERMS1	Identification erms/control/identification	Identification of the ERMS document itself.	1..n MUST
ERMS2	Identification erms/control/identification/@identificationType	A description of the identifier. Should be present in vocabulary agreed upon by sender and receivers in a submission agreement.	1..1 MUST
ERMS3	Information class for the whole document erms/control/informationClass	Information class for the whole document based on information security classification.	0..1 SHOULD
ERMS4	Classification schema erms/control/classificationSchema/	A description of the classification schema used.	0..1
ERMS5	Classification schema description erms/control/classificationSchema/textualDescriptionOfClassificationSchema/	A textual description of the classification schema used.	0..1 MAY
ERMS6	Classification schema description erms/control/classificationSchema/textualDescriptionOfClassificationSchema/p	The textual description is carried out in p-elements.	1..n MUST
ERMS7	Classification schema additional information	It is possible to link to a document or webpage describing the classification as well to add the information in the document. **See also**: Description of the element “additionalInformation”.	0..1 MAY

	erms/control/classificationSchema/additionalInformation		
ERMS8	Security class for the whole document erms/control/securityClass	Security class for the whole document.	0..1 SHOULD
ERMS9	Dates for the whole document erms/control/dates	Dates pertaining to the whole document. **See also**: Description of the element “Date”.	0..1 MAY
ERMS10	Maintenance information for the whole document erms/control/maintenanceInformation	Maintenance information pertaining to the whole document.	1..1 MUST
ERMS11	Maintenance status erms/control/maintenanceInformation/maintenanceStatus/@value	The maintenance status of the document following a vocabulary consisting of the terms: “revised”, “deleted”, “new”, “cancelled” and “derived”.	1..1 MUST
ERMS12	Maintenance agency erms/control/maintenanceInformation/maintenanceAgency	The agency or responsible body for creating the document.	1..1 MUST
ERMS13	Agency code erms/control/maintenanceInformation/maintenanceAgency/agencyCode	The identifying code for the agency or responsible body for creating the document.	0..1 SHOULD
ERMS14	Agency code type	The type of identification code following a vocabulary decided upon in the submission agreement.	1..1

	erms/control/maintenanceInformation/maintenanceAgency/@type		MUST
ERMS15	Other agency code erms/control/maintenanceInformation/maintenanceAgency/otherAgencyCode	There might be more than one identification code for the agency or responsible body for the creation of the document.	0..n MAY
ERMS16	Other agency code type erms/control/maintenanceInformation/maintenanceAgency/agencyCode/@type	The type of the other identification code.	0..1 SHOULD
ERMS17	Agency name erms/control/maintenanceInformation/maintenanceAgency/agencyName	The name of the agency or responsible body for creation the document.	1..n MUST
ERMS18	Maintenance note erms/control/maintenanceInformation/maintenanceAgency/note	A note for describing the agency or responsible body. **See also**: Description of element “Note”.	0..1 MAY
ERMS19	Maintenance history erms/control/maintenanceInformation/maintenanceHistory	The maintenance history of the document.	1..1 MUST
ERMS20	Maintenance event erms/control/maintenanceInforma	The maintenance events pertaining to the document.	1..n MUST

	tion/maintenanceHistory/maintenanceEvent		
ERMS21	Event type erms/control/erms/control/maintenanceInformation/maintenanceHistory/eventtype/@value	The type of maintenance event following a vocabulary consisting of the terms: “created”, “revised”, “deleted”, “cancelled”, “derived”, “updated” and “unknown”.	1..1 MUST
ERMS22	Event date and time erms/control/maintenanceInformation/maintenanceHistory/eventDateTime	The date and time the event occurred following the xsd:DateTime specified format.	1..1 MUST
ERMS23	Agent carrying out the event erms/control/maintenanceInformation/maintenanceHistory/agent	The agent responsible for the event. **See also**: The description of the element “Agent”.	1..1 MUST
ERMS24	System information erms/control/systemInformation	The exporting system can add extra information pertaining to the whole document.	0..1 MAY
ERMS25	Extra metadata from the system erms/control/systemInformation/extraMetadataInformation	The exporting system can include system information in its own XML format. This must be agreed upon in the submission agreement.	0..1 MAY
ERMS26	System information agents erms/control/systemInformation/agents	The system might add information about system agents.	0..1 MAY
ERMS27	System agent	A description of the agent.	1..n

	erms/control/systemInformation/agents/agent	**See also**: The description of element “Agent”.	MUST

6.3 Metadata for the Additional Information element

It is possible to add additional information in the document using the element additional information present in several places throughout the document.

Table 4: Additional information element

ID	Name and location	Description and usage	Cardinality Level
ERMS28	Appendix additionalInformation/appendix	Additional information in the form of a link to a document.	0..n MAY
ERMS29	Disposability of the appendix additionalInformation/appendix/@disposable	Boolean indication if the appendix can be disposed.	0..1 MAY
ERMS30	Name of the appendix additionalInformation/appendix/@name	The name of the appendix.	1..1 MUST
ERMS31	Description of the appendix additionalInformation/appendix/@description	A description of the appendix.This can be a short abstract.	0..1 MAY
ERMS32	File format of the appendix additionalInformation/appendix/@FileFormat	The file format for the appendix.	0..1 SHOULD
ERMS33	Original file format of the appendix	If the appendix has been transformed to the current format and the format the transformation occurred from are	0..1 MAY

	additionalInformation/appendix/@originalFileFormat	registered, this element can contain the original file format information.	
ERMS34	Path to the appendix additionalInformation/appendix/@Path	The path to the appendix. Follow the guidance in CSIP for making the reference.	1..1 MUST
ERMS35	Marker of eSignature additionalInformation/appendix/@eSignatureHasExisted	Boolean indicating if an eSignature has been present but disposed of before transfer.	0..1 MAY
ERMS36	eSignature additionalInformation/appendix/eSignature	The appendix can have a saved eSignature.	0..1 MAY
ERMS37	eSignature presence additionalInformation/appendix/eSignature/@present	Boolean indicating the presence of an eSignature.	1..1 MUST
ERMS38	Verification date for the eSignature additionalInformation/appendix/eSignature/@dateSignatureIsVerified	The date and time the signature was verified following the xsd:DateTime specified format.	0..1 MAY
ERMS39	Signature additionalInformation/appendix/eSignature/signature	The signature is inserted following its own XML schema. The use needs to be stated in the submission agreement in combination with which schema is being used.	0..1 SHOULD
ERMS40	Own elements	Additional information in the form of creation of a small number of extending elements using elements present for	0..n

	additionalInformation/ownElement	generic construction. This method should only be used for a small number of additions.	MAY
ERMS41	Description of own element additionalInformation/ownElement/ownElementDescription	A description of the own elements purpose.	0..1 SHOULD
ERMS42	Own element additionalInformation/ownElement/	The elements and attributes for the own element are seen in the example. It is important to make an agreement in the submission agreement upon the use of this element and how it is used.	0..n MAY
ERMS43	Additional XML data additionalInformation/additionaXMLData	Additional information in the form of extending XML data that is inserted. This XML data follows its own XML-schema and uses its own elements.	0..n MAY
ERMS44	Additional binary data additionalInformation/additionalBinData	Additional information in the form of inserted binary 64 data. It is important to note that for the binary data it is necessary to have information about the decoding of the information.	0..n MAY

