Requirements for the SCF Module STLXML-XSD

Contents

Disclaimer

Structure of the requirements

The structure of the requirements is as follows:

- **Title:** a short title, prepended with the internal ID of the requirement
- **Description:** the requirement text. The specified text will be used to test the implementation.
- **Area:** Apart from more general requirements the requirements are categorized by modules (e.g. `STLXML2EBU-TT` or `EBU-TT2EBU-TT-D`)
- **Requirement Review Status:** This is the internal review status of the requirement itself (especially of the requirement text).
- **Status Implementation:** This status indicates if the requirement is already met by the implementation. The possible status codes are:
  - *outstanding* - the corresponding code has not yet been written, or the requirement has been implemented but there are no test files for it
  - *waitingReview* - the code to implement the requirement has been written but nobody (except the developer) has reviewed the code yet
  - *underReview* - the corresponding code is under review and has not yet been accepted by the first reviewer
  - *reviewed* - the corresponding code has been reviewed and accepted by the first reviewer
  - *accepted* - the corresponding code has been accepted by the developer team and is ready to be published
- **Priority according to MoSCoW:** the priority that is the base to decide when the feature will be implemented. The possible values are:
  - *M* - must
  - *S* - should
  - *C* - could
  - *W* - won't

  For more information see: https://en.wikipedia.org/wiki/MoSCoW_method

Requirements for Sub-module StlXml-XSD

requirement-500: Existence StlXml-XSD

Description

There shall be an W3C XML Schema (XSD) that is conformant to the version 1.0 of the XML Schema Standard that can be used to validate the a StlXml file (StlXml-XSD).

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m

requirement-501: StlXml-XSD error reporting

Description

Validation of an XML file with the StlXml-XSD shall not result in false negative validation error messages but may result in false positive error messages.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m

requirement-503: StlXml content model

Description

The StlXml-XSD shall validate that StlXml has the elements HEAD and BODY as mandatory children where HEAD is the first and BODY the second child. The StlSource element is an optional child and shall be the third child, if present.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m

requirement-504: HEAD content model

Description

The StlXml-XSD shall validate the HEAD element has the elements "metadata" and GSI as only allowed child, that the GSI child element is mandatory and has the upper bound of "1", that the element "metadata" is optional and has the upper bound of "1", that if present, the "metadata" element is the first child.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-505: GSI content model

Description

The StlXml-XSD shall validate the GSI element has only the following elements as child elements, that these elements can not occur more than once, that they are mandatory and that they appear in following order of occurrence: CPN, DFC, DSC, CCT, LC, OPT, OET, TPT, TET, TN, TCD, SLR, CD, RD, RN, TNB, TNS, TNG, MNC, MNR, TCS, TCP, TCF, TND, DSN, CO, PUB, EN, ECD, UDA

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-506: BODY content model

Description

The StlXml-XSD shall validate the BODY element has the element TTICONTAINER as only allowed child, that this child element is mandatory and has the upper bound of "1".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-507: TTICONTAINER content model

Description

The StlXml-XSD shall validate the TTICONTAINER element has only TTI elements as children and that at least one TTI element is present.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-508: TTI content model

Description

The StlXml-XSD shall validate a TTI element has only the following elements as child elements, that these elements can not occur more than once, that they are mandatory and that they appear in following order of occurrence: SGN, SN, EBN, CS, TCI, TCO, VP, JC, CF, TF.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-509: CPN data type

Description

The StlXml-XSD shall validate that the content of element CPN is of type xs:token and is restricted to the following enumerated values: "437", "850", "860", "863" and "865".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-510: DFC data type

Description

The StlXml-XSD shall validate that the content of element DFC is of type xs:token and is restricted to the following enumerated values: "STL25.01" and "STL30.01".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-511: DSC data type

Description

The StlXml-XSD shall validate that the content of element DSC is of type xs:token and is restricted to the following enumerated values: "", "0", "1" and "2".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-512: CCT data type

Description

The StlXml-XSD shall validate that the content of element CCT is of type xs:token and is restricted to the following enumerated values: "00", "01", "02, "03" and "04".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-513: LC data type generic

Description

The StlXml-XSD shall validate that the content of element LC is of type xsd:hexBinary with the length one.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-514: LC data type value list

Description

The StlXml-XSD shall validate that the content of element LC has only the values listed in EBU Tech 3264-E Appendix 3 (p.25).

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

outstanding

Priority according to MoSCoW

c

requirement-515: OPT data type

Description

The StlXml-XSD shall validate that the content of element OPT is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-516: OET data type

Description

The StlXml-XSD shall validate that the content of element OET is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-517: TPT data type

Description

The StlXml-XSD shall validate that the content of element TPT is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-518: TET data type

Description

The StlXml-XSD shall validate that the content of element TET is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-519: TN data type

Description

The StlXml-XSD shall validate that the content of element TN is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-520: TCD data type

Description

The StlXml-XSD shall validate that the content of element TCD is of type string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-521: SLR data type

Description

The StlXml-XSD shall validate that the content of element SLR is of type string and has not more than 16 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-522: CD data type

Description

The StlXml-XSD shall validate that the content of element CD is of type string and has not more than 6 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-523: RD data type

Description

The StlXml-XSD shall validate that the content of element RD is of type string and has not more than 6 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-524: RN data type

Description

The StlXml-XSD shall validate that the content of element RN is an integer with the range 0-99.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-525: TNB data type

Description

The StlXml-XSD shall validate that the content of element TNB is an integer with the range 0-99999.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-526: TNS data type

