Swiss eCTD v4.0 Implementation Guide

Authors:	Lead: Ralph Maier, Swissmedic Review team Swissmedic
Responsible:	OSS, Swissmedic
Version / Date:	Version 0.1 / 01.07.2020
OID	2.16.840.1.113883.3.989.5.1.5.3.1.1

Change Record

Version	Date	Comments	Author(s)
0.1	01.07.2020	First draft based on EU Module 1 Implementation Guide v1.0 11.10.2018, added Swiss specific Module 1 details.	OSS

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Table of contents

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

1 List of Abbreviations

The following table defines some common terms in this document and specific to eCTD v4.0. This is not a complete listing.

Term	Definition
Applicant	A pharmaceutical company or its agent that is submitting information in support of an application.
Applicant's Information	Regulatory information submitted by an applicant for, or to maintain, a marketing authorisation that falls within the scope of this guidance document.
eCTD Application	A collection of electronic documents compiled by a pharmaceutical company or its agent in compliance with Swiss legislation and guidelines in order to seek a marketing authorisation or any amendments thereof. An eCTD application may comprise a number of Submissions and Submission Units.
Regulatory Activity	A collection of sequences covering the start to the end of a specific business process, e.g. an initial MA application or Type II variation. It is a concept used in some review tools to group together several business-related sequences.
Submission Unit	A single set of information and/or electronic documents supplied at one particular time by the applicant as a part of, or the complete, eCTD Application. In the context of eCTD, this is equivalent to a sequence.
Document	The *document* element is used for the purposes of transmitting the information about each document related to an application. Documents (e.g., PDF files) are prepared by the Applicant for review by the Regulatory Authority.
Payload	The payload is the part of transmitted data that is the actual intended message. The payload excludes any headers or metadata sent solely to facilitate payload delivery.
***contextOfUse* (CoU)**	The Context of Use defines the relationship between the table of contents heading (i.e., ***contextOfUse.code***) and the referenced document to be associated with that heading. The Context of Use is relevant to the sequence that it was submitted, which may include one or more ***submissions*** referenced in the ***submissionUnit***.
Object Identifier (OID)	An OID is a sequence of numbers that uniquely identify an object and represent a hierarchically-assigned namespace. OIDs are formally defined using the International Telecommunications Union ASN.1 standard[1]. OIDs are represented as follows: • String of digits separated by periods: 2.16.840.1.113883

[1] International Telecommunication Union, x680: Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

	• list of named branches: {joint-iso-itu-t(2) country(16) us(840) organisation(1) hl7(113883)} The current OIDs for the ICH domain include: • ich-estri – 2.16.840.1.113883.3.989 • ich-estri-msg-stds – 2.16.840.1.113883.3.989.2 • ich-estri-msg-stds-m8-ectd – 2.16.840.1.113883.3.989.2.2 • ich-estri-msg-stds-m8-ectd-code-lists – 2.16.840.1.113883.3.989.2.2.1 • ich-estri-msg-stds-m8-ectd-code-list-valueset-version – 2.16.840.1.113883.3.989.2.2.1.x.y
Universal Unique Identifier (UUID)	A UUID is hexadecimal text in the form of 8-4-4-4-12 characters, i.e., text value includes 32 characters and 4 hyphens.[2] UUIDs are formally defined by ISO/IEC 11578:1996 and ITU-T Rec X.667 | ISO/IEC 9834-8:2005. UUIDs are represented as follows: • String of digits separated by hyphens: 25635f23-a3a4-4ce0-9994-99c5f074960f In ICH eCTD v4.0, UUIDs will be used for any identifier root attribute value. Each required element with an identifier (e.g., ***id*** element) will indicate when a UUID should be provided.

73
74

[2] International Telecommunication Union, x667: Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Generation and registration of Universally Unique Identifiers (UUIDs) and their use as ASN.1 object identifier components

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

2 Notice to Reader

3 Instructions to Reader

This is a technical document that provides instructions on how to implement the eCTD v4.0 specification for Swiss purposes. The following content will be provided in a consistent manner within the document and/or the reader may be prompted by visual cues about the context or referenced information being presented in the document.

Please be aware that all XML samples have been created manually and may not be entirely correct or can be used by any software without careful control. For the final version of the Implementation Guide, it is expected that all XML snippets can be built by software.

Note: *All UUIDs and OIDs used in the XML samples and snippets are only for illustrational purposes, to demonstrate how the respective XML section will look. They cannot be used for testing. They will be replaced by real values once these are available.*

The following table provides visual cues that are used in the document.

Table 1: Legend of Symbols used in Document

Icon	Description
	Technical descriptions
	Items to be careful to follow
	Additional Instructions
	References to other documents
	Not being used for Swissmedic Implementation Guide

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

4 Purpose and Scope

This document serves as the Implementation Guide (IG) and a technical specification for the regional Swiss Module 1 of the Electronic Common Technical Document (eCTD) v4.0 using the HL7 Version 3 Regulated Product Submission (RPS) Release 2 Normative for human medicinal products. Applicable information indicated in the ICH eCTD IG[3] to be regionally available is incorporated as necessary to assist in the system development requirements for publishing or displaying eCTD v4.0 compliant messages for the recipients of the information.

This document has been prepared following the EU Implementation Guide with the purpose of a harmonised technical implementation for Switzerland. It was adapted with as few deviations as possible.

Note to Implementers: This Swiss eCTD v4.0 IG will need to be used in conjunction with the ICH eCTD IG, as the eCTD v4.0 message will be incomplete without understanding of its contents.

The RPS standard defines the message for exchanging regulatory information electronically between Competent Authorities and the Pharmaceutical Industry as well as between Competent Authorities in general, and needs to be detailed by implementation guides. This document only comprises the Swiss Module 1 part of the eCTD XML message including the Regional Administrative and CH-specific Product Information. The focus is to outline the essential components of the message which are required for Swiss Module 1 in addition to or which are differently from the common CTD Modules 2-5.
The content of eCTD v4.0 Modules 2-5, being shared across all regions represented in the International Council of Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH), is not included in this IG, although some principles need to be repeated in the document to assure a better understanding. This document therefore should be read together with the ICH eCTD IG to prepare a valid eCTD Submission Unit.
In addition, relevant rules and examples are provided to enable transition from eCTD v3.2.2 to v4.0.

5 Change Control Rules

Change requests need to be addressed to the relevant organisation which is responsible for the part, the standard or the implementation, based on:
eCTD v4.0 is based on the HL7 Version 3 Regulated Product Submission (RPS) Message Standard Release 2 Normative, which was developed in the external Standards Development Organisation (SDO), Health Level Seven International (HL7) and various stakeholders, which includes members of ICH M8. Changes of the RPS Standard need to be addressed according to rules outlined at HL7.
Changes to the ICH eCTD v4.0 IG and ICH Controlled Vocabularies remain the responsibility of the ICH M8 Expert Working Group & Implementation Working Group (ICH M8 EWG & IWG) and will follow the established eCTD change control process.

[3] The ICH IG is accessible at www.estri.org

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

6 Essential Components of the eCTD in Consideration of the Specific Regional Requirements

The XML message provides the ability to describe the contents of the regulatory exchange and all information needed to process the exchange between the parties by using the following essential components:

- Object Identifier (OIDs) and Universal Unique Identifier (UUIDs) (further information provided in the ICH eCTD IG, Section 4.5)
- Data Types (further information provided in the ICH eCTD IG, Section 4.6)
- Files and Folders (see Section 7 of this document, further information provided in the ICH eCTD IG, Section 4.1 and Section 11 [Appendix1])
- Controlled Vocabulary (see Section 8 of this document, further information provided in the ICH eCTD IG, Section 4.2 and Section 6)
- ICH eCTD v4.0 XML Schema and XML Message (see Section 9, further information provided in the ICH eCTD IG, Section 4.3 and Section 7)
- CH regional specific requirements for elements (see Section 10 of this document)
- Validation Rules (see Section 12 of this document, further information provided in the ICH eCTD IG, Section 12 [Appendix2])
- Forward Compatibility (see Section 13 of this document, further information provided in the ICH eCTD IG, Section 10 and Section 13 [Appendix 3])

The principles of creation and use of these components will be defined by

- ICH eCTD IG across regions (separate document[4])
- Swiss Module1 IG regionally (this document)

Therefore, in order to compose a complete eCTD v4.0 compliant message, the user additionally needs to refer to the requisite documentation published by ICH[5].

6.1 Elements for regional use covered by Swiss Module 1 Implementation Guide

For Swiss Module 1, only a limited set of the following elements are required. CH-specific business rules apply:

- ***submission***
  - ***subject5.submissionGroup***

For Swiss Module 1 the following elements are not required in addition to those which are excluded by ICH already:

- ***application***
  - ***holder.applicant***
  - ***subject.reviewProcedure***
  - ***reference.applicationReference***
  - ***informationRecipient.territorialAuthority***

[4] The ICH IG is accessible at www.estri.org
[5] A complete package for implementation is provided at www.estri.org.

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

- ***submission***
  - ***subject2.review***
    - ***subject1.manufacturedProduct***
    - ***holder.applicant***
    - ***author.territorialAuthority***
    - ***subject2.productCategory***
    - ***subject3.regulatoryStatus***
  - ***subject3.mode***
  - ***subject4.regulatoryReviewTime***
- ***componentOf2.categoryEvent***
  - ***component.categoryEvent***

Note to Implementers: *If the above listed elements and associated elements and attributes which are not required are included in the XML message, they will be ignored by the receiver.*

6.2 Regional Business Processes Covered by Swiss eCTD v4.0 Implementation Guide

This document will address the following regional business processes:

- **Dossier Management/Submission Life Cycle** – includes rules for Submission Unit, Submission and Applications (see Section 11.1 of this document).