Example of own elements

It is possible in this specification to add single extra elements following these examples.

```
<ownElement>
  <ownElementDescription>Own element used for detailing accounting
information</ownElementDescription>
  <ownElement name="Responsible unit" dataType="String" format="Used accounting
system">
    <value>3456/206/86176</value>
    <property>
      <attribute name="Accounting information">
        <value>Se-1234-3214-444</value>
      </attribute>
    </property>
  </ownElement>
</ownElement>
```

```
<ownElement>
  <ownElementDescription>Own element used for detailing accounting information and value representing the accountant</ownElementDescription>
  <ownElement name="Responsible unit" dataType="String" format="Used accounting system">
    <value>3456/206/86176</value>
    <property>
      <attribute name="Accounting information">
        <value>Se-1234-3214-444</value>
      </attribute>
    </property>
    <ownElement name="Accountant" dataType="String" format="Username">
      <value>MARJAAS</value>
    </ownElement>
  </ownElement>
</ownElement>
```

```
<ownElement>
  <ownElementDescription>Comments regarding the system</ownElementDescription>
  <ownElement name="Comment" dataType="String">
    <value>System comment 1</value>
  </ownElement>
  <ownElement name="Comment" dataType="String">
    <value>System comment 2</value>
  </ownElement>
</ownElement>
```

6.4 Metadata for the Date element

It is possible to specify several dates for both aggregations and records.

Table 5: Date element

ID	Name and location	Description and usage	Cardinality Level
ERMS45	Dates dates	A grouping element for all different kinds of dates occurring in the document.	0..1 SHOULD
ERMS46	Date dates/date	One date element is present for each type of date being described. The date and time for the date are given following the xsd:DateTime specified format.	1..n MUST

ERMS47	Type of date dates/date/@dateType	Classification of the type of date being described. Follows a vocabulary. **See also**: Vocabulary for date type.	1..1 MUST
ERMS48	Other type of date dates/date[@dateType=”other”]/@otherDateType	When the date type is set to the value “other” the otherDateType attribute is used to give the type of date being described.	0..1 SHOULD

The type of date can be specified using the values from table 6 accessible in the attribute @dateType.

Table 6: Vocabulary for date type

Value	Description
aggregated	Date of aggregation.
appraisal	Date of appraisal.
archived	Date of action archived.
archiving	Date of archiving.
captured	Date of capture.
checked_in	Date of check in.
checked_out	Date of check out.
classification	Date of classification made.
closed	Date of closing.
confidentiality__assessed	Date of when confidential assessment was made.
created	Date of creation.
decision	Date of decision.
decision_date	Date of decision.
decision_deadline	Deadline of making a decision.
decrypted	Date of decryption.

deleted	Date of deletion.
destroyed	Date of destruction.
dispatch	Date of dispatch.
encrypted	Date of encryption.
end	End date.
expedited	Date expedited.
expiration	Date of expiration.
finished	Date of finish.
first_used	Date of first use.
last_addition	Date of last addition.
last_addition_timestamp	Date of last addition timestamp.
last_reviewed	Date of last review.
loan	Date of loan.
main_signature	Date of main signature created.
modified	Date of modification.
moved	Date of move.
opened	Date of opening.
opening_date	Date of opening.
originated	Date of origination creation.
other_signature	Date of other signatures added.
ownership_start	Date of when ownership starts.
prepared	Date of preparation.
received	Date of receipt.
received_at_location	Date of receipt at the location.
relocated	Date of relocation.
rendered	Date of rendition.

reviewed	Date of review.
sent	Date sent.
start	Date of start.
take_back	Date of take back.
transferred	Date of transfer.
other	Description of other dates not in the list.

6.5 Metadata for the Note element

It is possible to add notes in the document using the element note.

Table 7: Note element

ID	Name and location	Description and usage	Cardinality Level
ERMS49	Note note	A note regarding, for example, an aggregation or a record.	0..n MAY
ERMS50	Type of note note/@noteType	A description of the identifier. Should be present in vocabulary agreed upon by the sender and receivers in a submission agreement.	0..1 MAY
ERMS51	Date of the note note/@noteDate	The date the note is recorded.	0..1 SHOULD

6.6 Metadata for the Relation element

It is possible to describe relations.

Table 8: Relation element

ID	Name and location	Description and usage	Cardinality Level
ERMS52	Relation relation	Each relation is described with a relation element. As a value the identification of the entity being part of the relation is given.	0..n MAY
ERMS53	Type of relation relation/@relationType	Classification of the type of relationship being described. Follows a vocabulary. **See also**: Vocabulary for relation type.	1..1 MUST

ERMS54	Other type of relation relation[@relationType=”own_relation_definition”]/@otherRelationType	When the relation type is set to the value “Other” the OtherRelationType attribute is used to give the type of relationship being described.	0..1 SHOULD

The type of relationship can be specified using the values from table 9 accessible in the attribute @relationType.

Table 9: Vocabulary for relation type

Value	Description
replaces	This entity replaces the entity identification given.
is_replaced_with	This entity is replaced by the entity identification given.
reference	This entity references the entity identification being given.
referenced_by	This entity is referenced by the entity identification being given.
demands	This entity is demanding the entity identification being given.
needed_by	This entity is needed by the entity identification being given.
contains	This entity contains the entity identification being given.
part_of	This entity is a part of the entity identification being given.
other_format_version	This entity has another format version being available in the entity identification being given.
another_format_version_of	This entity is the other format version of an entity identification being given.
has_version	This entity has another version described is in the entity identification being given.
is_version_of	This entity is a version of the entity identification being given.
is_redacted_version_of	This entity is the redacted version of the entity identification being given.
has_redacted_version	This entity has a redacted version available in the entity identification being given.
rendition_version_of	This entity is the redacted version of the entity identification being given.
has_rendition_version	This entity has a rendition being available in the entity identification being given.

is_child_of	This entity is the child entity to the entity identification being given.
is_parent_of	This entity is the parent of the entity identification being given.
moved	The entity described with the entity identification given has been moved.
moved_from	This entity has been moved from the entity identification given.
deleted	The entity described with the entity identification given has been deleted.
own_relation_definition	A description of an own relation type.

