# Requirements for the SCF Module EBU-TT2STLXML

# 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 EBU-TT2STLXML

## requirement-014: STL XML identity

**Description**

When an STL XML file was converted to an EBU-TT file and the created EBU-TT file is converted back to STL XML, the resulting STL XML is semantically identical to the original STL XML file. If this is for some reason not possible it is documented and justified.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

s

## requirement-095: EBU-TT to STL XML

**Description**

There is the option to transform an EBU-TT Part 1 file that was created by transforming an STL XML file into an EBU-TT file following EBU Tech 3360 v0.9 back into an STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-096: Guideline conformity - not calculable

**Description**

When an EBU-TT file is converted in an STL XML file, information that can not be calculated from the EBU-TT document will be inserted according to a documented guideline. One example is the information for the GSI field DSN (Disc Sequence Number).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

s

## requirement-097: Guideline conformity - not supported

**Description**

When an EBU-TT file is converted in an STL XML file, the mapping of information that is not supported in EBU-STL follows a documented guideline (e.g. the mapping of color values that are not supported in STLXML).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

s

## requirement-099: Code Page 850 support

**Description**

The EBU-TT to STLXML module supports the Code Page 850 for the GSI Header block.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-100: Code Page Number mapping

**Description**

The Code Page Number (CPN) in the STL XML file's GSI Header is set to 850 by default. This behaviour can be overwritten by the parameter "CPN".

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-101: Disc Format Code mapping

**Description**

The Disk Format Code (DFC) in the STL XML file's GSI Header is set to "STL25.01" if the calculated frame rate is equal to 25. If no frame rate was specified, 25 is assumed. If another value is set, the transformation is aborted.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

c

## requirement-147: DSC parameter

**Description**

There is a parameter, e.g. called "DSC", that defines if the resulting STL XML file is intended to be used for teletext or open subtitles. Its value is either ", indicating undefined, 0 for indicating open subtitling, 1 or 2, indicating level-1 and level-2 teletext. The default value for this parameter is 2 if it's not specifically given when the transformation is started.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-102: Display Standard Code mapping

**Description**

The Display Standard Code (DSC) in the STL XML file's GSI Header is mapped depending on its intended use according to the table in EBU Tech 3264 (p.6). Its value is set depending on the value given for the DSC parameter.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

c

## requirement-404: CCT parameter

**Description**

There is a parameter "CCT", that defines Character Code Table used in the resulting STL XML file. According to EBU Tech 3264 (p.7) its value ranges from 00 to 04 (3030 hex to 3034 hex).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-103: Character Code Table mapping

**Description**

The Character Code Table (CCT) in the STL XML file's GSI Header is set as the code table's number that is given by the CCT parameter. If the number of the used codepage isn't defined by the parameter and can not be calculated depending on the characters used in the file's tt:p elements, the transformation is aborted.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-405: LC parameter

**Description**

There is a parameter, e.g. called "LC", that defines the Language Code used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-104: Language Code mapping

**Description**

The Language Code (LC) in the STL XML file's GSI Header is mapped from the LC parameter. If the parameter is not set, the LC element's value is mapped to the xml:lang attribute of the EBU-TT file's tt:tt element according to the table in EBU Tech 3360 v9.0 Annex C. If this attribute isn't set, the value 00 is written. The supported languages are: Englisch, French, German, Italian, Portugues, Spanish

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-406: OPT parameter

**Description**

There is a parameter, e.g. called "OPT", that defines the Original Programme Title used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-105: Original Programme Title mapping

**Description**

The Original Programme Title (OPT) in the STL XML file's GSI Header is mapped to the OPT parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentOriginalProgrammeTitle. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format has more then 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-407: OET parameter

**Description**

There is a parameter, e.g. called "OET", that defines the Original Episode Title used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-106: Original Episode Title mapping

**Description**

The Original Episode Title (OET) in the STL XML file's GSI Header is mapped to the OET parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentOriginalEpisodeTitle. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format has more then 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-408: TPT parameter

**Description**

There is a parameter, e.g. called "TPT", that defines the Translated Programme Title used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-107: Translated Programme Title mapping