7 Submission Contents, Folder and File Structure

Although the eCTD v4.0 specification does not require a specific folder and file structuring or naming convention, the following rules may provide a best practice recommendation on practical aspects on storing the files locally.

7.1 Content in Swiss Module 1

The ICH Common Technical Document ("CTD") specifies that Module 1 should contain region-specific administrative and product information.
Please observe the formal requirements when submitting applications. The requirements can be found on Swissmedic's website under "Services & Lists - Formal requirements".

7.2 Submission Unit Content in eCTD v4.0 Messages

The Submission Unit consists of a *First Level Folder* (see section 7.4), the eCTD v4.0 XML Message for that individual Submission Unit, named "*submissionunit.xml*", the text file providing the checksum (sha256) of the submissionunit.xml file, named "*sha256.txt*", the folder m1 (see section 7.6) and, as appropriate, folders m2 to m5.

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Notes:

- The sender should not send the schema files – i.e., the util folder of previous versions of the eCTD is no longer required. The XML should reference the interaction schema being used.
- All files included in these folders should be accounted for in the XML message.
- Files previously sent do not need to be sent again.
- It is possible to reference documents across applications (equivalent to the term dossier).

It is not the intent of the eCTDv4.0 Implementation Guide to introduce content related business rules which may be used for business validation after structured authoring of content has been introduced and may offer additional validation rules.

7.3 Naming Conventions

The naming conventions for files and folders for Swiss Module 1 will be replaced by keywords using controlled vocabularies (see Section 8.3) at the level of ***submissionUnit.component.contextOfUse***, which is also required for selective display of information.

7.3.1 Allowable Characters

There are no additional requirements other than those outlined in the ICH eCTD IG.

7.3.2 Length of Names and the Path

There are no additional requirements other than those outlined in the ICH eCTD IG.

7.4 First Level Folder Naming Convention

In general, to identify the content with a folder structure, the first level folder must be named with the sequence number of the submission. This folder contains all other folders and the content. Regardless of the naming convention of the root folder, the eCTD tool should independently manage the storing of the sequences at the correct location.

7.5 Pathname Conventions and Best Practices

There are no additional requirements other than those outlined in the ICH eCTD IG.

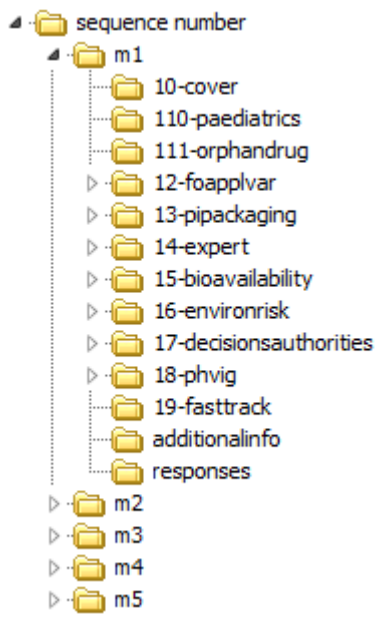
7.6 Folder Hierarchy

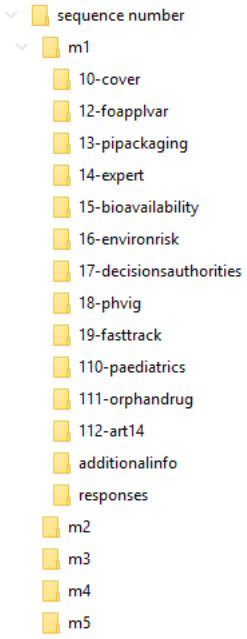
Due to the principles to which eCTD v4.0 messages will be handled, the hierarchy of folders in m1 will be skipped. (Figure 1):

Figure 1: Folder Hierarchy of Module 1 Screenshot

Message in eCTD v3.2.2 format Message in eCTD v4.0 format

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12





7.7 File Formats

In general, for messages to Swissmedic, the ICH M2 recommendations on file format[6] and the specification for submission formats[7] of ICH M8 need to be considered. In addition, in the Swiss Module 1, files and formats are acceptable as described in table 2.

Table 2: Acceptable file formats for Module 1

Document	File Format	Remark
Cover letter	PDF*	PDF preferably generated from electronic source. Scanned document with the original signature is mandatory. Note that this does not apply to portal submissions.
Administrative forms	PDF*	PDF preferably generated from electronic source. Scanned document with the original signature is mandatory. Note that this does not apply to portal submissions.
Product information text Draft packaging material or mock-ups	PDF* PDF*	Include working documents as word file (.doc or .docx, please refer to the guidance document) in addition to the PDF for the product information, for ease of review.**
Other	PDF*	PDF preferably generated from electronic source.

* Additional details on PDF and PDF/A formats can be found in ICH M2 recommendations.

[6] http://estri.org/recommendations/index.htm
[7] http://estri.org/new-eCTD/index.htm

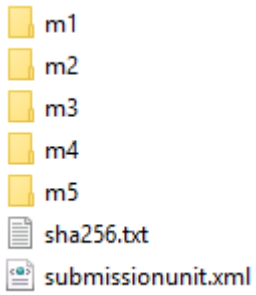
** For the correct naming of the files please refer to the latest Swissmedic Guidance for Industry on Providing Regulatory Information in eCTD Format. This document is supposed to be updated later concerning eCTD v4.0.

In addition, the PDF files should follow the general ICH requirements of Modules 2 to 5 regarding size limitations, security settings/password protection etc.
Other file formats such as .doc or .docx may be required in addition to the eCTD as Working Documents. These files should not be added as leaf elements (documents) within the eCTD structure. They should be provided in a separate folder called “<eCTD sequence>-workingdocuments” (e.g. 0000-workingdocuments) on the CD/DVD containing the eCTD or should be uploaded separately on the Swissmedic eGov Portal. Please refer also to the Swissmedic Guidance for Industry for Industry or the available guidance documents for the use of the Swissmedic eGov Portal on the handling of these documents.

7.8 Checksums

The checksum of the submissionunit.xml needs to be provided as a separate text file, named sha256.txt and will be located in the sequence number folder:

Figure 2: Submission Unit Folder Structure



There is no need to repeat the value of the checksum in the cover letter. The value will be checked against the submissionunit.xml file submitted. In case the value is not matching, the message will be rejected.

8 Controlled Vocabularies

The information in the following sub-sections will outline the controlled vocabulary used in composing an eCTD v4.0 message. There are several different authoritative sources for the controlled vocabularies, and as such they are categorised below by the organisation that controls the content. The ICH eCTD v4.0 specific terminologies, i.e. the controlled vocabulary determined by ICH, are stated in the ICH Implementation Guide.

Swissmedic has its own organisation root OID registered on the HL7 registry:

{joint-iso-itu-t(2) country(16) us(840) organisation(1) hl7(113883) externalUseRoots(3) ich-estri(989) regional-specialised(5) sub-reg(1) smc(5)} or being read as:

2.16.840.1.113883.3.989.5.1.5 (optional child OIDs to be added),

which is extended to assign a specified OID for dossier management ("3"), where the Swiss M1 IG ("1") is being part of and which relates to its first final version ("1") for implementation use:

2.16.840.1.113883.3.989.5.1.5.3.1.1 (Swiss M1 IG v1.0)

A different OID assigned to Swissmedic is valid for controlled vocabularies[8]. The relevant controlled vocabularies are provided in the Implementation Package as Excel sheets:

2.16.840.1.113883.3.989.5.1.5.3.1.4.1 -> Tabelle Submission Unit Type
2.16.840.1.113883.3.989.5.1.5.3.1.4.2 -> Tabelle Submission Type
2.16.840.1.113883.3.989.5.1.5.3.1.4.3 -> Tabelle Context of Use

Notes to Implementers:

- *The controlled vocabulary required enables system to system communications and is not always the ideal way to display concepts in a system graphical user interface (GUI). Be cautious not to apply the technical codes in the GUI, instead use the business-friendly terms that are specified by Competent Authorities.*
- *For implementation, the controlled vocabulary will be provided using on OID assigned specifically. All regionally required controlled terms are available as Excel files in the package.*

8.1 Keywords and Controlled Vocabularies for Swiss Purpose

Keywords need to be used to support a reader friendly presentation of content within the same context of use, either by sender defined ***keywordDefinition*** or using a controlled vocabulary, i.e. for document type, language, country. Depending on the product, additional sender defined keywords can be used to specify the pharmaceutical form or strength for which a product information text is dedicated. These sender defined keywords should be used for Module 3 purpose at the same time. However, dedicated rules cannot be stated here as they will depend from individual products or sender specific rules to be applied across their product portfolio. It is not foreseen to re-submit ***keywordDefinition*** values in each sequence. However, sender defined keywords can be modified but will executed then for all applications making use of them (see Section 10.27).
The controlled vocabularies specified for the Swiss Module 1 part of the eCTD v4.0 message are described below in regard to terminology and location for obtaining detailed information. Currently no versioning is foreseen for terms to be used for eCTD v4.0. A new version of the CV set will have its own OID. This will guarantee that the correct version of the term IDs can be identified. Updates should not be executed automatically. However, the assumption is made of always displaying the most recent version of a term of which the ID of the code system is inserted into the XML file. In case, the code system ID is provided correctly, the software can download / integrate / have to look-up what the current display value will be. The display value will then always be the most recent expression.

