EBU
OPERATING EUROVISION AND EURORADIO

TECH 3390

EBU-TT, PART M
METADATA DEFINITIONS

METADATA ELEMENTS AND ATTRIBUTES FOR USE IN EBU-TT DOCUMENTS

VERSION: 1.0

SOURCE: SP/MIM – XML SUBTITLES

Geneva
May 2017

Conformance Notation

This document contains both normative text and informative text.

All text is normative except for that in the Introduction, any section explicitly labelled as 'Informative' or individual paragraphs which start with 'Note:'.

Normative text describes indispensable or mandatory elements. It contains the conformance keywords 'shall', 'should' or 'may', defined as follows:

'Shall' and 'shall not':	Indicate requirements to be followed strictly and from which no deviation is permitted in order to conform to the document.
'Should' and 'should not':	Indicate that, among several possibilities, one is recommended as particularly suitable, without mentioning or excluding others. OR indicate that a certain course of action is preferred but not necessarily required. OR indicate that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.
'May' and 'need not':	Indicate a course of action permissible within the limits of the document.

Default identifies mandatory (in phrases containing "shall") or recommended (in phrases containing "should") values that can, optionally, be overwritten by user action or supplemented with other options in advanced applications. Mandatory defaults must be supported. The support of recommended defaults is preferred, but not necessarily required.

Informative text is potentially helpful to the user, but it is not indispensable and it does not affect the normative text. Informative text does not contain any conformance keywords.

A conformant implementation is one which includes all mandatory provisions ('shall') and, if implemented, all recommended provisions ('should') as described. A conformant implementation need not implement optional provisions ('may') and need not implement them as described.

Documentation Conventions

If a reference to an element is used in this specification and the name of the element type is not namespace qualified, then the namespace http://www.w3.org/ns/ttml applies.

If a reference to an attribute is used in this specification and the name of the attribute is not namespace qualified, then the appropriate namespace for TT Parameter, TT Style or TT Metadata applies[1].

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[1] See EBU Tech 3350 [12], p. 11

Contents

Status of this document

This document is a stable document and may be used as reference material or cited from another document.

This document is part of a series of EBU-TT (EBU Timed Text) documents. The full list of published and planned EBU-TT documents is given below.

Part 1: EBU-TT Subtitling format definition (EBU Tech 3350)
Introduction to EBU-TT and definition of the XML based format.

Part 2: STL (Tech 3264) Mapping to EBU-TT (EBU Tech 3360)
How EBU-TT provides backwards compatibility with EBU STL.

Part 3: EBU-TT in Live Subtitling applications: system model and content profile for authoring and contributions (EBU Tech 3370)
How to use EBU-TT for the production and contribution of live subtitles.

EBU-TT WebSocket Carriage Specification (EBU Tech 3370s1)
Carriage of EBU-TT Part 3 over WebSocket

EBU-TT, Part D (EBU Tech 3380)
EBU-TT content profile for TTML that can be used for the distribution of subtitles over IP based networks.

Carriage of EBU-TT-D in ISOBMFF (EBU Tech 3381)
How EBU-TT-D can be stored using the storage format of the ISO Base Media File Format (ISO/IEC 14496-12).

EBU-TT, Part M: Metadata Definitions (EBU Tech 3390)
Definition of metadata elements and attributes for use in EBU-TT documents

EBU-TT Annotation
How EBU-TT can be used in future scenarios for 'authoring of intent'.

EBU-TT User Guide
General guide ('How to use EBU-TT').

EBU-TT, Part M

EBU–TT Metadata Definitions

EBU Committee	First Issued	Revised	Re-issued
TC	2017		

Keywords: subtitling, metadata, XML, W3C, TTML, DFXP, captions

Scope

The EBU-TT subtitle file format is intended for archiving, exchange and live subtitle transmission. The EBU-TT format, specified in EBU Tech 3350, uses TTML as a foundation technology and consequently a certain 'freedom of expression' is possible. Stated differently, it is technically possible to author subtitle files in EBU-TT that differ markedly from each other in internal XML structure yet should result in exactly identical visual outcomes when rendered / played. This document contains the formal definitions for metadata elements can be used within EBU-TT documents to describe characteristics of the contained subtitle data, thus facilitating interchange between users of an EBU-TT document.