6.7 Metadata for the Restriction element

It is possible to describe restrictions.

Table 10: Restriction element

ID	Name and location	Description and usage	Cardinality Level
ERMS55	Restrictions restriction	Each restriction is described with a restriction element.	0..n MAY
ERMS56	Type of restriction restriction/@restrictionType	Classification of the type of relation being described. Follows a vocabulary. **See also**: Vocabulary for restriction type.	1..1 MUST
ERMS57	Other type of restriction restriction[@restrictionType=”other”]/@otherRestrictionType	When the restriction type is set to the value “Other type” the otherRestrictionType attribute is used to give the type of restriction being described.	1..1 MUST
ERMS58	Explanatory text restriction/explanatoryText	An explanatory text regarding the restriction.	0..1 SHOULD
ERMS59	Regulation restriction/regulation	A description of the regulation and paragraph used.	1..1 MUST
ERMS60	Information class	The information class associated with the restriction.	0..1

	restriction/information Class		MAY
ERMS61	Security class restriction/securityClass	The security class associated with the restriction.	0..1 MAY
ERMS62	Dates restriction/dates/date	Dates related to the restriction. **See also**: Description of element "Date".	0..1 MAY
ERMS63	Duration restriction/duration	There might be durations given for the restriction. It is either given by dates or by a number.	0..n MAY
ERMS64	Duration dates restriction/duration/dates/date	The duration can be given with a set of dates. **See also**: Description of element "Date".	0..n MAY
ERMS65	Calculated duration restriction/duration/calculatedDuration	The duration can be calculated.	0..1 MAY

The type of restriction can be specified using the values from table 11 accessible in the attribute @restrictionType.

Table 11: Vocabulary for restriction type

Value	Description
confidential	This entity is considered confidential.
gdpr	This entity contains GDPR sensitive information.
integrity	This entity contains integrity information.
other_type	Description of restriction is not in the list.

6.8 Metadata for the IPP element

It is possible to describe IPP restrictions.

Table 12: IPP element

ID	Name and location	Description and usage	Cardinality Level
ERMS66	IPP information IPPInformation	Each IPP is described with an IPP element.	0..n MAY
ERMS67	Agent IPPInformation/agent	All agents associated with the IPP is described in its own agent element. **See also**: The description of element "Agent".	0..n SHOULD
ERMS68	Conditions IPPInformation/reproductinConditions	A description of the conditions for reproduction.	0..n SHOULD
ERMS69	IPP type IPPInformation/ippType	The IPP reference to a legislative act.	0..1 MAY
ERMS70	IPP duration IPPInformation/ippduration	There might be durations given for the IPP. These are either given by dates or by a number.	0..n MAY
ERMS71	IPP duration dates IPPInformation/ippduration/dates/date	The duration can be given with a set of dates. **See also**: Description of element "Date".	0..n MAY
ERMS72	Calculated duration IPPInformation/ippduration/calculatedDuration	The duration can be calculated.	0..1 MAY

6.9 Metadata for the Classification element

It is possible to give a classification of the entity.

Table 13: Classification element

ID	Name and location	Description and usage	Cardinality Level

ERMS73	Classification classification	A classification of the entity. Values need to be expressed and considered as documentation and follow the submission as documentation.	0..1 MAY
ERMS74	Identification classification/@classificationId	Identification of the classification.	0..1 SHOULD
ERMS75	Code classification/@classificationCode	The code for the classification.	0..n SHOULD
ERMS76	Hierarchical identifier classification/@fullyQualifiedClassificationCode	The hierarchical identifier of the entity, which is unique within the ERMS.	0..1 MAY
ERMS77	New hierarchical identifier classification/@newFullyQualifiedClassificationCode	The new hierarchical identifier of the entity, which is unique within the ERMS.	0..1 MAY

6.10 Metadata for the Loan element

It is possible to give a description of loans of the entity.

Table 14: Loan element

ID	Name and location	Description and usage	Cardinality Level
ERMS78	Loan loan	A description of a loan of the entity.	0..n MAY
ERMS79	Agent loan/agent	Identification of the agent taking part in the loan. **See also**: Description of element “Agent”.	0..n SHOULD
ERMS80	Loan dates loan/dates	All dates associated with the loan.	0..1 SHOULD
ERMS81	Each date loan/dates/date	Each date associated with the loan. **See also**: Description of element “Date”.	1..n MUST

ERMS82	Term loan/term	The description of the terms for a loan of the entity.	0..1 SHOULD

6.11 Metadata for the Action element

It is possible to describe different actions like appraisal, transformations and decisions made for the entity.

Table 15: Action element

ID	Name and location	Description and usage	Cardinality Level
ERMS83	Action action	Each action is described with an action element.	1..n MAY
ERMS84	Action preformed action/actionText	Description of the action performed like a transformation event.	1..1 MUST
ERMS85	Action preformed due to action/actionDue	The action is performed due to regulation described here.	0..1 SHOULD
ERMS86	Motivation for action action/actionMotivation	The motivation for performing the action.	0..1 MAY
ERMS87	Type of action action/actionType	The type of action taken. Values need to be expressed and considered as documentation and follow the submission as documentation.	0..1 SHOULD
ERMS88	Dates associated with the action action/dates	All dates associated with the action such as: action date, period of action being valid, expiry date.	0..1 SHOULD
ERMS89	Each individual date connected with the action action/dates/actionDate	Each date relating to the action. **See also**: Description of element “Date”.	1..n MUST
ERMS90	Agents associated with the action	All agents associated with the action like agent responsible for the action taken.	0..1 SHOULD

	action/agents		
ERMS91	Each individual agent connected with the action action/agents/agent	Each agent relating to the action. **See also**: Description of element “Agent”.	1..n MUST

6.12 Metadata for the Agent element

It is possible to add different types of agents in the document using the element agent. The agent element is used for both senders of information to an ERMS as well as for the responsible person of the handling of the record in the ERMS system. At the same time, the agent can be either a person or an organisation.