Note to Implementers: *For convenience, the displayName values of several codes are provided in the XML snippets. However, the display name is not required for processing of a submissionunit.xml file. Instead, any*

[8] Controlled vocabularies are lists of terms that refer to attributes of the medicinal and the pharmaceutical product e.g. dosage form, route of administration, unit of measurement.

diyplayName value will be ignored as it should be retrieved from the respective codeSystem as described in the section above.

Table 3: Controlled Vocabularies for CH purpose

Referenced Controlled Term List	List Name	Purpose	Source
Context of Use Codes	**CH eCTD Context of Use**	Specifies the code set to represent the headings found in the CTD structure that are specified by regional authorities (specifically Module 1). Examples of enhancement features and the reuse of data are in the context of use which will allow one piece of data to be used across many applications, avoiding the need for duplication of data elements.	2.16.840.1.113883.3.989.5.1.5.3.1.4.3
Submission Codes	**Application Submission Type**	Type of regulatory activity constituted by one or several Submission Units and referring to at least one application.	2.16.840.1.113883.3.989.5.1.5.3.1.4.2

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Submission Unit Codes	**Submission Unit Type**	Specifies the type of Submission Unit	2.16.840.1.113883.3.989.5.1.5.3.1.4.1

8.2 Controlled Vocabulary specified by HL7

The controlled vocabularies specified by Health Level 7 (HL7) will apply for Swiss Module 1 in the same way as for Modules 2-5, see ICH eCTD IG for details.

8.3 Controlled Vocabulary specified by ISO

The controlled vocabulary specified by other organisations (i.e. not managed by ICH, Region or HL7) are provided below, denoting the responsible organisation, a brief description of the terminology and location for obtaining detailed information.

Not all of the controlled vocabularies listed below and the corresponding XML elements are currently used at Swissmedic. If they are used in the XML message, they are ignored. Chapter is retained in Swiss Module 1 IG for reasons of traceability.

- **International Organisation for Standardization (ISO) - Two-Letter Language Code**: This is a two-letter code that is specified for the language as specified in the ISO 639.1 standard. This vocabulary is used to define the ***text@language*** attribute.
- **ISO Country Code – Two-letter Country Code:** This is the country code that is specified in the ISO 3166-1 standard. For Swiss Module 1 purposes a constrained list will be provided (see eCTD Guidance for Industry).

8.4 Maintenance of Controlled Vocabularies

International vocabulary harmonisation for eCTD v4.0 is out of scope for the initial release of eCTD v4.0 and implementers may use existing vocabularies that are unique to their message exchange requirements between parties.
Maintenance of Controlled Vocabularies from outside Swissmedic will be handled by the M2 Working Group.

9 eCTD v4.0 XML Schema and Message

There are no principles deviating from the ICH Implementation Guide for creating the Swiss part of the XML message. Especially in regard to the header of the message the same elements/attributes apply as outlined in the ICH eCTD IG. In addition, the conceptual model is identical to what is described in the ICH IG.
Nevertheless, additional regional specific requirements need to be considered for other elements/attributes as outlined below.

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Note to Implementers: The ***value*** elements should be provided in the XML alongside the ***codeSystem*** and ***code***. However, the display name provided by the ***value*** element will not be validated and should not be displayed by tools. The ***codeSystem*** and ***code*** values will be validated and the associated name value from the Code System itself should be displayed in tools instead.

All information in this section is organised in order to enable the eCTD v4.0 XML components to appear within the schema. Elements/attributes that are not required in Switzerland are indicated as such in table 4, below.

Note to Implementers: *Elements, associated elements and attributes that are not required in Switzerland but are included in the XML message (payload) will be ignored by the receiver. Required and Swissmedic specific elements are highlighted in this document.*
Also note that examples below might show XML elements which are not needed by Swissmedic. The examples were taken from EMA's Implementation Guide with as little deviations as possible and were adapted to Swissmedic's needs. Refer to Section 10 for relevant XML elements.

9.1 Example for the header as to be used in Switzerland

```
<PORP_IN000001UV ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:hl7-org:v3
PORP_IN000001UV.xsd">
  <id/>
  <creationTime/>
  <interactionId/>
  <processingCode/>
  <processingModeCode/>
  <acceptAckCode/>
  <receiver>
    <device classCode="DEV" determinerCode="INSTANCE">
      <id>
        <item root="2.16.840.1.113883.3.989.2.2.1.11.1" identifierName="ICH eCTD v4.0 IG v1.3"/>
        <item root="2.16.840.1.113883.3.989.5.1.5.3.1.1" identifierName="Swiss M1 IG v1.0"/>
      </id>
    </device>
  </receiver>
  <sender>
    <device classCode="DEV" determinerCode="INSTANCE">
      <id/>
    </device>
  </sender>
```

9.2 Structure of the eCTD v4.0 payload message adapted to Swiss purposes

The following tables provide the structure of the payload message and indicate the relevant section for detailed explanations.

391

Table 4: XML Structure

XML Structure
The eCTD v4.0 begins at the ***controlActProcess*** of the payload XML message related to Module 1 content.
<controlActProcess classCode="ACTN" moodCode="EVN"> <subject typeCode="SUBJ">
The ***submissionUnit*** element contains the following elements and their attributes: • ***component.contextOfUse*** ○ ***primaryInformationRecipient.TerritorialAuthority (not being used by Swissmedic)*** ○ ***replacementOf.relatedContextOfUse*** ○ ***derivedFrom.documentReference*** ○ ***subjectOf.submissionReference*** ○ ***referencedBy.keyword***

```
<submissionUnit>
    <id/>
    <code/ >
    <title/ >
    <statusCode/ >
    <component>
        <priorityNumber value=""/>
        <contextOfUse>
            <id/ >
            <code/ >
            <statusCode/>
            <primaryInformationRecipient>
                <territorialAuthority>
                    <governingAuthority>
                        <id/ >
                        <name/ >
                    </governingAuthority>
                </territorialAuthority>
            </primaryInformationRecipient>
```

submissionUnit (Section 10.1) as a supplement to the ICH eCTD IG

priorityNumber (Section 10.2) as a supplement to the ICH eCTD IG

contextOfUse (Section 10.3) as a supplement to the ICH eCTD IG

primaryInformationRecipient.territorialAuthority (Section 10.4) Not being used by Swissmedic.

```
            <replacementOf  typeCode="RPLC">
                <relatedContextOfUse>
                    <id/>
                </relatedContextOfUse>
            </replacementOf>
            <derivedFrom>
                <documentReference>
                    <id/>
                </documentReference>
            </derivedFrom>
            <subjectOf  negationInd="">
                <submissionReference>
                    <id>
                        <item/>
                    </id>
                </submissionReference>
```

replacementOf.relatedContextOfUse (Section 10.5) as a supplement to the ICH eCTD IG

derivedFrom.documentReference (Section 10.6) as a supplement to the ICH eCTD IG

submissionReference (Section 10.7) specific for Swiss Module 1 IG

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

XML Structure

```
            </subjectOf>
            <referencedBy typeCode="REFR">
                <keyword>
                    <code/>
                </keyword>
            </referencedBy>
        </contextOfUse>
    </component>
```

keyword (Section 10.8)
as a supplement to the ICH eCTD IG and specific for Swiss Module 1 IG

This section of the XML relates to specifying the ***Submission*** element. The submission section contains the following elements and their attributes:

- ***sequenceNumber*** (included as an element of the relationship between ***submissionUnit*** and ***Submission***)
- ***callBackContact.contactParty (not being used by Swissmedic)***
- ***subject1.regulatoryStatus*** (excluded***) (not being used by Swissmedic)***
- ***subject2.review***
  - ***subject1.manufacturedProduct (not being used by Swissmedic)***
  - ***holder.applicant (not being used by Swissmedic)***
  - ***author.territorialAuthority (not being used by Swissmedic)***
  - ***subject2.productCategory (not being used by Swissmedic)***
  - ***subject3.RegulatoryStatus*** (excluded from applicant's message)***(not being used by Swissmedic)***
- ***subject3.mode (not being used by Swissmedic)***
- ***subject4.regulatoryReviewTime*** (ecxluded) ***(not being used by Swissmedic)***
- ***subject5.submissionGroup***

```
    <componentOf1>
        <sequenceNumber/ >
        <submission>
            <id/ >
            <code/ >
            <callBackContact>
                <contactParty>
                    <statusCode/ >
                    <contactPerson>
                        <name/ >
                        <asAgent>
                            <representedOrganization>
                                <id/ >
                                <name/>
                            </representedOrganization>
                        </asAgent>
                    </contactPerson>
                </contactParty>
            </callBackContact>
            <subject1>
                <regulatoryStatus>
                    <code>/<code>
                </regulatoryStatus>
            </subject1>
            <subject2>
                <review>
                    <id/>
                    <statusCode/>
```

sequenceNumber.submission (Section 10.9)