Legacy formats for subtitle files already carry metadata or comment data. The EBU-TT Metadata entities defined by this document are intended to support industry accepted practises established by legacy formats. In addition, and where relevant, defined values for metadata entities have been extended from legacy uses to cater for subsequent developments in the broadcast industry (e.g. frame rates) since these legacy formats were standardised.

Only the definitions of the EBU-TT metadata elements and attributes are covered by this document; the use of those defined metadata elements within a specific use case (e.g. Archive, Legacy Subtitle File Conversion or Live Subtitling) is covered by the relevant primary EBU-TT document (i.e. EBU-TT Part 1 (EBU Tech 3350) [1], EBU-TT Part 2 (EBU Tech 3360) [2] and EBU-TT Part 3 (EBU Tech 3370) [3] respectively).

Definition of Terms

Captions and subtitles

The term "captions", especially in the USA, describes on-screen text for use by deaf and hard of hearing audiences. Captions include indications of the speakers and relevant sound effects. The term "subtitles", especially in European use, describes on-screen text for both translation and transcription (hearing loss) purposes. For easier reading only the term "subtitles" is used in this specification, since the EBU-TT file representation for captions and subtitles is identical. In this specification the term "captions" may be used interchangeably for the term "subtitles" (except where noted).

Active video

The term "active video" (known alias: Production Aperture) refers to the portion of the video signal that is used to carry picture information, as specified in SMPTE ST 2016-1:2009, §4 [4].

Active image

The term "active image" refers to the portion of the video picture area that is being utilized for programme content, as specified in SMPTE ST 2016-1:2009 §4. The active image excludes letter box bars and pillar box bars.

Subtitle Safe Area

The use of safe areas (for graphics, subtitles and important 'on screen' action) in television production ensures that the most important parts of the picture are seen by the majority of viewers. Older televisions can display less of the video outside of the safe area than ones made more recently. As a result of the deliberate 'over-scan' in analogue television sets, the presentation of subtitles over the active video is assumed to be restricted to a 'Subtitle Safe Area' within which the rows of the subtitle text are rendered. The subtitle characters are typically drawn 'inside a horizontal and vertical margin' over the active video. The position and exact proportion of the active video that may be covered by subtitle characters is undefined by specifications. A Subtitle Safe Area may typically be 80 to 90% of the height and width of the active video, roughly centred, with the horizontal margin similar in proportion of the active video to the vertical margin.

Subtitle zero

Many legacy subtitle files contain a 'subtitle zero' that is used to convey metadata that cannot be formally carried within the legacy file structure, or to provide a human readable copy of metadata. This 'subtitle zero' is typically the first subtitle in the file with timecode in-cue and out-cue values deliberately set outside of the range of the associated video file. (E.g. Time Code In = 00:00:00:00 Time Code Out = 00:00:00:08).[2]

Document Processing Context

The implied (or explicit) external context or environment internal to a content processor in which document processing occurs, and in which out-of-band protocols or specifications may define certain behavioural defaults, such as the most appropriate document processing strategy.

The processing of an EBU-TT file may be influenced by metadata. This use of metadata may itself be influenced by other information external to the processing context, e.g. company-specific default settings, house guidelines, analysis of associated content (e.g. video files) etc.

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[2] Typical practise is to include a **single** subtitle zero to contain information that is not intended for display. However, multiple subtitles with this characteristic might exist.