Table 16: Agent element

ID	Name and location	Description and usage	Cardinality Level
ERMS92	Agent agent	An element describing an agent.	1..1 MUST
ERMS93	Agent type agent/@agentType	The agent type according to a value list. **See also**: Vocabulary for agent type.	1..1 MUST
ERMS94	Other description of agent type agent[agentType=”other”]/@otherAgentType	When the agent type is set to the value “other” the otherAgentType attribute is used to give the type of agent being described when the value is not in the value list.	0..1 SHOULD
ERMS95	Name of agent name	The name of the agent.	1..1 MUST
ERMS96	Other way of describing the agent agent/agentExtendingInformation	The agent can be defined with another schema or with a document containing the information.	0..1 MAY
ERMS97	Agent description in a file	Agent description made in a referenced document.	0..1 MAY

	agent/agentExtendingInformation/agentExtendingAppendix	**See also**: The description of the element "additionalInformation/appendix".	
ERMS98	Agent description in XML agent/agentExtendingInformation/agentExtendingXMLInformation	Agent description is made in another XML-schema and inserted in this element.	0..1 MAY
ERMS99	Organisation agent/organisation	Organisation or body that the agent belongs to.	0..1 MAY
ERMS100	Unit name agent/unitName	The name of the subunit that the agent belongs to.	0..1 MAY
ERMS101	ID number agent/idNumber	The ID number (if given) of the agent.	0..1 MAY
ERMS102	Type of ID number agent/idNumber/@idNumberType	The type of the ID number. Values need to be expressed and considered as documentation and follow the submission as documentation.	0..1 SHOULD
ERMS103	Agent role agent/role	The role of the agent. Values need to be expressed and considered as documentation and follow the submission as documentation.	0..1 MAY
ERMS104	Address and contact information agent/addressContactInformation	Address and contact information to the agent.	0..1 SHOULD
ERMS105	Address information agent/addressContactInformation/addressline	The address is made up of several address lines.	1..n MUST
ERMS106	Address information type agent/addressContactInformation	The address line is typed using values from a value list. **See also**: Vocabulary for "Address information type".	1..1 MUST

	/addressline/@addrestType		
ERMS107	Other description of address information type agent/addressContactInformation/addressLine[@addressType=”other”]/@otherAddressLineType	When the address type is set to the value “Other” the otherAddressLineType attribute is used to give the type of address line being described.	0..1 SHOULD
ERMS108	Contact information agent/addressContactInformation/contacLline	The contact information is built up with several contact lines.	1..n MUST
ERMS109	Contact information type agent/addressContactInformation/contactLine/@contactType	The contact line is typed with a value from a value list. **See also**: vocabulary “Contact information type”.	1..1 MUST
ERMS110	Other description of contact information type agent/addressContactInformation/contactLine[@contactType=”other”]/@otherContactLineType	When the contact type is set to the value “other” the otherContactLineType attribute is used to give the type of contact line being described.	0..1 SHOULD
ERMS111	Protected Identity agent/protectedIdentity	A Boolean marker of the agent having a protected identity.	0..1 MAY

The type of agent can be specified using the values from table 17 accessible in the attribute @agentType.

Table 17: Vocabulary for Agent type

Value	Description
administrator	An administrative agent.
agent	An agent.
archiver	An archivist agent.
authorising_person	An authorising agent.
borrower	A borrowing agent.
counterpart	A counterpart agent.
creator	A creator agent.
custodian	A custodian agent.
deliverer	A delivery agent.
dispatcher	A dispatcher agent.
editor	An editor agent.
ipp_owner	An IPP owner agent.
main_signatory	A main signatory agent.
mover	A mover agent.
opening_person	An opening agent.
other_signatory	Another signatory agent.
owner	An owner agent.
reader	A reader agent.
recipient	A recipient agent.
receiver	A receiver agent.
relocator	A relocator agent.
responsible_person	A responsible agent.
sender	A sender agent.
user	A user agent.
other	The value is not present in the value list.

The type of address information can be specified using the values from table 18 accessible in the attribute @addressType.

Table 18: Vocabulary for Address information type

Value	Description
postal_address	The address line is typed as a postal address.
postal_code	The address line is typed as a postal code.
postal_city	The address line is typed as a postal city.
post_box	The address line is typed as a postal box.
municipality_code	The address line is typed as a municipality code.
municipality	The address line is typed as the name of a municipality.
parish	The address name is typed as the name of a parish.
parish_code	The address line is typed as a parish code.
province	The address line is typed as the name of a province.
county	The address line is typed as the name of a county.
country	The address line is typed as the country code or name of a country.
other	The value is not present in the value list.

The type of contact information can be specified using the values from table 19 accessible in the attribute @contactType.

Table 19: Vocabulary for Contact information type

Value	Description
phonenumber	The contact information contains a phone number.
mobilenumber	The contact information contains a mobile phone number.
fax	The contact information contains a fax number.
email	The contact information contains an e-mail.
homepage	The contact information contains a webpage address.

other	The value is not present in the value list.

6.13 Metadata for the Disposal element

It is possible to describe the disposal actions and dates.

Table 20: Disposal element

ID	Name and location	Description and usage	Cardinality Level
ERMS112	Disposal disposal	An element for documenting decisions and actions related to assessing the archival value and disposition of the materials being described.	1..1 MUST
ERMS113	Disposal marker disposal/@disposable	Indicator that disposal is possible mandated through law and or regulations.	1..1 MUST
ERMS114	Default disposal schedule identification disposal/defaultDisposalScheduleId	Identification for the default disposal schedule used.	0..1 MAY
ERMS115	Used disposal schedule identification disposal/disposalScheduleId	Identification for the disposal schedule used.	0..1 MAY
ERMS116	Action taken disposal/disposalAction	Code describing the action to be taken on disposal of the record.	0..1 MAY
ERMS117	Disposal period disposal/disposalPeriod	Value describing when disposal can be made.	0..1 MAY
ERMS118	Mandate for disposal disposal/disposalMandate	Textual description of the mandates used for the disposal action.	0..1 MAY

ERMS119	Description of disposal disposal/disposalDescription	Textual description of the disposal.	0..1 MAY
ERMS120	Comments to the disposal disposal/disposalComments	There might be comments saved regarding the disposal. Each comment is saved in a “disposalComment”.	0..1 MAY
ERMS121	Comment for disposal disposal/disposalComments/disposalComment	Each line for disposal comment.	1..n MUST
ERMS122	Last review comment for the disposal disposal/lastReviewedDisposalComment	Comment made by the user who last reviewed the record explaining the disposal decision made by that review.	0..1 MAY
ERMS123	Name of person responsible for the disposal disposal/disposingPerson	A string describing the person responsible for the disposal.	0..n MAY
ERMS124	Name of person supervising the disposal disposal/supervisingPerson	A string describing the person supervising the disposal.	0..n MAY
ERMS125	Dates relating to the disposal disposal/dates	A collection of all dates relating to the disposal.	1..1 MUST
ERMS126	A single date relating to the disposal disposal/dates/disposalDate	Each date significant to the disposal is described in a disposalDate element. The date is given as a xsd:DateTime.	1..n MUST

ERMS127	Disposal date type disposal/dates/disposalDate/@dateType	Each date is described according to a value list. **See also**: Vocabulary “Disposal date type”.	1..1 MUST
ERMS128	Other type of date disposal/dates/disposalDate[@dateType=”other_date”]/@otherDateType	When the date type is set to the value “other_date” the otherdateType attribute is used to give the type of date being described.	0..1 SHOULD

The type of disposal date can be specified using the values from table 21 accessible in the attribute @dateType.