**Description**

The Translated Programme Title (TPT) in the STL XML file's GSI Header is mapped to the TPT parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentTranslatedProgrammeTitle. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

s

## requirement-409: TET parameter

**Description**

There is a parameter, e.g. called "TET", that defines the Translated Episode Title used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-108: Translated Episode Title mapping

**Description**

The Translated Episode Title (TET) in the STL XML file's GSI Header is mapped to the TET parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentTranslatedEpisodeTitle. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format requires more than 32 character, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-410: TN parameter

**Description**

There is a parameter, e.g. called "TN", that defines the Translator's Name used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-109: Translator's Name mapping

**Description**

The Translator's Name (TN) in the STL XML file's GSI Header is mapped to the TN parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentTranslatorsName. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-411: TCD parameter

**Description**

There is a parameter, e.g. called "TCD", that defines the Translator's Contact Details used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-110: Translator's Contact Details mapping

**Description**

The Translator's Contact Details (TCD) in the STL XML file's GSI Header is mapped to the TCD parameter. If the parameter is not set, the element's value is mapped to the from the EBU-TT file's ebuttm:documentTranslatorsContactDetails. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-412: SLR parameter

**Description**

There is a parameter, e.g. called "SLR", that defines the Subtitle List Reference Code used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-111: Subtitle List Reference Code mapping

**Description**

The Subtitle List Reference Code (SLR) in the STL XML file's GSI Header is mapped to the SLR parameter. If the parameter is not set, the element's value is mapped to the EBU-TT file's ebuttm:documentSubtitleListReferenceCode. If the element is not present in the source document, the empty element is written. If the string converted to the STL XML file's text format requires more than 16 characters, it gets cut at the 16 character. Leading and trailing spaces are trimmed by the mapping.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-112: Creation Date mapping

**Description**

The Creation Date (CD) in the STL XML file's GSI Header is set as the current date following ISO Standard 8601 and the format is YYMMDD (YY = year, MM = month, DD = Day).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

s

## requirement-113: Revision Date mapping

**Description**

The Revision Date (RD) in the STL XML file's GSI Header is set as the current date following ISO Standard 8601 (i.e. YYMMDD).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

s

## requirement-114: Revision Number mapping

**Description**

The Revision Number (RN) in the STL XML file's GSI Header is set to " 0".

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-115: tt:p element mapping

**Description**

If the content of a tt:p element converted to STL text format takes up more than 112 bytes of space, the tt:p needs to be subdivided so that no single part uses more than 112 bytes of space. The Total Number of TTI Blocks (TNB) in the STL XML file's GSI Header is equivalent to the number of tt:p elements in the EBU-TT file's tt:body element needing 112 bytes or less in STL text format plus the amount of sub parts needed to convert those tt:p that take up too much space.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-116: Total Number of Subtitles mapping

**Description**

The Total Number of Subtitles (TNS) in the STL XML file's GSI Header is equivalent to the number of TTI blocks having their Extension Block Number (EBN) set to 255 (FFh), as an EBN value of 255 (FFh) states the last TTI block of a Group and thus ending a subtitle.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-117: Total Number of Subtitle Groups mapping

**Description**

For an EBU-TT file created by the STLXML2EBU-TT module the Total Number of Subtitle Groups (TNG) in the STL XML file's GSI Header is equivalent to the number of tt:div element children of the EBU-TT file's tt:body element.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

s

## requirement-421: MNC parameter

**Description**

There is a parameter, e.g. called "MNC", that defines the Maximum Number of Displayable Characters used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-118: Maximum Number of Displayable Characters in any text row mapping

**Description**

The Maximum Number of Displayable Characters in any text row (MNC) is set to 40. If the parameter MNC is set its value takes precedence unless the DSC is 1 or 2 and the specified value is greater than 40.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-413: MNR parameter

**Description**

There is a parameter, e.g. called "MNR", that defines the Maximum Number of Displayable Rows used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-119: Maximum Number of Displayable Rows mapping

**Description**

The Maximum Number of Displayable Rows (MNR) in the STL XML file's GSI Header is mapped to the MNR parameter. If the parameter is not set, the element's value is set to 23 if the intended use is for teletext and thus has a DSC with value 1 or 2. Otherwise the empty element is written.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

s

## requirement-120: Time Code: Status mapping

**Description**

The Time Code: Status (TCS) in the STL XML file's GSI Header is set to 1. A value of 0 is not possible since EBU-TT doesn't allow untimed content.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-414: TCP parameter