1.   EBU-TT Metadata Use

EBU-TT is intended as general purpose exchange format for subtitles. As an exchange format EBU-TT intrinsically also is an archiving format (see Figure 1).
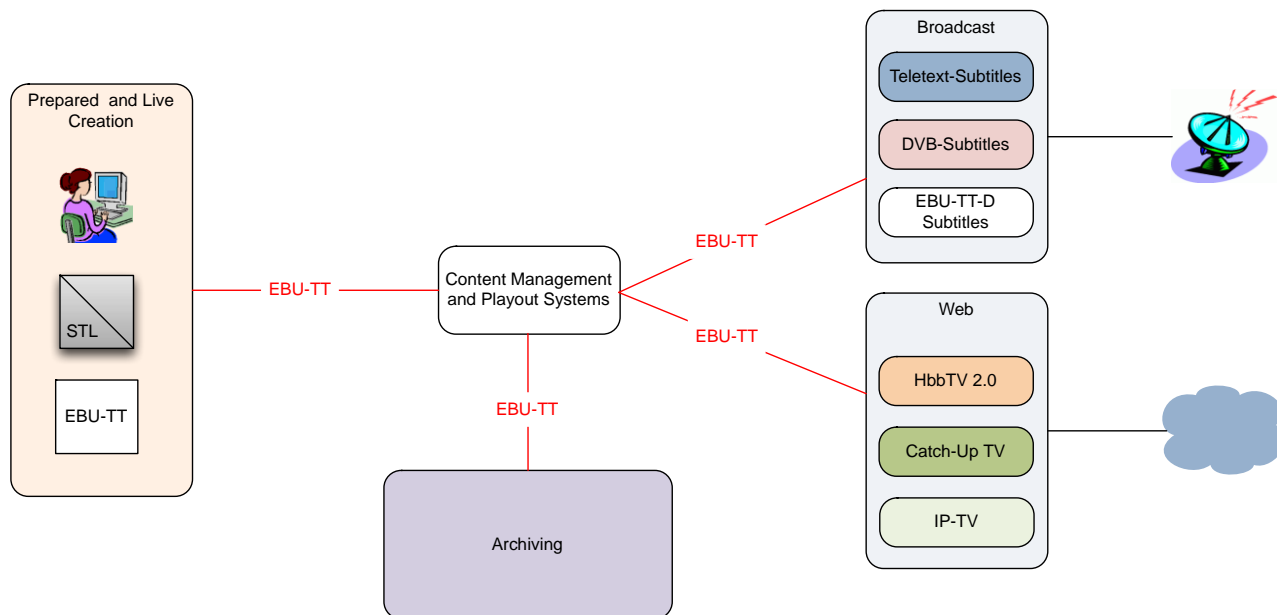
Figure 1: Use of EBU-TT within subtitling workflows

It should be appreciated that metadata may be included in EBU-TT subtitle files for different reasons at different points in a subtitling workflow. The use of a common metadata model facilitates the exchange of subtitle files; between systems of different vendors; and between authoring and archive systems and different distribution formats.

It should also be noted that EBU-TT format files may also be used in the distribution of video content to the viewer / end user, e.g. EBU-TT Part D (EBU Tech 3380) [5], although in these cases it is anticipated that the use of metadata within those distributed EBU-TT documents will be limited to metadata elements that have a specific role in the presentation and or the selection of the subtitle content.

2.   Generic constraints

The EBU-TT format defines constraints for an XML document instance. A valid EBU-TT XML document has to comply with the generic constraints and the document structure defined in EBU Tech 3350.

2.1   Namespaces

The following namespace related to metadata from TTML 1.0 [6] shall be used for the TTML metadata elements and attributes used in EBU-TT documents:

Name	Prefix	Value
TT Metadata	ttm:	http://www.w3.org/ns/ttml#metadata

The following namespace shall be used for the assignment of XML Schema datatypes:

Name	Prefix	Value
XML Schema	xs:	http://www.w3.org/2001/XMLSchema

The following namespace shall be used for the EBU-TT defined metadata:

Name	Prefix	Value
EBU-TT Metadata	ebuttm:	urn:ebu:tt:metadata

2.2   *Metadata and extensibility*

In accordance with EBU-TT Part 1, if an element has a `tt:metadata` element as child element, then the child `tt:metadata` element shall appear before all other child elements that are defined for this element by EBU-TT.

The content model of `tt:metadata` is as defined in TTML 1.0.

- The content model in TTML 1.0 allows tt:metadata to have zero or more **elements** as children.
- Child elements of tt:metadata can be in any namespace other than the namespaces defined in TTML 1.
- The only **namespace from TTML** that child elements of tt:metadata are allowed to have is the TT metadata namespace (http://www.w3.org/ns/ttml#metadata).
- The content model in TTML 1.0 allows tt:metadata to have zero or more **attributes** in any namespace other than the namespaces defined in TTML 1.0.
- The only **namespace from TTML** that attributes of tt:metadata are allowed to have is the TT metadata namespace (http://www.w3.org/ns/ttml#metadata).