Table 21: Vocabulary for Disposal dates type

Value	Description
action_due	The due date for an action.
applied	The date that a disposal was applied.
confirmation_due	Date for conformation due for the disposal.
disposal_date	The date for disposal.
lifted	The date disposal was lifted.
overdue_alert	The date for an alert of overdue of the disposal.
retention_period_start	The start date for a retention period.
retention_period_end	The end date for a retention period.
other_date	The value is not present in the value list.

6.14 Metadata for ERMS Records

The following tables contain elements used in an ERMS transfer of a record.

Table 22: ERMS use of metadata for Records

ID	Name and location	Description and usage	Cardinality
ERMS129	One record records/record	An ERMS document can consist of either records or records in an aggregation.	1..n MUST
ERMS130	Identifier record/@systemIdentifier	An identifier for the record with the type UUID created at the latest at the export of the information.	1..1 MUST
ERMS131	Definition of type of record record/@recordType	Type of the record. Values need to be expressed and considered as documentation and follow the submission as documentation.	0..1 MAY
ERMS132	Definition of state of record record/@recordPhysicalOrDigital	A statement whether the record is physical, digital, both or if the statement does not apply following the value list: “physical”, “digital”, “physical_and_dDigital” and “does_not_apply”.	0..1 MAY
ERMS133	Information classification record/informationClass	The information class for the record.	0..1 SHOULD
ERMS134	Security class record/securityClass	The security class for the record.	0..1 SHOULD
ERMS135	Creation date of the record record/dates/date[@dateType=”created”]	Date and time the entity was created, set by the system.	1..1 MUST
ERMS136	Originated date of the record record/dates/date[@dateType=”originated”]	Date and time of origin of a record or other entity which may vary from the creation date of the entity in the system.	0..1 MAY
ERMS137	Title of the record record/title	The identifying name or title of the entity. Can be created manually or by the system.	0..1 SHOULD

ERMS138	Other titles for the record record/otherTitle	There might be other titles present for the record.	0..n MAY
ERMS139	Description record/description	A description of the entity. Mandatory if the title is missing.	0..1 MAY Or 1..1 MUST
ERMS140	Parent aggregation identifier record/parentAggregationId	Parent aggregation for a child aggregation or record.	0..1 MAY
ERMS141	Disposal of the record record/disposal	Description of the disposal of the record. **See also**: Description of the element “disposal”.	0..1 MAY
ERMS142	Date for last review record/dates/date/@dateType=”last_reviewed”	System set date and time indicating when the last review was completed.	0..1 MAY
ERMS143	Date for transfer of the record record/dates/date/@dateType=” transferred”	System set date and time indicating when the transfer of the record was confirmed.	0..1 MAY
ERMS144	Duplicate of the record record/Relation/@relationType=” has_version”	Reference to another entity that has been created by duplicating the record, component or event, and is an exact copy up to the event of duplication, with an identical provenance.	0..1 MAY
ERMS145	An action record/action	An element for recording an event like a transformation of the record. **See also:** Description of element “Action”.	0..n MAY

ERMS146	Entity identification record/objectId	Universally unique identifier for an entity that is generated automatically by the system and stays with the entity forever.	1..1 MUST
ERMS147	Extra entity identification record/extraId	Any external identifier that is used by an ERMS system or is required in a country.	0..n MAY
ERMS148	Extra ID type record/extraid/ @extraIdType	The type of ID number. Values need to be expressed and considered as documentation and follow the submission as documentation.	1..1 MUST
ERMS149	Notes record/notes	Notes regarding the record.	0..1 MAY
ERMS150	Note record/notes/note	Each individual note is placed in a Note element. **See also**: Description of element “Note”.	0..n SHOULD
ERMS151	Subject of the record record/subject	Subject of the record as free text described by creator or ontology subject related by the archivist.	0..n MAY
ERMS152	Keywords record/keywords	Keywords describing the content.	0..1 MAY
ERMS153	Each individual keyword record/keywords /keyword	Each individual keyword is placed in a “Keyword” element.	1..n MUST
ERMS154	Geographical locations record/notes/note	List of geographical locations related to the content other than relations as addresses for agents can be placed as a note. **See also**: Description of element “Note”.	0..n MAY
ERMS155	Finding aid reference for the record record/identifcation	Information about any finding aids that the repository or records creator may have that provide information relating to the context and contents of the unit of description.	0..n MAY
ERMS156	Classification of identification	Indicate that the identification given supplies a finding aid reference. Values need to be expressed and considered as documentation and follow the submission as documentation.	1..1 MUST

	record/identification/@identificationType		
ERMS157	Description Source record/notes/note	References to publications and other materials used for description can be made in a note. **See also**: Description of element “Note”.	0..n MAY
ERMS158	Creator record/agents/agent/@agentType=”creator”	An entity primarily responsible for making the content of the resource; an entity primarily responsible for making the resource (examples of a Creator include a person, an organisation, or a service). **See also**: Description of element “Agent”.	0..n MAY
ERMS159	Owner record/agents/agent/@agentType=”owner”	Owner of the record. **See also**: Description of element “Agent”.	0..n MAY
ERMS160	Administrator record/agents/agent/@agentType=”administrator”	Administrator of the record. **See also**: Description of element “Agent”.	0..n MAY
ERMS161	Reader record/agents/agent/@agentType=”reader”	Everyone who should be able to read the contents of the record (in the source ERMS system). **See also**: Description of element “Agent”.	0..n MAY
ERMS162	Sender record/agents/agent/@agentType=”sender”	Sender of the record. **See also**: Description of element “Agent”.	0..n MAY
ERMS163	Editor record/agents/agent/@agentType=”editor”	Person(s) who could edit the record (including adding) in the source ERMS system. **See also**: Description of element “Agent”.	0..n MAY
ERMS164	Recipient record/agents/agent/@agentType=”recipient”	Recipient of the record. **See also**: Description of element “Agent”.	0..n