submission (Section 10.10)
specific for Swiss Module 1

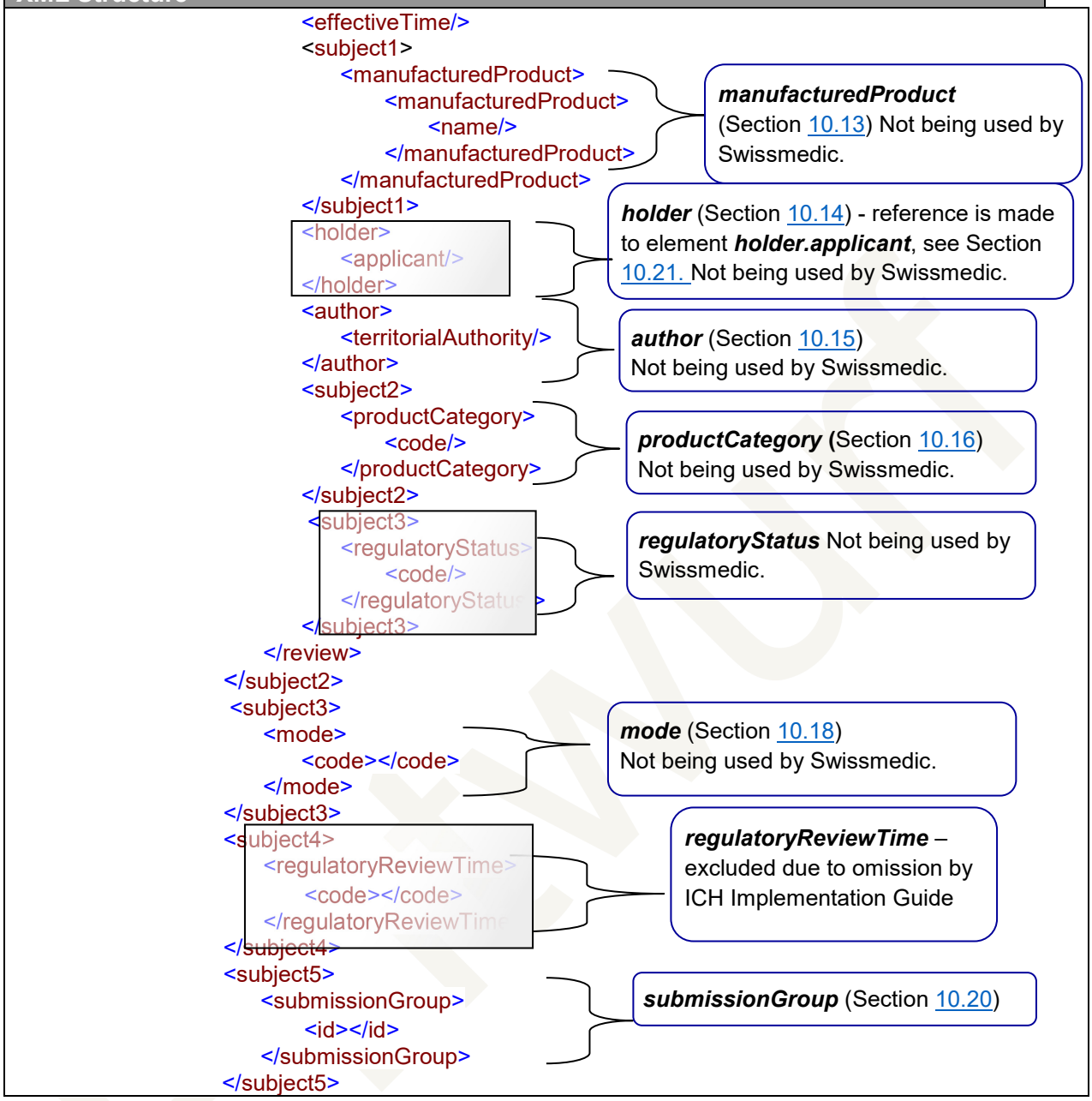
callBackContact (Section 10.11)
Not being used by Swissmedic.

regulatoryStatus
excluded due to omission by ICH Implementation Guide.

review (Section 10.12)
Not being used by Swissmedic.

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

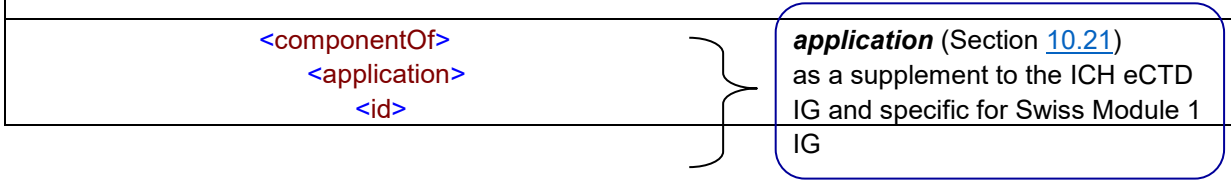
XML Structure



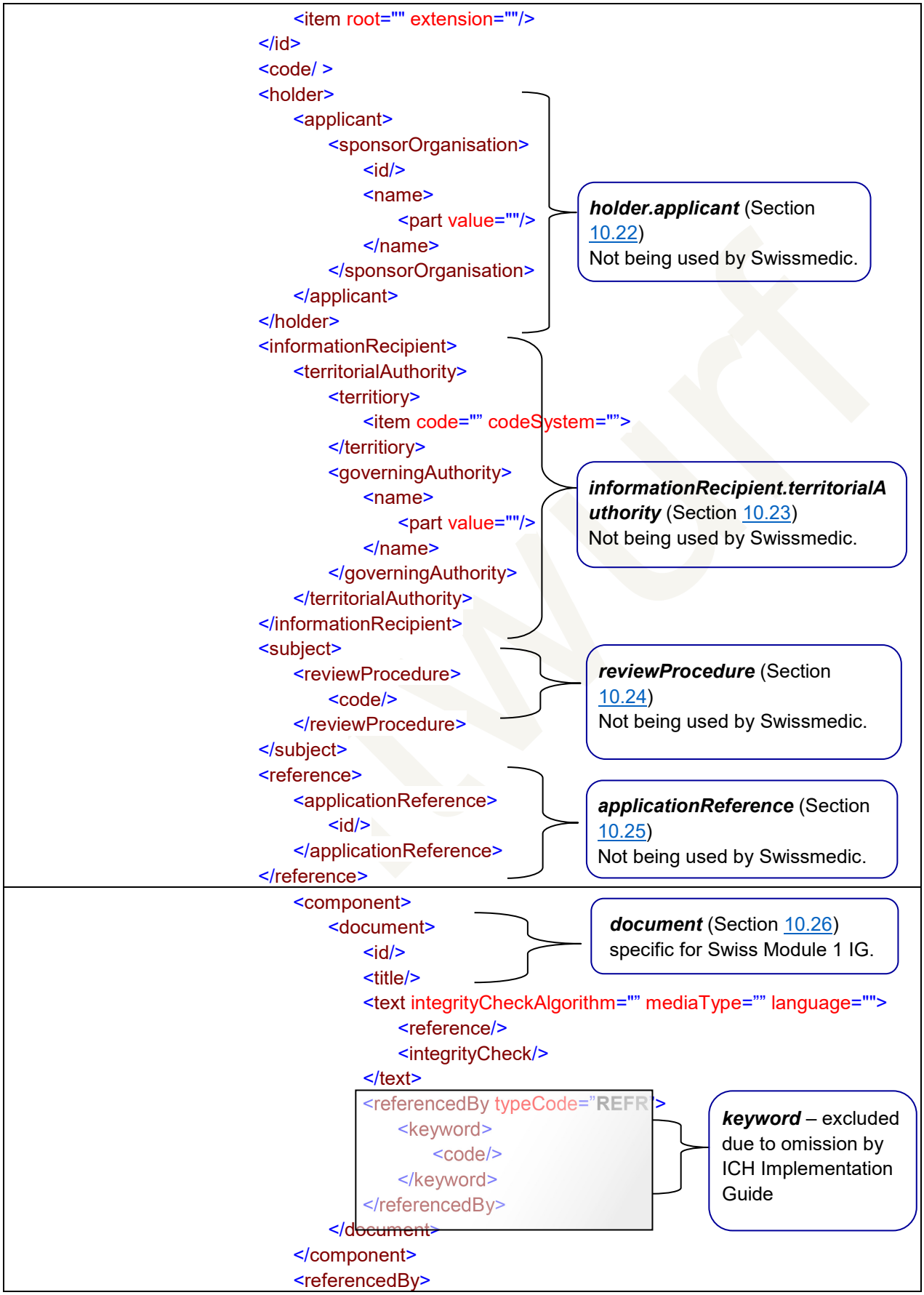
392

This section of the XML relates to the ***application*** element. The application section contains the following elements and their attributes:

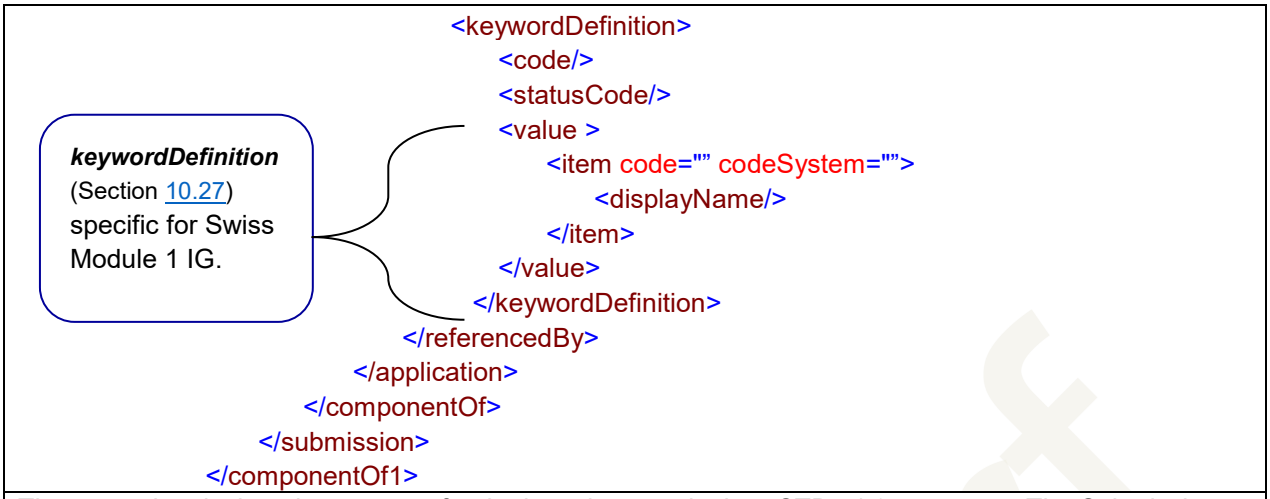
- ***holder.applicant (not being used by Swissmedic)***
- ***informationRecipient.territorialAuthority (not being used by Swissmedic)***
- ***subject.reviewProcedure (not being used by Swissmedic)***
- ***reference.applicationReference (not being used by Swissmedic)***
- ***component.document***
- ***referencedBy.keywordDefinition*** (excluded)



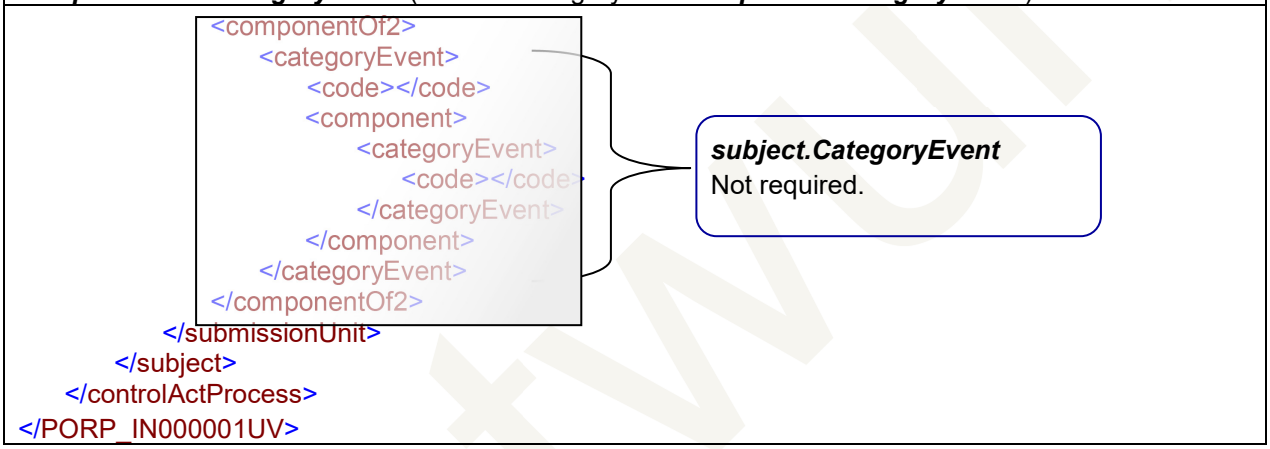
Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12



Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12



These are the closing element tags for the key elements in the eCTD v4.0 message. The Submission Unit's category ***Event*** is found after the closing tag for the submission, the ***componentOf2.CategoryEvent*** (and sub category with ***component.CategoryEvent***).



10 CH Regional Specific Requirements for Elements

10.1 Submission Unit

The Submission Unit is a collection of documents provided to the Regulatory Authority. A Submission Unit always relates to a regulatory activity specified by the submission that is related to a specified application.
Only one Submission Unit can be sent at a time related to one regulatory activity and application.
The Submission Unit may be in response to one or more lists of questions from a Regulatory Authority, with respect to the specified application and Submission Unit.
Whenever a Submission Unit needs to be withdrawn by the applicant, a new message needs to be sent providing the new status code "suspended" of that previously submitted unit. In this case, content references are not required as the status code of document elements will not change, and also CoU elements are not affected. In consequence, the documents will no longer be displayed for the application and Submission Unit that was withdrawn, but they can still be used and will be displayed when referenced by other applications.

10.1.1 Location in XML

The ***submissionUnit*** element in the XML message is in the following location:

- ***controlActProcess*** >> ***subject*** >> ***submissionUnit***

Refer to Table 4: XML Structure.

10.1.2 XML details

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.1.2.1 XML Elements

Tables with a complete set of XML elements and attributes required for the ***SubmissionUnit*** element are provided in the ICH eCTD IG and will not be repeated in this document. No additional requirements apply for Swiss Module 1.

10.1.2.2 XML Sample: Submission Unit

The following is an example of the XML for the ***submissionUnit*** element.

```
<subject typeCode="SUBJ">
    <submissionUnit>
      <id root="c503dce7-d628-42c1-861a-ab738afe739d"/>
        <code code="120001" codeSystem="2.16.840.1.113883.3.989.5.1.5.3.1.4.1"/>
          <!-- Initial submission to start a regulatory activity -->
           <title value="initial"/>
          <statusCode code="active"/>
          <!--[Additional information may appear after the addition of the statusCode (if one exists), otherwise this will
          come after the title or code elements. For example, depending on the type of Submission Unit the additional
          elements may be available to select from the Submission Unit component or componentOf1 elements.-->
      <componentOf1>
          <sequenceNumber value="1"/>
          <submission>
            <!--Additional information will follow for the submission elements. -->
              <componentOf>
                <application>
                <!-- Additional information appears for the application element. -->
                 </application>
              </componentOf>
          </submission>
      </componentOf1>
    </submissionUnit>
</subject>
```

Note: If a status code is provided, a submissionUnit.Code must be provided as well. The status code values are either 'active' or 'suspended'.

10.2 Priority Number

There are no additional requirements other than those outlined in the ICH eCTD IG.

*Note: The life cycle will be executed by inserting a new **contextOfUse** element including the respective combination of keywords and by assigning the appropriate priority number. All life cycle considerations outlined in the ICH eCTD IG will apply to Swiss Module 1 in the same manner.*

10.3 Context of Use

The Context of Use (CoU) provides a link between the table of contents heading of the CTD and the referenced document that is associated to that heading including a label for a short instructive information on the document referenced (document label). There are no additional technical requirements other than those outlined in the ICH eCTD IG. In the sections below, the examples will be provided for Swiss Module 1.

*Note: The life cycle will be executed by inserting a new **contextOfUse** element including the respective combination of keywords and by assigning the appropriate priority number. All life cycle considerations outlined in the ICH eCTD IG will apply to Swiss Module 1 in the same manner.*

10.3.1 Location in XML

The ***contextOfUse*** element in the XML message is in the following location:

- ***controlActProcess>> subject>> submissionUnit>>component>> contextOfUse***

Refer to Table 3: XML Structure for the XML representation.

10.3.2 XML Details

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.3.3 Terminology

The Context of Use codes will be provided by CH-specific controlled vocabularies (see Section 8.1).
The desired status codes will be used in line with ICH eCTD IG definitions.

10.4 Territorial Authority (as primary information recipient related to contextofUse)

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.5 Related Context of Use (Context of Use Life Cycle)

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.6 Document Reference

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.7 Submission Reference

The Submission Reference is designed to permit the sender to specify that a ***contextOfUse element*** that does not apply to that submission (regulatory activity) will not be displayed. The ***submissionReference*** element indicates the previously started regulatory activity to which the ***contextOfUse*** element must not be assigned. In case a regulatory activity concerns several strengths of a medicinal product, but one of the strengths is not authorised, then the id element

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

should point to the submission identifier to not present the content in the context of the indicated regulatory activity.
For example: The change of a manufacturer for one of the excipients need to be addressed, but for two of the five strengths covered by the dossier this excipient is not used. The change of the manufacturer is only relevant for three strengths and the manufacturer details can be hidden for those two forms not concerned.

10.7.1 Location in XML

The ***submissionReference*** element follows the ***subjectOf*** element next to ***contextOfUse*** element:

- ***controlActProcess>> subject>> submissionUnit>>component>> contextOfUse>>subjectOf>>submissionReference***

Refer to Table 3: XML Structure for the XML representation.

10.7.2 XML details

XML Elements

The following tables provide a complete set of XML elements and attributes required for the ***SubmissionReference*** element, and any special instructions.

*The **classCode** is fixed to "OBS" and **moodCode** is fixed to "EVN". These values are not required in the XML message.*

SubmissionReference.id

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Id		[1..1]		This is the container element of the following elements and attributes by which it uniquely identifies the application.
Id.item		[1..*]		This is a container element for the ***SubmissionReference***.
	root	[1..1]	Valid OID or UUID	This is the root attribute that provides the global unique identifier for the ***SubmissionReference*** element.
Conformance	The ***id.item@root*** is a required element			
Business Rules	More than one ***item*** element may be provided. The submissionGroup element contains a negationIndication which will exclude a ***contextOfUse element*** from displaying for the indicated submission.			

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***id.item@identifierName*** • ***id.item@scope*** • ***id.item@reliability*** • ***id.item@displayable*** • ***id@validTimeLow*** • ***id@validTimeHigh*** • ***id@controlInformationRoot*** • ***id@controlInformationExtension*** • ***id@nullFlavor*** • ***id@flavorId*** • ***id@updateMode***			

XMLSample: Submission Reference

The following is an example of the XML for the ***SubmissionReference*** element.

```
<subjectOf negationInd="true">
    <submissionReference>
    <id>
        <item root="76ac931c-9cc6-4cc8-bd94-0222e50a6adb"/>
        <item root="34849ee7-a26b-4435-b269-43046a73e462"/>
    </id>
    </submissionReference>
</subjectOf>
```

See XML Colour Legend for colour usage.