**Description**

There is a parameter, e.g. called "TCP", that defines the Time Code: Start-of-Programme used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

c

## requirement-121: Time Code: Start-of-Programme mapping

**Description**

The Time Code: Start-of-Programme (TCP) in the STL XML file's GSI Header is taken from the TCS parameter. If the parameter is not set, the element's value is taken from the EBU-TT file's ebuttm:documentStartOfProgramme. The default value for the TCP is 00000000.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-415: TCF parameter

**Description**

There is a parameter, e.g. called "TCF", that defines the Time Code: First in-cue used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-122: Time Code: First in-cue mapping

**Description**

The Time Code: First in-cue (TCF) is taken from the TCF parameter. If the parameter is not set, the element's value is taken from the value of the first TTI block's TCI element. This is the Time Code of the first in-cue of the subtitle list, thus the first tt:p element's begin time that's valid.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-123: Total Number of Disks mapping

**Description**

If the content of a tt:p element converted to STL text format takes up more than 112 bytes of space, the tt:p needs to be subdivided so that no single parts uses more than 112 bytes of space. The Total Number of Disks (TND) is calculated from the number of tt:p elements in the EBU-TT file needing 112 bytes or less in STL text format plus the amount of sub parts needed to convert those tt:p that take up too much space. A single Disk can store 11242 TTI blocks. So if the sum of tt:p elements and needed sub parts exceeds 11242, the TND is calculated accordingly.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-124: Disk Sequence Number mapping

**Description**

The Disk Sequence Number (DSN) is set to 1 if the number of TTI block needed to match the tt:p elements in the EBU-TT file does not exceed 11242. Otherwise, the file is split into multiple STL XML files and the DSN of the respective files is incremented by 1 for each additional STL XML file up to the Total Number of Disks (TND).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

s

## requirement-416: CO parameter

**Description**

There is a parameter, e.g. called "CO", that defines the Country of Origin used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-125: Country of Origin mapping

**Description**

The Country of Origin (CO) in the STL XML file's GSI Header is taken from the CO parameter. If the parameter is not set, the element's value is taken from the EBU-TT file's ebuttm:documentCountryOfOrigin. If the element is not present in the source document, an empty CO element is generated. The country codes are mapped for the countries United Kingdom, Italy, Spain, France, Portugal and Germany.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-417: PUB parameter

**Description**

There is a parameter, e.g. called "PUB", that defines the Publisher used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-126: Publisher mapping

**Description**

The Publisher (PUB) in the STL XML file's GSI Header is taken from to the PUB parameter. If the parameter is not set, the element's value is taken from the EBU-TT file's ebuttm:documentPublisher. If the element is not present in the source document, the empty PUB element is generated. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaced are trimmed.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-418: EN parameter

**Description**

There is a parameter, e.g. called "EN", that defines the Editor's Name used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-127: Editor's Name mapping

**Description**

The Editor's Name (EN) in the STL XML file's GSI Header is taken from the EN parameter. If the parameter is not set, the element's value is taken from the EBU-TT file's ebuttm:documentEditorsName. If the element is not present in the source document, an empty EN element is generated. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-419: ECD parameter

**Description**

There is a parameter, e.g. called "ECD", that defines the Editor's Conact Details used in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-128: Editor's Contact Details mapping

**Description**

The Editor's Contact Details (ECD) in the STL XML file's GSI Header is taken from the ECD parameter. If the parameter is not set, the element's value is taken from the EBU-TT file's ebuttm:documentEditorsContactDetails. If the element is not present in the source document, an empty ECD element is generated. If the string converted to the STL XML file's text format requires more than 32 characters, it gets cut at the 32nd character. Leading and trailing spaces are trimmed.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

s

## requirement-129: User-Defined Area mapping

**Description**

The User-Defined Area (UDA) in the STL XML file's GSI Header is taken from the EBU-TT file's ebuttm:documentUserDefinedArea. If the element is not present in the source document, 576 bytes of spaces are used. If the string converted to the STL XML file's text format requires more than 576 bytes, it gets cut at the 576th byte. If the resulting last byte is a control code, it is replaced by a space.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-130: tt:p to TTI mapping