2.3   *Fonts and Metadata (Informative)*

The correct, or expected, rendering of text is dependent on several factors, including the display resolution, the font layout algorithm and the font selected, for example. It is not always reasonable to expect that all presentation processors will find the same glyph for every Unicode code point in content with a given value of `tts:fontFamily`, and that any particular line of rendered text will always occupy the same size block of pixels.

However it is important that the author's intent in the presentation of a specific piece of subtitle text is honoured as closely as possible. In particular, text ought not to occupy more space than has been allocated, lest there be unwanted line breaks or overflows, and all glyphs should be presented accurately.

In a broadcast context, the point of creation of an EBU-TT Part 1 document is likely to be an authoring station of some sort, and the primary consumption point is typically an encoder, for example a processor that creates an EBU-TT Part D output, or a renderer that rasterises the input into a bitmap graphic. To varied extents, the organisations involved can arrange some shared resources or knowledge to minimise the differences in behaviour between authoring station and encoder / renderer. They may for example agree a specific font or set of fonts in which the output is permitted to be presented.

Put simply, each font resource (which could be stored as a font 'file') describes a set of glyphs, each corresponding to a code point, with instructions on how to draw each glyph and metrics such as size and spacing. Different variants of font can exist, each with a different font resource for different font weights (normal or bold), or for different font styles (normal, italic). The font therefore defines a substantial set of the information that could usefully be shared between author and encoder to minimise the described potential differences in the appearance of text.

When rendering an EBU-TT document every implementation needs to map the processed set of styles for any content, including `tts:fontFamily`, `tts:fontWeight`, `tts:fontStyle` and the computed font size into a set of glyphs and metrics obtained from an appropriate font resource. The `tts:fontFamily` name does not have to map directly to the file name of an installed font, for example. The EBU-TT specifications do not specify an executive mechanism to direct processors

in exactly how they must do this. However EBU-TT does offer metadata that can be used to identify potential mismatches between the font assumed at authoring and the fonts available when processing or rendering an EBU-TT document.

The `ebuttm:font` metadata element can be used to specify a URI to indicate which font resource was used when authoring the document, for a given combination of font family name, weight and style, and for bitmap fonts, size. This URI could be a filename, an address on a local server, or perhaps a URL pointing to a globally available resource. If a downstream processor needs to render the content and is not able to recognise or dereference that URI, it could present a warning that there is a potential problem that needs to be addressed. This therefore can be used operationally as a check to help ensure that authored documents are likely to be presented correctly.

Of course there remain other variables that could differ, and that have an impact here, such as the text layout algorithm, however those variables are likely to remain static for any particular chain of equipment or workflow and might therefore be managed at setup time rather than on a document by document basis.

2.4   *Describing Facets of the Subtitle Content (informative)*

In a prepared or a live subtitling environment it can be useful to indicate some aspect of the editorial or technical quality of a particular piece of content, for example if it has been spellchecked, profanity checked, had its code point set reduced for downstream compatibility, had colours applied, been positioned etc. The `ebuttm:facet` element can be used to meet this requirement.

One or more `ebuttm:facet` elements can be added as children of a `tt:metadata` element associated with any content, and can indicate via the `expresses` attribute of the `ebuttm:facet` element whether that content *has* ("`has`") or *does not have* ("`has_not`") the facet indicated by a term in a classification scheme. It is also possible to indicate if it is *unknown* if the content has the facet ("`unknown`"). This mechanism is therefore inherently extensible; it should be noted that no classification schemes are listed or defined by in this specification.

The `ebuttm:facet` element should contain either a text label (as the element contents) or a `link` attribute to link to a term in a classification scheme or both. A facet with an empty text label that also omits the `link` attribute has no meaning.

When multiple facets are applied to the same piece of content they are considered to be orthogonal and additive; it is an error to apply more than one facet with the same 'term identifier' to the same content element, where the 'term identifier' is the combination of any text content of the `ebuttm:facet` element and any `link` attribute's value.