10.7.3 Terminology

There is no further terminology foreseen.

10.8 Keyword

The ***keyword*** element is used for the purpose of transmitting additional information about a ***contextOfUse*** element.
The ***keyword*** is either defined by an external controlled vocabulary, e.g. Document Type Code, Language Code or Country Code, or it may be defined within the message as ***keywordDefinition***.

Note: The life cycle will be executed by inserting a new contextOfUse element including the respective combination of keywords and by assigning the appropriate priority number. All life cycle considerations outlined in the ICH eCTD IG will apply to Swiss Module 1 in the same manner.

10.8.1 Location in XML

The ***keyword*** element in the XML message is in the following location:

- ***controlActProcess>> subject>> submissionUnit>>component>> contextOfUse >> referencedBy>> keyword***

Refer to Table 4: XML Structure.

10.8.2 XML Details

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.8.3 Terminology

Swiss Module 1 controlled vocabularies are provided in the Implementation Guide package and later on Swissmedic's website, see also Section 8.1.

10.9 Sequence Number

There are no additional requirements other than those outlined in the ICH eCTD IG.

10.10 Submission

The ***submission*** is the representation of a regulatory activity constituted by several Submission Units and referring to exactly one application. The respective controlled vocabulary is CH-specific. However, for the purposes of the Current View Transition message the ICH Controlled Vocabulary should be used.
A Submission Unit may contain more than one submission, each referring to one application (see Section 8). This is relevant in the case of grouped variations.

Remark: The id.item@root will change for a new regulatory activity only. As long as Submission Units refer to the same regulatory activity the same id@root will be used.

10.10.1 Location in XML

The ***submission*** element in the XML message is in the following location:

- ***controlActProcess>> subject>> submissionUnit>>componentOf1>> submission***

Refer to Table 4: XML Structure.

10.10.2 XML Details

The following attributes are used with the ***submission*** element:

XML Elements

The following tables provide a complete set of XML elements and attributes required for the ***Submission*** element, and any special instructions.

*The **classCode** is fixed to "ACT" and **moodCode** is fixed to "EVN". These values are not required in the XML message.*

563 **Submission.id**

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
id		[1..1]		This is a container element that provides a unique identifier for the submission.
id.item		[1..1]		This is the container element of the following attributes by which it uniquely identifies the application. *Note: This is a regional constraint.*
	root	[1..1]	Valid OID or UUID	This is the root attribute that uniquely identifies the submission.
	extension	[1..n]	alpha-numeric e.g., 123456789	The ***extension*** attribute of the ***id*** element provides a location to specify the Swissmedic application number (Swissmedic application number, not the marketing authorisation number) including specific extensions related to the regulatory activity. Use "**pending**" as value if actual Swissmedic application number is not known yet.
Conformance	The ***id.item@root*** attribute is required for the ***submission*** element.			
Business Rules	Only one ***item*** element should be provided for a submission. The ***id@extension*** is the extended procedure number for the regulatory activity. This value will stay the same for all Submission Units within the regulatory activity.			
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***id.item@identifierName*** • ***id.item@scope*** • ***id.item@reliability*** • ***id.item@displayable*** • ***id@validTimeLow*** • ***id@validTimeHigh*** • ***id@controlInformationRoot*** • ***id@controlInformationExtension*** • ***id@nullFlavor*** • ***id@flavorId*** • ***id@updateMode***			

564

565 **Submission.code**

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
code		[0..1]		This is a container element for the ***submission***.
	code	[1..1]	Alpha Numeric	This is the code attribute, which is a unique value that indicates the type of content in the ***submission***.
	codeSystem	[1..1]	Valid OID or UUID	This is the codeSystem attribute.
Conformance	There must be one, and only one, ***code@code*** attribute specified for a submission.			
Business Rules	***Submission*** codes may vary for different product types. In case of eCTD for human medicinal product the relevant code list is referenced in section 8.1.			
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***code.displayName*** • ***code.originalText*** • ***code.translation*** • ***code.source*** • ***code@codeSystemName*** • ***code@codeSystemVersion*** • ***code@valueSet*** • ***code@valueSetVersion*** • ***code@codingRationale*** • ***code@validTimeLow*** • ***code@validTimeHigh*** • ***code@controlInformationRoot*** • ***code@controlInformationExtension*** • ***code@nullFlavor*** • ***code@flavorId*** • ***code@updateMode***			

566

567 **Submission.statusCode**

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
statusCode		[0..1]		This is a container element for the ***statusCode*** of the submission.
	code	[1..1]	Alpha Numeric e.g., active, suspended	This is the ***statusCode*** attribute that indicates the status of the submission. Not being used by Swissmedic.
Conformance	If the ***statusCode*** element is provided, the ***code*** attribute is required.			
Business Rules				

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***code@codeSystemName*** • ***code@codeSystemVersion***			

568
569

570 **XML sample: Submission**

571 The following is an example of the XML for the ***submission*** element.

572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587

```
<componentOf1>
  <sequenceNumber value="1"/>
  <submission>
    <id>
      <item root="0d84467e-f20b-42ad-a69a-63e61a4f7ea7" extension="123456789"/>
    </id>
    <code code="100001" codeSystem="2.16.840.1.113883.3.989.5.1.5.3.1.4.2/>
      <!... displayName value="na-nas" as retrieved from the code system...!
    </code>
    <statusCode code="active"/>
    <!..Additional information will follow in the submission element.-->
    <componentOf>
      <!..Additional information appears for the application element. -->
    </componentOf>
  </submission>
</componentOf1>
```

588

See XML Colour Legend for colour usage.

589 ### 10.10.3 Terminology

590 The ***submission*** element code values will be provided by CH-specific controlled vocabularies (see
591 Section 8.1).
592 The desired status codes will be used in line with ICH eCTD IG definitions.
593

594 ### 10.10.4 Related Elements

595 The ***following*** elements are related to ***submission*** and require additional information:
596 • ***subject2.review*** (not being used by Swissmedic, see Section 10.12)
597 • ***subject4.regulatoryReviewTime*** (not being used by Swissmedic, see Section 10.19)
598 • ***subject5.submissionGroup*** (see Section 10.20)
599 • ***subject3.mode***, not being used by Swissmedic, see Section 10.18)
600
601

602 ## 10.11 Contact Party

603 
604 This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.
605
606

10.12 Review

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.13 Manufactured Product

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.14 Holder

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.15 Territorial Authority (as author of review) [used by regulators only]

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.16 Product Category

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.17 Regulatory Status [used by regulators only]

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.18 Mode

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.19 Regulatory Review Time

This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.20 Submission Group

The Submission Group represents an option to process regulatory activities together in case the assessment will cover the same content and applies to more than one product which will otherwise not be assessed together. A submission group needs to be defined per regulatory activity and is required to be stated within each Submission Unit submitted during that course of assessment.

The ***submissionGroup*** element can be used where the same regulatory activity will be processed the same way. The UUID will connect the different applications for processing the submission (regulatory activity) as a group.

10.20.1 Location in XML

The ***submissionGroup*** element in the XML message is in the following location:

- ***controlActProcess>> subject>> submissionUnit>>componenOf1>> submission>>subject5>>submissionGroup***

Refer to Table 3: XML Structure for the XML representation.

10.20.2 XML details

XML Elements

The following tables provide a complete set of XML elements and attributes required for the ***submissionGroup*** element, and any special instructions.

*The **classCode** is fixed to "GROUPER" and **moodCode** is fixed to "EVN". These values are not required in the XML message.*

submissionGroup.id

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Id		[1..1]		This is a container element that provides a unique identifier for the submission group that the submission is part of.
	root	[1..1]	Valid UUID	The ***root*** attribute of the ***item*** element provides a global unique identifier for the submission reference.
Conformance	The ***id@root*** is a required attribute.			

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Business Rules	The same ID needs to be added to all group members. This will indicate a group of applications the regulatory activity applies to. They are not formally defined as a grouping or worksharing, but in case of duplicates they can be processed together. The sender of the message may decide whether the activities will be processed in this way or not.			
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***id@identifierName*** • ***id@extension*** • ***id@scope*** • ***id@reliability*** • ***id@displayable*** • ***id@validTimeLow*** • ***id@validTimeHigh*** • ***id@controlInformationRoot*** • ***id@controlInformationExtension*** • ***id@nullFlavor*** • ***id@flavorId*** • ***id@identifierName*** • ***id@updateMode*** • ***id@xsi:type***			

XML Sample: submissionGroup

The following is an example of the XML for the ***submissionGroup*** element.

```
<subject5>
   <submissionGroup>
      <id root="UUID for the submissionReference"/>
   </submissionGroup>
</subject5>
```

See XML Colour Legend for colour usage.

10.20.3 Terminology

There is no further terminology foreseen.

10.21 Application

The ***application*** element represents a request from Regulated Industry to a Regulatory Authority, for the approval to market a medicinal product for human use. The application, in this context, will typically cover all dosage forms and strengths of a product.

Referencing across applications is possible when all content is identifiable by using eCTD v4.0 compliant identifier. Content previously submitted according to eCTD v3.2.2 specification must be transitioned first before this content can become part of a new marketing authorisation application according eCTD v4.0 or any other regulatory activity.