Description

The StlXml-XSD shall validate that the content of element TNS is an integer with the range 0-99999.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-527: TNG data type

Description

The StlXml-XSD shall validate that the content of element TNG is an integer with the range 0-255.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-528: MNC data type

Description

The StlXml-XSD shall validate that the content of element MNC is an integer with the range 0-99.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-529: MNR data type

Description

The StlXml-XSD shall validate that the content of element MNR is an integer with the range 0-99.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-530: TCS data type

Description

The StlXml-XSD shall validate that the content of element TCS is of type xs:token with the enumerated values of "0" and "1".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-531: TCP data type

Description

The StlXml-XSD shall validate that the content of element TCP is of type string where the first two characters correspond to a zero padded number in the range of 0-23, the third and fourth character to a zero padded number in the range of 0-59, the fifth and sixth character to a zero padded number in the range of 0-59 and the seventh and eigth character to a zero padded number in the range of 0-29.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

s

requirement-532: TCF data type

Description

The StlXml-XSD shall validate that the content of element TCF is of type string where the first two characters correspond to a zero padded number in the range of 0-23, the third and fourth character to a zero padded number in the range of 0-59, the sixth and seventh character to a zero padded number in the range of 0-59 and the eight and ninth character to a zero padded number in the range of 0-29.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

s

requirement-533: TND data type

Description

The StlXml-XSD shall validate that the content of element TND is an integer in the range 1-9.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-534: DSN data type

Description

The StlXml-XSD shall validate that the content of element DSN an integer in the range 1-9.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-535: CO data type generic

Description

The StlXml-XSD shall validate that the content of element CO is of type xs:token, has the the length of 3 and has only characters in the range A-z.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-536: CO data type value list

Description

The StlXml-XSD shall validate that the content of element CO is one of the country codes listed in EBU Tech 3264-E Appendix 4 (page 27)

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

outstanding

Priority according to MoSCoW

c

requirement-537: PUB data type

Description

The StlXml-XSD shall validate that the content of element PUB is of type xs:string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

s

requirement-538: EN data type

Description

The StlXml-XSD shall validate that the content of element EN is of type xs:string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-539: ECD data type

Description

The StlXml-XSD shall validate that the content of element ECD is of type xs:string and has not more than 32 characters.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-550: UDA data type

Description

The StlXml-XSD shall validate that the content of element UDA is of type xs:string and has not more than 768 characters (which equals to 576 characters coded in Base64).

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-540: SGN data type

Description

The StlXml-XSD shall validate that the content of element SGN is an integer in the range of 0-255.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-541: SN data type

Description

The StlXml-XSD shall validate that the content of element SN is an integer in the range of 0-65535.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-542: EBN data type

Description

The StlXml-XSD shall validate that the content of element EBN is of type xsd:hexBinary of length 1.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-543: CS data data type

Description

The StlXml-XSD shall validate that the content of element CS is of type xsd:hexbinary with the following enumerated values: "00", "01", "02", "03".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-544: TCI data type

Description

The StlXml-XSD shall validate that the content of element TCI is of type string where the first two characters correspond to a zero padded number in the range of 0-23, the third and fourth character to a zero padded number in

the range of 0-59, the sixth and seventh character to a zero padded number in the range of 0-59 and the eight and ninth character to a zero padded number in the range of 0-29.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

s

requirement-545: TCO data type

Description

The StlXml-XSD shall validate that the content of element TCO is of type string where the first two characters correspond to a zero padded number in the range of 0-23, the third and fourth character to a zero padded number in the range of 0-59, the sixth and seventh character to a zero padded number in the range of 0-59 and the eight and ninth character to a zero padded number in the range of 0-29.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

s

requirement-546: VP data type

Description

The StlXml-XSD shall validate that the content of element VP is an integer with the range 0-99.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-547: JC data type

Description

The StlXml-XSD shall validate that the content of element JC is of type xsd:hexBinary and restricted to the following values: "00", "01", "02" and "03".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-548: CF data type

Description

The StlXml-XSD shall validate that the content of element JC is of type xsd:hexBinary and restricted to the following values: "00" and "01".

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-549: TF content model

Description

The StlXml-XSD shall validate that the content of element TF is of type mixed content and has only the following elements as children: 'AlphaBlack', 'AlphaRed', 'AlphaGreen', 'AlphaYellow', 'AlphaBlue', 'AlphaMagenta', 'AlphaCyan', 'AlphaWhite', 'Flash', 'Steady', 'EndBox', 'StartBox', 'NormalHeight', 'DoubleHeight', 'DoubleWidth', 'DoubleSize', 'MosaicBlack', 'MosaicRed', 'MosaicGreen', 'MosaicYellow', 'MosaicBlue', 'MosaicMagenta', 'MosaicCyan', 'MosaicWhite', 'Conceal', 'ContiguousMosaic', 'SeparatedMosaic', 'Reserved', 'BlackBackground', 'NewBackground', 'HoldMosaic', 'ReleaseMosaic', 'space', 'newline'.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

reviewed

Priority according to MoSCoW

m

requirement-560: StlSource content model

Description

The StlXml-XSD shall validate that StlSource has the elements Filename and Data as mandatory children where Filename is the first and Data the second child.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m

requirement-561: Filename content model

Description

The StlXml-XSD shall validate that the content of element Filename is of type xs:string.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m

requirement-562: Data content model

Description

The StlXml-XSD shall validate that the content of element Data is of type xs:base64Binary.

Area

StlXml-XSD

Requirement Review Status

accepted

Status Implementation

accepted

Priority according to MoSCoW

m