**Description**

For every tt:p element at least one new TTI element is created.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-131: Subtitle Group Number mapping

**Description**

The Subtitle Group Number (SGN) is a child of a TTI element. If the EBU-TT file was created from the STLXML2EBU-TT module, its value is calculated from the order of the tt:div parents of the currently processed tt:p element. For example, if the tt:div element is the first within the tt:body element, the value "0" is set for SGN.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-132: Subtitle Number mapping

**Description**

The Subtitle Number (SN) is a child of a TTI element. Its value is defined by the order of the tt:p elements. Its value is incremented by 1 for each further processed tt:p element. If the content of a tt:p converted to STL text format takes up more than 112 bytes of space, it has to be mapped to multiple TTI blocks. Each of these resulting TTI blocks has the same SN. For example, if the third tt:p element is currently processed, its SN is set to 2. For the fourth, the SN of all the TTI blocks needed to represent this tt:p is set to 3 and so on.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-133: Extension Block Number mapping

**Description**

If the currently processed tt:p element's content is short enough to fit in a single TTI-block, meaning its content converted to STL text format doesn't take up more than 112 bytes of space, the Extension Block Number (EBN) is set to 255 (FFh). Otherwise the tt:p element is split and the EBN of each resulting TTI-block is mapped according to EBU Tech 3264 (p.11).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-403: Offset parameter

**Description**

There is a parameter, e.g. called "offset", that describes if an offset shall be used for the time codes or not. The value of the parameter is either "0" if no offset shall be used, or the value of the desired offset in seconds.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-134: Time Code In mapping

**Description**

The TCI element is a child of the TTI element. Its value is the respective tt:p element's begin attribute's value converted into a smpte timecode taken into account the specified framerate from the DSC field with the format hhmmssff (hh = hours, mm = minutes, ss = seconds, ff = frames). If an offset in seconds is given by a parameter, this offset is added. If the value of the begin attribute does not conform to the expected time code format (taking into account the specified framerate) the transformation exits with an error message.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-138: Time Code Out mapping

**Description**

The Time Code Out (TCO) is a child of a TTI element. Its value is the respective tt:p element's end attribute's value converted into a smpte timecode with the format hhmmssff (hh = hours, mm = minutes, ss = seconds, ff = frames). If an offset in seconds is given by a parameter, this offset is added. If the value of the end attribute does not conform to the expected time code format (taking into account the specified framerate) the transformation exits with an error message.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-424: JC parameter

**Description**

There is a parameter, e.g. called "JC", that defines the Justification Code used for each TTI block in the resulting STL XML file.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

c

## requirement-142: Justification Code mapping

**Description**

The Justification Code (JC) is taken from the tts:textAlign attribute of the currently processed tt:p element. If the space attribute of the next ancestor is set to "preserve", the JC is set to 00 hex. Otherwise the mapping is done according to EBU Tech 3264 (p.13). If no tts:textAlign attribute value is applicable, the fall back value 02 hex (centred text) is used.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-143: Comment Flag mapping

**Description**

The Comment Flag (CF) is set to 1 if there exists an ebuttExt:comment element that's a child of a tt:metadata element which is the first child of the currently processed tt:p element and this comment hasn't been mapped yet to another TTI Block. Otherwise its value is set to 0. If the content of this ebuttExt:comment element converted to STL text format takes up more than 112 bytes of space, it has to be mapped to multiple TTI blocks and the CF of all resulting TTI blocks containing this data is set to 1 as well.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

s

## requirement-399: Comment mapping

**Description**

If there exists an ebuttExt:comment elements that's a child of a tt:metadata element which is the first child of the currently processed tt:p element, the content of this ebuttExt:comment element is mapped into in the Text field (TF) element of the TTI block whose Comment Flag (CF) was set to 1. If the content of this ebuttExt:comment element converted to STL text format takes up more than 112 bytes of space, it has to be mapped to multiple TTI blocks.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

s

## requirement-144: STL XML validation

**Description**

The resulting STL XML file has to be valid against the respective STL XML XSD.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-145: DoubleHeight parameter