An application will consist over time of multiple submissions or regulatory activities (e.g. initial marketing authorisation application, variations or PSURs) over time. For example, a marketing application may consist of one or more regulatory decisions e.g., the collection of all approvals is related to the application. Each regulatory submission (for details refer to section 8.1 for controlled vocabulary of Application Submission Types) will have its own regulatory action, and most likely will be composed of one or more Submission Units.

The ***application*** element is also presented in the ICH eCTD IG, as it is the connection point for the ***document*** and ***keywordDefinition*** elements in the XML message, but only complementary information is provided.

10.21.1 application.id

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
id		[1..1]		This is a container element that provides a unique identifier for the submission.
id.item		[1..1]		This is the container element of the following attributes by which it uniquely identifies the application, because an application can be given multiple identifiers across territories, one id.item element should be used for each unique application identifier.
	root	[1..1]	Valid OID or UUID	The root attribute of the id.item element provides a global unique identifier for the application element.
	extension	[1..1]	alpha-numeric e.g., 12345	The ***extension*** attribute of the ***id*** element provides a location to specify the Swissmedic marketing authorisation number (Zulassungsnummer). Use “pending” as value if actual Swissmedic marketing authorisation number is not known yet.
Conformance	The ***id.item@root*** attribute is required for the ***application*** element.			
Business Rules	Only one ***item*** element should be provided for an application. The ***id@extension*** is the marketing authorisation number of the application. This value will stay the same for all Submission Units within the application.			

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***id.item@identifierName*** • ***id.item@scope*** • ***id.item@reliability*** • ***id.item@displayable*** • ***id@controlInformationExtension*** • ***id@controlInformationRoot*** • ***id@flavorId*** • ***id@nullFlavor*** • ***id@updateMode*** • ***id@validTimeLow*** • ***id@validTimeHigh***			

701

702 **10.21.2 application.code**

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
code		[1..1]		This is a container element that organizes the coded value for the application.
	nullFlavor	[1..1]	NA	The container element is required for technical reasons. The value **NA** indicates that the attribute is not applicable. See the following example.
Conformance	The ***code@nullFlavor*** attribute is required for the ***application.code*** element.			
Business Rules	NA			

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***code.displayName*** • ***code.originalText*** • ***code.translation*** • ***code.source*** • ***code@codeSystemName*** • ***code@codeSystemVersion*** • ***code@codingRationale*** • ***code@controlInformationExtension*** • ***code@controlInformationRoot*** • ***code@flavorId*** • ***code@id*** • ***code@updateMode*** • ***code@validTimeLow*** • ***code@validTimeHigh*** • ***code@valueSet*** • ***code@valueSetVersion*** • ***code@xsi:type***			

10.21.3 Location in XML

The ***application*** element in the XML message is in the following location:

- ***controlActProcess>> subject>> submissionUnit>>componentOf1>> submission>>componentOf>>application***

Refer to Table 4: XML Structure.

10.21.4 XML details

There are no additional requirements other than those outlined in the ICH eCTD IG.

```
<componentOf>
  <application>
    <id>
<!-- ============================================-->
<!-- Root reflects the UUID provided by the publishing software-->
<!-- Extension reflects the Swissmedic authorisation number in this example -->
<!—application.code should indicate a code value "Not applicable" (NA) -->
<!-- ============================================-->
        <item root="5f0e8436-e1df-4031-90d3-413deff109e5" extension="12345"/>
    </id>
      <code nullFlavor="NA"/>
      ...
  </application>
```

10.21.5 Terminology

The controlled terminology for the ***application*** element includes codes for application types (e.g. Full Dossier, Bibliographic, Biosimilar, Generic) (refer to Section 6.1).

10.21.6 Related Elements

The ***following*** elements are related to ***application*** and require additional information:

- ***holder.applicant*** (not being used by Swissmedic, see Section 10.22)
- ***informationRecipient.territorialAuthority*** (not being used by Swissmedic, see Section 10.23)
- ***subject.reviewProcedure*** (not being used by Swissmedic, see Section 10.24)
- ***reference.applicationReference*** (see Section 10.25)
- ***component.document.*** (see Section 10.26)
- ***referencedBy.keywordDefinition*** (see Section 10.27)

10.22 Applicant

STOP This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.23 Territorial Authority (as information recipient related to application)

STOP This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.24 Review Procedure

STOP This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.25 Application Reference

STOP This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

10.26 Document

The ***document*** element is used for the purposes of transmitting the information about each document related to an application. The valid use for a specific application and the purpose of a specific regulatory activity is based on the association with a specified CoU. As documents will not be deleted or set to inactive (no status change is foreseen), a new CoU can be associated at any time regardless of whether the application itself is still active or the regulatory activity is rejected or approved.
Document elements (referencing e.g. PDF files) will be prepared by the sender, i.e. the Applicant, for review by the Regulatory Authority. A document element is applicable to one file and is

772 referenced by one contextOfUse element. The same CoU element combinations may be used in
773 multiple Submission Units (reuse of documents)[14]. Documents can be grouped using a group title
774 provided with the ***contextOfUse*** element. To the ***contextOfUse*** element an additional label can be
775 assigned if the document title is not instructive enough or too general or too detailed.
776

777 ### 10.26.1 Location in XML

778 The ***document*** element in the XML message is in the following location:

779 - ***controlActProcess>> subject>> submissionUnit>>componentOf1>>***
780 ***submission>>componentOf>>application>>component>>document***

781 Refer to Table 3: XML Structure for the XML representation.

782

783 ### 10.26.2 XML details

784 **XML Elements**

785 Tables with a complete set of XML elements and attributes required for the ***document*** element are
786 provided in the ICH eCTD IG and will not be repeated here. The following additional requirements
787 apply for CH M1.

788

789 **document.text**

Business Rules	In CH: The ***text*** element should be used when sending a document. The ***text@language*** is not thought to be used in the context of Swiss M1. The ***text@mediaType*** is not thought to be used in the context of Swiss M1. The ***text.thumbnail*** element is not thought to be used in the context of Swiss M1. The ***text.description@value*** attribute is not thought to be used in the context of Swiss M1. For file reuse, the **documentReference** element provides the UUID of the ***document*** element to be reused. It is prerequisite that the metadata as well as the content cannot be changed for any reuse.

[14] The CTD granularity document specifies where one or more documents may be submitted for each CTD section. Because the eCTD v3.2.2 does not distinguish files and documents, those terms have been previously used interchangeably. The granularity document has been updated to specify the opportunities when using eCTD v4.0. (http://www.ich.org/fileadmin/Public_Web_Site/ICH_Products/CTD/M4_R4_Organisation/M4_R4__Granularity_Document.pdf)

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

Excluded Elements and Attributes	No other elements than indicated in the ICH eCTD v4.0 IG will be excluded.

790

791 **Document.confidentialityCode is not thought to be used in the context of Swiss M1**

Element	Attribute	Cardinality	Value(s) Allowed *Examples*	Description *Instructions*
confidentialityCode		[0..1]		This is a container element that provides an ability to identify Commercial Confidential Information (CCI) and Protected Personal Data (PPD) in the EU.
	code	[1..1]	Valid OID or UUID	This is the ***code*** attribute that contains the value for the confidentiality code.
	codeSystem	[1..1]	Valid OID or UUID	This is the ***codeSystem*** attribute that is a unique identifier for the controlled vocabulary system. *This should be the OID or UUID registered for the code system.*
Conformance	The ***confidentialityCode*** is an optional element.			
Business Rules	If the element is provided, a code and a codeSystem attribute are required.			
Excluded Elements and Attributes	The following attributes are not required by eCTD 4.0: • ***confidentialityCode.displayName*** • ***confidentialityCode.originalText*** • ***confidentialityCode.translation*** • ***confidentialityCode.source*** • ***confidentialityCode@codeSystemName*** • ***confidentialityCode@codeSystemVersion*** • ***confidentialityCode@valueSet*** • ***confidentialityCode@valueSetVersion*** • ***confidentialityCode@codingRationale*** • ***confidentialityCode@validTimeLow*** • ***confidentialityCode@validTimeHigh*** • ***confidentialityCode@controlInformationRoot*** • ***confidentialityCode@controlInformationExtension*** • ***confidentialityCode@nullFlavor*** • ***confidentialityCode@flavorId*** • ***confidentialityCode@id*** • ***confidentialityCode@updateMode*** • ***confidentialityCode@xsi:type***			

792

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

XML Samples

The following are examples of the XML for ***document*** elements. The Document is a component of an Application.

Sample 1:

```
<component>
  <document>
    <id root="50cf78aa-7c32-4994-859b-49500369fe1d"/>
    <title value="General Information"/>
    <text integrityCheckAlgorithm="SHA256" language="en" charset=" utf8">
      <reference value="../m1/nongmo-var.pdf"/>
    <!-- ================================================-->
    <!-- Thumbnail is an optional attribute which may be used by the sender for internal -->
    <!—purposes (e.g. DMS ID), but will be ignored by the receiver. -->
    <!-- ================================================-->
          <thumbnail value="identifier for document from sender's document management system"/>
      <integrityCheck>56df6492f724ee2e76e12cb4b001bd2fdc43603
fb15d70afc89813398739fb9c</integrityCheck>
    <!-- ================================================-->
    <!-- Description is an optional attribute which is thought not to be used for Swiss M1. -->
    <!-- ================================================-->
      <description>Normally not provided</description>
    </text>
  </document>
</component>
```

Sample 2:

```
<component>
  <document>
    <id root="16d152de-3258-4523-a21b-0abe5b01fe82e"/>
    <title value="Cover Letter"/>
    <text integrityCheckAlgorithm="SHA256" language="de">
      <reference value="../m1/de-cover.pdf"/>
      <integrityCheck>b9a6aff775736cf100505af68da859a941432a9f9e56d24
5ac3edaa4235df0ac</integrityCheck>
    </text>
  </document>
</component>
```

See XML Colour Legend for colour usage.