ERMS165	Other record/agents/agent/@agentType=”other”	Other persons/organisations related to the record. **See also**: Description of element “Agent”.	0..n
ERMS166	Classification of agent type other record/agents/agent[@agenttype=”other”]/@otherAgentType	Classification of the type of other related entity to the record.	1..1 MUST
ERMS167	Record level name record/levelName	Name of level in the archival hierarchy.	0..1 MAY
ERMS168	Related record record/relation	Related record and type of relation. **See also**: Description of element “Relation”.	0..n MAY
ERMS169	Additional information record/additionalInformation	Any additional metadata. **See also**: Description of element “Additional information”.	0..1 MAY
ERMS170	Archival history record/archivalHistory	Information on the history of the unit of description that is significant for its authenticity, integrity and interpretation.	0..1 MAY
ERMS171	Each paragraph of archival history record/archvialhistory/historyLine	Each paragraph of text giving the archival history.	1..n MUST
ERMS172	Main signature date record/dates/date/@dateType=”main_signature”	Date of main signature.	0..1 MAY
ERMS173	MainSigner record/agents/agent/@agentTyp	Name of responsible person who signed the record. **See also**: Description of element “Agent”.	0..1 MAY

	e=”main_signatory”		
ERMS174	Main signatory role record/agents/agent[@agentType=”main_signatory]/role	Main signatory role.	0..1 MAY
ERMS175	Other signature date record/dates/date/@dateType=”other_signature”	Date of other signature.	0..n MAY
ERMS176	Other signer record/agents/agent/@agenTtype=”other_signatory”	Other person signing the record. **See also**: Description of element “Agent”.	0..n MAY
ERMS177	Other signer role record/agents/agent[@agentType=”other_signatory”]/role	Other signatory role.	0..1 MAY
ERMS178	Dispatch date record/dates/date/@dateType=”dispatch”	Date of dispatch of the record.	0..1 MAY
ERMS179	Dispatcher record/agents/agent/@agentType=”dispatcher”	Person responsible for dispatching the record. **See also**: Description of element “Agent”.	0..1 MAY
ERMS180	Addressee record/agents/agent/@agentType=”counterpart”	Original addressee of the record. **See also**: Description of element “Agent”.	0..n MAY
ERMS181	Dispatch mode record/dispatchMode	Mode of dispatching of the record.	0.. MAY

ERMS182	eSignatures connected with the record record/eSignatures	All e-signatures with the record can be resent.	0..1 MAY
ERMS183	Each individual eSignature record/eSignatures/eSignature	Each eSignature is described in its own eSignature element. **See also**: Description of elements regarding eSignature in element “Additional information”.	1..n MUST
ERMS184	Access to the record record/access	A textual description of the access to the record.	0..1 MAY
ERMS185	Physical location of the record record/physicalLocations	All the physical or logical placement of the record.	0..1 MAY
ERMS186	Physical location of the record record/physicalLocations/physicalLocation	The physical or logical placement of the record.	1..n MUST
ERMS187	Current location of the record record/physicalLocation/currentLocation	The records current location.	0..1 SHOULD
ERMS188	Home location for the record record/physicalLocation/homeLocation	The place considered to be home for the record.	0..n MAY
ERMS189	Direction record/direction	A record is sometimes given a direction of either being outgoing or incoming as well as other values depending on your system.	0..1 MAY
ERMS190	Type of direction record/direction/@directionDefinition	Classification of the type of direction being described. Follows this vocabulary: “incoming”, “outgoing”, “internal_memo for_follow-up”, “internal_memo_without_follow-up”, “case_draft” and “other”.	1..1 MUST

ERMS191	Other type of direction record/direction[@directionDefinitiontype="other"]/@otherRecordDefinitionType	When the direction definition is set to the value "Other" the otherDirectionDefinitiontype attribute is used to give the type of direction being described.	0..1 SHOULD
ERMS192	Status of the record record/status/@value	The record can have a status following this vocabulary: "ad_acta", "closed", "expedited", "initiated", "in_progress", "obliterated", "on_hold", "open", "prepared" and "received".	0..1 MAY
ERMS193	Running number for the record record/Irunning Number	The record can have a running number in the form of an integer.	0..1 MAY
ERMS194	Restrictions associated with the record record/restriction	There can be restrictions associated with the record. One description per restriction is used. **See also**: Description of "Restriction element".	0..n MAY
ERMS195	IPP description record/IPPInformation	There can be IPP restrictions associated with the record. **See also**: the description of the "IPP information element"	0..1 MAY
ERMS196	Classification record/classification	It is possible to give different classifications to a record. **See also**: Description of element "Classification".	0..1 MAY
ERMS197	Loan record/loan	A loan of the record can be described. Each loan is described in a loan element. **See also**: Description of element "Loan".	0..n MAY

6.15 Metadata for ERMS Aggregation

The following tables contain elements to be used in an ERMS transfer. The aggregation itself can contain aggregations or records.

Note: The following table contains guidelines for most common cases.

Table 23: ERMS use of metadata for Aggregations

ID	Name and Location	Description and usage	Cardinality
ERMS 198	One aggregation aggregations/aggregation	An ERMS document can consist of either records or aggregations which can contain either aggregations or records.	1..n MUST
ERMS 199	Identifier aggregation/@systemIdentifier	An identifier for the aggregation with the type UUID created at the latest at the export of the information.	1..1 MUST
ERMS 200	Definition of type of Aggregation aggregation/@aggregationType	Type of the aggregation. Follows the value list: “Casefile”, “Class”, “Component”, “File”, “Subfile”, “Volume” and “Own aggregation definition”.	1..1 MUST
ERMS 201	Other type of aggregation aggregation[@aggregationType=”own_aggregation_definition”]/@otherAggregationType	When the aggregation type is set to the value “Own aggregation type” the attribute otherAggregationType is used to give the type of aggregation being described.	0..1 SHOULD
ERMS 202	Information classification aggregation/informationClass	The information class for the aggregation.	0..1 SHOULD
ERMS 203	Security class aggregation/securityClass	The security class for the aggregation.	0..1 SHOULD
ERMS 204	Date of creation aggregation/dates/date[@dateType=”created”]	System set date and time showing when the entity was created.	1..1 MUST
ERMS 205	Date of Origination aggregation/dates/date[@dateType=”originated”]	Date and time of origin of a record or other entity which may vary from the creation date of the entity in the system.	0..1 MAY
ERMS 206	Date for first used aggregation/dates/date[@dateType=”first_used”]	System generated date and time indicating when an entity was first used; generally taken as the last time it can be modified or deleted without formally destroying it.	0..1 MAY