**Description**

There is a parameter, e.g. called "doubleHeight", that can have three different values. Allowed values are "single", "double" or "default". If the parameter is set to "single", all subtitles in the processed EBU-TT file are interpreted as having singleHeight. If the parameter is set to "double", all subtitles in the processed EBU-TT file are interpreted as having doubleHeight. If the parameter is set to "default", the height for each TTI block is calculated if possible. In order to calculate if doubleHeight is used or not, the height of the text in relation to the height of the video is taken as reference for the calculation.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-146: DoubleHeight parameter handling

**Description**

If the "doubleHeight" parameter is set to "double", the first element in each row represented in the TF element is a DoubleHeight element.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-148: DSC parameter handling

**Description**

If the "DSC" parameter is set to 1 or 2, only the control codes applicable for teletext subtitles are used according to EBU Tech 3264 (p.14).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

reviewed

**Priority according to MoSCoW**

c

## requirement-149: Newline elements

**Description**

If the "doubleHeight" parameter is set to "double", a tt:br element is realised by two adjacent newline elements.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-150: DoubleHeight in a line

**Description**

If the "doubleHeight" parameter is set to "double" or it is set to "default" and for the currently created TTI block doubleHeight is calculated, the first element in a line (whereby a line break equals to two adjacent newline elements) is a DoubleHeight element.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

rejected

**Priority according to MoSCoW**

c

## requirement-151: tt:span element mapping

**Description**

If a tt:span element references a style with one ore more properties that do not apply through styles that were inherited, the differences between the inherited style properties and the new style properties are matched with the appropriate Control Codes according to EBU Tech 3264 Appendix 2 (p.24). If for example the current style references a black background with white foreground and the new style references a black background with a yellow foreground, only the Control Codes for changing the foreground are applied.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

underReview

**Priority according to MoSCoW**

c

## requirement-152: StartBox and EndBox placement

**Description**

Every line of text represented in a TF field is started by two StartBox and ended by two EndBox elements. The only element that comes before two StartBox elements in a line is the doubleHeight element if the usage of doubleHeight was either calculated or given by the doubleHeight parameter.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

inDiscussion

**Status Implementation**

underReview

**Priority according to MoSCoW**

c

## requirement-154: tt:br to newline mapping

**Description**

If the "doubleHeight" parameter is set to "double", a tt:br element within a tt:p element is mapped with two adjacent newline elements. Otherwise it is mapped with one newline element.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-155: Control Code interpretation

**Description**

In a Text Field (TF) the Control Codes between words act as spaces according to EBU Tech 3360 (p.41). The number of spaces in the TF element is equivalent to the number of spaces in the tt:p element if the spaces are intended to be preserved. Otherwise there's one space between two words. For example if the mapping of two words with a space between them would result in the two words with a space element and a Control Code between them, the space will be ignored.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-400: Supported styles mapping

**Description**

All color values of tts:color and tts:backgroundColor in an EBU-TT file are mapped to the colours supported in EBU STL according to EBU Tech 3264 Appendix 2 (p.24).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

waitingReview

**Priority according to MoSCoW**

c

## requirement-401: Style mapping

**Description**

If the EBU-TT file was created by transforming an STL XML file, a tt:span element referencing a new style is mapped as follows: First the difference to the currently applied style is identified. If the styles differ in the used background, the colour referenced for the background is identified. If the styles differ in the used foreground, the colour used for the text is identified. In both of these cases the colours are appropriate representations for the colours given in the table at EBU Tech 3360 4.4.7.1 (p.41). To map the tt:span element with the new background, the element representing the appropriate background colour's Control Code is given. Then a NewBackground element is set. To map the tt:span element with the new foreground, the element representing the appropriate text colour's Control is given. For example, a style referencing green text on yellow background that differs in both background and foreground from the previously referenced style (f.e. named "GreenOnYellow") is mapped by <AlphaYellow><NewBackground><AlphaGreen>.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

accepted

**Priority according to MoSCoW**

m

## requirement-157: Not supported character handling

**Description**

All characters not supported by the specified character code table for the tti block are ignored (see EBU Tech 3264 Appendix 2 for the characters supported by the different character code tables).

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c

## requirement-158: Referenced Code Page mapping

**Description**

All characters supported by the referenced Code Page are used correctly according to EBU Tech 3264 Appendix 2.

**Area**

EBU-TT2STLXML

**Requirement Review Status**

accepted

**Status Implementation**

outstanding

**Priority according to MoSCoW**

c