Note to Implementers: For documents *(i.e., representing each a single file)*, the text element *will* be provided *along with the other required elements*.

10.26.3 Terminology

The ***document*** element has one coded terminology for language (the ISO language codes) (see Section 9.3).

10.27 Keyword Definition

The ***keywordDefinition*** element is used by the sender to define a keyword that is referenced by an identifier in other parts of the message. For details see the ICH Implementation guide. The usage of this element is expected to be helpful in Swiss Module 1 for product information text to separate different pharmaceutical forms or strengths. It should be noted, that the sender defined keywords will not be understood as regulatory content. The purpose is simply to support

presentation of content that shall be displayed together and will provide a meaningful orientation for reviewers.

10.28 Category Event

 This element will not be used in Switzerland. Any occurrence in the XML message will be ignored.

11 Creating the Message

With the individual components of the XML message described above, each of those components will now be used to demonstrate how to compose multiple components to address a specific scenario. This will also explain how to address the creation and modifications to the content transmitted during the lifecycle of a submission focusing on Swiss Module 1, as recommendations need to differ from ICH recommendations to cover CH-specific scenarios.

11.1 Content Life Cycle Management (contextOfUse and Documents)

There are no deviating principles to apply in comparison to the general rules set out by ICH. The example below shows a short sample of ***contextOfUse*** and ***Document*** elements referencing a few Swiss Module 1 files. See above chapters for elements required for Swiss submissions. Not required elements in the XML payload are ignored by Swissmedic.

XML example:

```
<componentOf>
  <application>
<!-- ======================================================-->
<!-- Additional information may appear after the Application.code-->
<!-- ======================================================-->
    <component>
      <document>
        <id root="88c5b0a4-8042-4110-a0c2-af8e51d87e26"/>
        <title value="Cover Letter"/>
        <text integrityCheckAlgorithm="SHA256" language="de" charset="utf-8">
        <reference value="../m1/10-cover/cover.pdf"/>
      <integrityCheck>3285a776897425b9a3b87abbaaf163fb261242397997b003efe3201e</integrityCheck>
        </text>
      </document>
    </component>
    <component>
      <document>
        <id root="b4db2ef3-cb0a-4fd7-be1c-2875e0ae7193"/>
        <title value="Tracking Table"/>
        <text integrityCheckAlgorithm="SHA256" language="en" charset="utf-8">
        <reference value="../m1/10-cover/common-cover-tracking-20120420.pdf"/>
        <integrityCheck>3285a776xv745a25b9a3b87abbaaf163f726ec912423979
97b003efe3201e</integrityCheck>
        <description value= = "Does not seem to be necessary"/>
        </text>
      </document>
    </component>
    <component>
      <document>
        <id root="3bd2276d-fa45-47c7-9360-fa833cffbb1f"/>
        <title value="Expert Quality"/>
        <text integrityCheckAlgorithm="SHA256" language="en" charset="utf-8">
        <reference value="../m1/14-expert/quality-meier.pdf"/>
```


Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

```
        <integrityCheck>3285a776897425b9a3b877z45abbaaf1726ec912423979
97b003efe3202e</integrityCheck>
        </text>
      </document>
    </component>
    <component>
      <document>
        <id root="0b4229b0-6c98-4fe9-9575-556019c12fc5"/>
        <title value="Expert Non-Clinical"/>
        <text integrityCheckAlgorithm="SHA256" language="de" charset="utf-8">
        <reference value="../m1/14-expert/nonclinical-schulz.pdf"/>
        <integrityCheck>3285a776897425b9a3b87abbaaf163fb2646726ec912423979
97b003efe3203e</integrityCheck>
        </text>
      </document>
    </component>
  </application>
</componentOf>
```

11.2 Complex Scenarios

11.2.1 Referencing Multiple Applications in Case of Grouping

In general, there is no deviation to the known process of submitting documents to Swissmedic by post or via the Swissmedic eGov portal as it was with eCTD v3.2.2. Depending on the kind of grouping, one or several XML messages per application have to be submitted.

Note: Documents may only be reused and referred to across applications if they are available to Swissmedic. See the next chapter for more information.

11.2.2 Referencing across submissions and applications of the same pharmaceutical company

The principles of referencing are entirely the same, regardless of whether a reference should be presented within a Submission Unit, where a document is to be displayed with two different context of use, across submissions, or across applications. A ***document*** element will always be referenced by the new ***contextOfUse*** element and its ID. The ***document*** element provides the link to the PDF file. Compiler tool interoperability would require a continued access to any cross application referenced documents and that they are also provided in the transfer of ownership. As a general rule, no ***document*** elements can be referenced if they have not been submitted to Swissmedic. In cases of MAH transfers a separate consolidating sequence might be necessary to complete the document archive of Swissmedic. In those cases it is not foreseen that the document title should be changed. Changes of the document title is intended to mainly include corrections of typos. The update mode is not considered to be used for establishing a new meaning / usage of a file. In that case a new CoU is required. From a technical point of view, the rules outlined in the ICH eCTD IG apply entirely to Swiss Module 1 as well.

Note: Document title corrections will be displayed wherever the document element is referenced. This effect is acceptable as no regulatory content will be changed. Further guidance as to when a document title change is allowed or recommended is provided in the ICH Implementation Guide, section on Document Element Updates.

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12

11.3 Building Regulatory Activities (Submission)

The following section provides a set of message snippets that highlight the Module 1 content. These XML samples do not include the information that is relevant to Modules 2-5. All samples in this section provide a regulatory activity life cycle within an application.

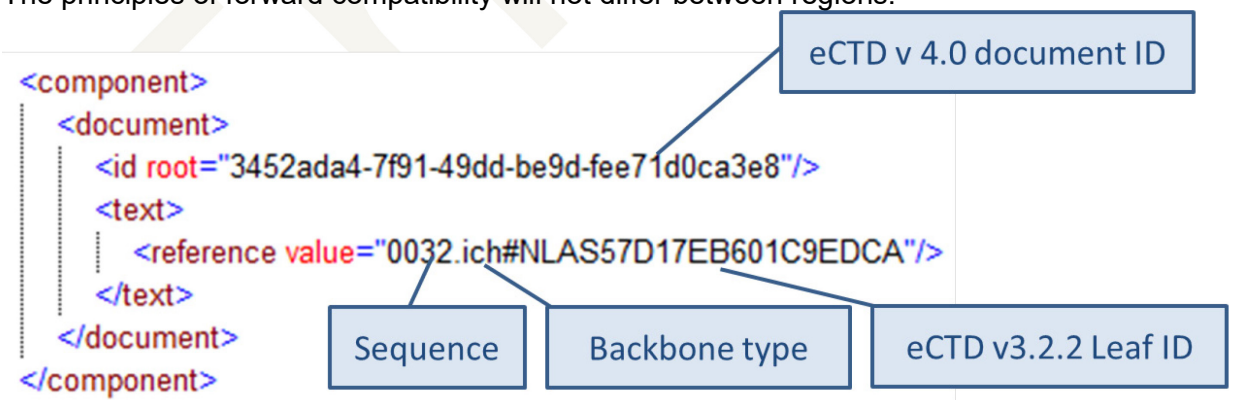
12 XML Message Validation Rules

The principles of validation rules for eCTD v4.0 messages will not differ between regions. For details please refer to the ICH Implementation Guide. The following table highlights validation rules by elements which are specifically used in Switzerland. Not all checks according to the schema as already mentioned in the ICH IG will be repeated here. All code/codeSystem combinations are expected to be currently valid. If an error is detected, the submission unit needs to be resubmitted including the corrected item.

Category	Type/Element	Validation Criteria
Message Validation	Submission Reference	A Submission Unit sent by regulators must provide a Submission Reference stated as a valid code/codeSystem combination.
	Submission	Submission must have a valid code/codeSystem combination.
	Submission Group	Submission Group must have a valid code/codeSystem combination if it has been used. Note: If the initial sequence of a regulatory activity makes use of the submission group element this element needs to be completed through all sequences related to that activity. Submission Group id root must be a unique identifier.

13 Compatibility With and Reference to Previous Versions of Module 1

The principles of forward compatibility will not differ between regions.



The ICH Implementation Guide describes a one-time transition from v3.2.2 to v4.0 based on the current regulatory view of a dossier. This means that all valid content of a dossier in eCTD format v3.2.2 will be mapped in a way that document elements can be referenced in the future according to the eCTD specification v4.0. It is expected need that the eCTD v4.0 tool will assign the document element UUID to all available content (current view), but not selecting specified modules

962 in some way. It needs to be noted that those parts which are not yet in eCTD format cannot be
963 transitioned.
964

Note: The Transition Mapping Message will be accepted to execute only once per dossier. It won't be possible to start the mapping with e.g. m3 and to add m4 and m5 at a later point in time.

965

Swissmedic • Hallerstrasse 7 • 3012 Berne • www.swissmedic.ch • Tel. +41 58 462 02 11 • Fax +41 58 462 02 12