ERMS 207	Date for last addition aggregation/dates/date[@dateType=”last_addition”]	System set date and time indicating when the most recent record or child aggregation was added to the parent aggregation.	0..1 MAY
ERMS 208	Class identification aggregation/classification	An ID of the file plan as well as a description of the classification. **See also**: Description of element “Classification”.	0..n MAY
ERMS 209	Title of the aggregation aggregation/title	The identifying name or title of the entity. Can be created manually or by the system.	0..1 SHOULD
ERMS 210	Other titles for the aggregation aggregation/otherTitle	There might be other titles present for the aggregation.	0..n MAY
ERMS 211	Description aggregation/description	A description of the entity. Mandatory if the title is missing.	0..1 MAY Or 1..1 MUST
ERMS 212	Scope notes aggregation/notes/note	An element that provides information about the nature of and activities reflected in the described materials. **See also**: Description of element “Note”.	0..1 MAY
ERMS 213	Date for closing aggregation/dates/date[@dateType=”closed”]	System set date and time indicating when the aggregation was closed.	0..1 MAY
ERMS 214	Date for destruction aggregation/dates/date[@dateType=”destroyed”]	System set date and time indicating when the entity was destroyed.	0..1 MAY
ERMS 215	Maximum levels of aggregations aggregation/maxLevelsOfAggregation	The maximum number in the form of an integer of levels of aggregation allowed below a root aggregation.	0..1 MAY
ERMS 216	Parent aggregation identification	Parent aggregation for a child aggregation.	0..1 MAY

	aggregation/parentAggregationId		
ERMS 217	Hierarchical parent aggregation identification aggregation/hierarchicalParentClassId	The parent class for a hierarchical class.	0..1 MAY
ERMS 218	Entity identification aggregation/objectId	Universally unique identifier for an entity that is generated automatically by the system and stays with the entity forever.	1..1 MUST
ERMS 219	Extra entity identification aggregation/extraId	Any external identifier that is used by an ERMS system or is required in a country.	0..n MAY
ERMS 220	Extra id type aggregation/extraId/@extraIdType	The type of the ID number. Values need to be expressed and considered as documentation and follow the submission as documentation.	1..1 MUST
ERMS 221	Notes aggregation/notes/note	Notes pertaining to the aggregation. **See also**: Description of element “Note”.	0..n MAY
ERMS 222	Subject of the aggregation aggregation/subject	Subject of the aggregation as free text described by the creator or ontology subject related by the archivist.	0..n MAY
ERMS 223	Keywords aggregation/keywords	Keywords describing the content.	0..1 MAY
ERMS 224	Each idividual keyword aggregation/keywords/keyword	Each individual keyword is placed in a “Keyword” element.	1..n MUST
ERMS 225	Geographical locations aggregation/notes/note	List of geographical locations related to the content other than relations as addresses for agents can be placed as a note. **See also**: Description of element “Note”.	0..n MAY
ERMS 226	Finding aid reference for the record aggregation/identifcation	Information about any finding aids that the repository or records creator may have that provide information relating to the context and contents of the unit of description.	0..n MAY

ERMS 227	Classification of identification aggregation/identification/@identificationType	Indicate that the identification given supplies a finding aid reference. Values need to be expressed and considered as documentation and follow the submission as documentation.	1..1 MUST
ERMS 228	Publication aggregation/notes/note	Publications that are about or are based on the use, study, or analysis of the unit of description. **See also**: Description of element “Note”.	0..n MAY
ERMS 229	Description Source aggregation/notes/note	References to publications and other materials used for description can be made in a note. **See also**: Description of element “Note”.	0..n MAY
ERMS 230	Creator aggregation/agents/agent/@agentType=”creator”	An entity primarily responsible for making the content of the resource; an entity primarily responsible for making the resource (examples of a Creator include a person, an organisation, or a service). **See also**: Description of element “Agent”.	0..n MAY
ERMS 231	Owner aggregation/agents/agent/@agentType=”owner”	Person responsible or role. **See also**: Description of element “Agent”.	0..n
ERMS 232	Editor aggregation/agents/agent/@agentType=”editor”	Person(s) who can edit the aggregation (including adding). **See also**: Description of element “Agent”.	0..n
ERMS 233	Administrator aggregation/agents/agent/@agentType=”administrator”	Administrator of the aggregation. **See also**: Description of element “Agent”.	0..n
ERMS 234	Reader aggregation/agents/agent/@agentType=”reader”	Everyone who should be able to read the contents of the aggregation. **See also**: Description of element “Agent”.	0..n
ERMS 235	Other aggregation/agents/agent/@agentType=”other”	Other persons/organisations related to the aggregation. **See also**: Description of element “Agent”.	0..n

ERMS 236	Classification of agent type other aggregation/agents/agent[@agentType="other"]/@otherAgentType	Classification of the type of other related entity to the aggregation.	1..1 MUST
ERMS 237	Moved records aggregation/relations/relation[@relationType="moved"]	Information about records that have been moved to other aggregations. **See also**: Description of element "Relation".	0..n MAY
ERMS 238	Deleted records aggregation/relations/relation[@relationType="deleted"]	Explanation that the record has been deleted by the administrator or has been destroyed due to technical errors.	0..n MAY
ERMS 239	Status of the aggregation aggregation/status/@value	The aggregation can have a status following this vocabulary: "ad_acta", "closed", "expedited", "initiated", "in_progress", "obliterated", "on_hold", "open", "prepared" and "received".	0..1 MAY
ERMS 240	Decisions regarding the aggregation aggregation/action	Decisions about the aggregation is saved as actions. **See also**: Description of element "Action".	0..n MAY
ERMS 241	An action aggregation/action	An element for recording an event like a transformation of the aggregation. **See also:** Description of element "Action".	0..n MAY
ERMS 242	Archival history aggregation/archivalHistory	Information on the history of the unit of description that is significant for its authenticity, integrity and interpretation.	0..1 MAY
ERMS 243	Each paragraph of archival history aggregation/archvialHistory/historyLine	Each paragraph of text giving the archival history.	1..n MUST
ERMS 244	Date recieved aggregation/dates/date[@dateType="received"]	Date and time when the aggregation was received.	0..1 MAY
ERMS 245	Date for classification	Date of classification.	0..1 MAY

	aggregation/dates/date[@dateType="classification"]		
ERMS 246	Start date for ownership aggregation/dates/date[@dateType="ownership_start"]	Date when ownership started.	0..1 MAY
ERMS 247	Physical location of the aggregation aggregation/physicalLocations	All the physical or logical placement of the aggregation.	0..1 MAY
ERMS 248	Physical location of the aggregation aggregation/physicalLocations/physicalLocation	The physical or logical placement of the aggregation.	1..n MUST
ERMS 249	Current location of the aggregation aggregation/physicalLocation/currentLocation	The aggregation's current location.	0..1 SHOULD
ERMS 250	Home location for the aggregation aggregation/physicalLocation/homeLocation	The place considered to be home for the aggregation.	0..n MAY
ERMS 251	Related aggregations aggregation/relation	Related aggregations or records and type of relation. **See also**: Description of element "Relation".	0..n MAY
ERMS 252	Additional information aggregation/additionalInformation	Any additional metadata. **See also**: Description of element "Additional information".	0..1 MAY
ERMS 253	Restrictions associated with the Aggregation aggregation/restriction	There can be restrictions associated with the aggregation. One description per restriction is used. **See also**: Description of "Restriction element".	0..n MAY
ERMS 254	IPP description aggregation/IPPInformation	There can be IPP restrictions associated with the aggregation. **See also**: the description of the "IPP information element".	0..1 MAY

ERMS 255	An action aggregation/action	An element for recording an event like the appraisal of the aggregation. **See also:** Description of element “Action”.	0..n MAY
ERMS 256	Loan aggregation/loan	All information regarding loan of the aggregation. **See also**: Description of element “Loan”.	0..n MAY
ERMS 257	Responsible in-house archivist aggregation/agents/agent[@agentType=”archiver”]	Person responsible for in-house archiving.	0..n MAY
ERMS 258	Date for archiving of the aggregation aggregation/dates/date[@dateType=”archiving”]	Date of in-house archiving.	0..n MAY
ERMS 259	Disposal of the aggregation aggregation/disposal	Description of the disposal of the aggregation. **See also**: Description of element “Disposal”.	0..1 MAY
ERMS 260	Transfer date aggregation/dates/date[@dateType=”transferred”]	Date of transfer to the archive.	0..n MAY
ERMS 261	Deliverer aggregation/Agents/Agent[@agentType=”deliverer”]	Person responsible for the delivery to the archive.	0..n MAY
ERMS 262	Recipient aggregation/Agents/Agent[@agentType=”recipient”]	Person responsible for receipt in the archive.	0..n MAY
ERMS 263	eSignatures connected with the aggregation aggregation/eSignatures	All eSignatures with the aggregation can be present.	0..1 MAY
ERMS 264	Each individual eSignature	Each eSignature is described in its own eSignature element.	1..n MUST

	aggregation/eSignatures/eSignature	**See also**: Description of elements regarding eSignature in element “Additional information”.	
ERMS 265	Dispatch mode aggregation/dispatchMode	Mode of dispatching of the aggregation.	0..1 MAY
ERMS 266	Dispatch date aggregation/dates/date/@dateType=”dispatch”	Date of dispatch of the aggregation.	0..1 MAY
ERMS 267	Dispatcher aggregation/agents/agent/@agentType=”dispatcher”	Person responsible for dispatching the aggregation. **See also**: Description of element “Agent”.	0..1 MAY
ERMS 268	Access to the aggregation aggregation/access	A textual description of the access to the aggregation.	0..1 MAY
ERMS 269	Aggregation level name aggregation/levelName	Name of level in the archival hierarchy.	0..1 MAY

6.16 Value other in value lists

In the value lists for the attributes, there is always a value “other” or “own…” present to accommodate the possibility to use values used in one’s own system. When the value is selected, the use of an attribute with the same name and the prefix “other” is validated with the Schematron rules. The use of the value “other” or “own…” needs to be stated in a transmission and or submission agreement, as well as which values that can be used.

7 Postface

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Project co-funded by the European Commission within the ICT Policy Support Programme Dissemination Level		
P	**Public**	x
C	**Confidential, only for members of the Consortium and the Commission Services**	

REVISION HISTORY AND STATEMENT OF ORIGINALITY

Submitted Revisions History

Revision No.	Date	Authors(s)	Organisation	Description
0.1	22 April 2015	Angela Dappert	DLM	Draft outline.
0.2	28 April 2015	Angela Dappert	DLM	Draft outline slightly updated.
0.3	14 August 2015	Angela Dappert	DLM	Incorporate issues from ERMS meetings.
0.35	16 October 2015	Tarvo Kärberg	NAE	Reorganising, incorporating feedback.
0.4	10 November 2015	Tarvo Kärberg	NAE	Updating the content, incorporating feedback.
0.5	12 November 2015	Andrew Wilson	UPHEC	Updating the content. Adding new information about SIP to AIP transformation.
0.6	16 November 2015	João Cardoso	IST	Updating the content.
0.7	17 November 2015	Levente Szilágyi	NAH	Updating the content. Adding information about metadata tables.
0.71	19 November 2015	Tarvo Kärberg	NAE	Incorporating feedback, cleaning the text, merging the content.
0.8	30 November 2015	Tarvo Kärberg	NAE	Merging the content.
0.9	13 January 2016	Tarvo Kärberg	NAE	Merging the content.
0.91	15 January 2016	Levente Szilágyi	NAH	Updating the content. Adding information about metadata tables.
0.92	19 January 2016	Jože Škofljanec	SNA	Updating the content related to SFSB records.
0.93	21 January 2016	Gregor Zavrsnik	SNA	Updating the content related to geodata.
0.94	22 January 2016	Levente Szilágyi	NAH	Updating the content related to EAD tables.
0.95	26 January 2016	Alex Thirifays	DNA	Quality assurance and proof-reading.
0.96	28 January 2016	Kuldar Aas	NAE	Quality assurance and proof-reading.
0.97	29 January 2016	Andrew Wilson	University of Brighton	Quality assurance and proof-reading.
1.0	29 January 2016	Tarvo Kärberg	NAE	**Final version** (part of D3.3).

1.1	20 July 2016	Tarvo Kärberg	NAE	Incorporating additional feedback from Andrew Wilson and Advisory Board.
1.2	30 September 2016	Tarvo Kärberg	NAE	Incorporating agreements made in the Common Specification work group.
1.3	18 November 2016	Tarvo Kärberg	NAE	The ERMS specification was split in two. This specification contains information about ERMS only from this point forward.
1.4	23 November 2016	Tarvo Kärberg	NAE	Updating appendices II and III.
1.5	05 January 2017	Levente Szilágyi	NAH	Adding MoReq2010 based EAD XML.
1.6	09 January 2017	Levente Szilágyi	NAH	Updating aggregation elements.
1.7	12 January 2017	Tarvo Kärberg	NAE	Finalising the document.
1.8	23 November 2018	Jaime Kaminski	DLM	Quality assurance and proofreading.
1.9	25 November 2018	Karin Bredenberg	NAS	Update according to the new schema for ERMS. Tables not ready. Draft for review, E-ARK4ALL project.
2.0	31 May 2019	Karin Bredenberg	NAS	Update after review.
2.0	31 May 2019	Janet Anderson	DNA	Final proof read.
2.0	31 May 2019	DILCIS Board	DILCIS Board	Release of version 2.0.
2.0	20 January 2020	Jaime Kaminski	Highbury	Quality assurance and proofreading.

Statement of originality:
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