Facets are inherited, but may be overridden in a descendant element. For example, a document that was emitted by a spelling checker Improver node with a *has* "spell-checked" facet applied to the `tt:body` element could be edited further, resulting in an ad hoc insertion of new text, say in a `span` element. That span element could reasonably have the *has_not* "spell-checked" facet applied to override the inherited value.

This inheritance rule implies that implementations need to take care not to assume that a facet applied to a content element automatically applies also to all of its descendants, since any one of those descendants can specify an alternate sense of the `expresses` attribute.

Note: Where both a text label and a `link` attribute are present, implementations are expected to include precedence rules to handle the possible scenario in which the two do not agree, that is, if the `link` resolves to a classification scheme 'term item' whose label differs from the text contents of the `ebuttm:facet` element.

2.4.1   Document level summaries of facets

The `ebuttm:documentFacet` element may be added to a `tt:metadata` element in the `tt:head` or `tt:tt` element to provide a document level summary of a particular facet.

Rather than an `expresses` attribute the `ebuttm:documentFacet` element has a `summary` attribute, that takes the values `"all_has"`, `"mixed"`, `"all_has_not"` or `"unspecified"`. If all the content in a document *has* a facet then the summary shall be `"all_has"`. If all the content in a document *has_not* a facet then the summary shall be `"all_has_not"`. If there is a mix of *has* and *has_not* and *unknown* or if some of the content does not have the facet then any `expresses` attribute summary value shall be `"mixed"`. If none of the document's content has the facet or all of the document's content has the facet described as *unknown* then any `expresses` attribute summary shall be `"unspecified"`. The value `"unspecified"` is chosen to differ from `ebuttm:facet`'s `expresses` attribute value `"unknown"` deliberately to avoid confusion between their subtly different meanings. The `ebuttm:documentFacet` element is otherwise identical in use to the `ebuttm:facet` element.

2.5   *Applied processing metadata and STL file conversion (informative)*

The EBU-TT Part 2 specification (EBU Tech 3360) recommends that the strategies and parameters used during the conversion process should be recorded in an `ebuttm:appliedProcessing` element. This `ebuttm:appliedProcessing` element is recommended to contain a process attribute indicating the process of conversion with a value of "convertFromSTL" and an appliedDateTime attribute containing a 'datetime' value to identify when the conversion occurred.

It is further recommended that additional child elements (defined below) are used to record the parameters used and any Document Processing Context determinations made about the source STL file during conversion. The following two metadata elements are defined by this specification. They should be used in accordance with EBU-TT Part 2.

The `ebuttm:stlConversion` element may contain parameters and/or context child elements that record the parameters and/or Document Processing Context determinations relevant to the conversion process.

The `ebuttm:stlParameter` element may record the value of an identified parameter or Document Processing Context determination applied to the conversion process.

2.6   *Document Structure*

The formal definition of the EBU-TT metadata is presented in tabular form.

Definitions used within this specification:

Type:	Constraints of the information structure of an XML element or XML attribute. The type can be further constrained through Enumerations and normative text in the description.
Enumeration:	Enumerated values that shall be used for certain elements or attributes of type `xs:string`.
Cardinality:	How often an element or attribute may be used inside the corresponding parent element. If the lower bound is greater than 0 (e.g. "1..1" or "1..*") the element or attribute is mandatory at this position of the document structure. If the lower bound is equal to 0 (e.g. "0..1" or "0..*") the element or attribute is optional at this position in the document structure.
Description	A general normative description of the defined element or attribute.
Position	The relative position of an element or attribute in an EBU-TT Document as an XPATH [7] expression. A default namespace of "http://www.w3.org/ns/ttml" is assumed and elements without a prefix in the XPATH expression are in that

default namespace.

Significance	The significance of the information contained within the defined element or attribute with respect to the document contents. Significance of information may generally have document scope or local scope.

3. Metadata Definitions

The contents of this section define a set of metadata entities within the `ebuttm:` namespace, each element of which may be used where needed within other EBU-TT documents.

Unless otherwise specified in this document or by another specification:

Metadata elements apply both to the element in which they appear and to that element's descendants (i.e. they are inherited).

With the exception of the deprecated `ebuttm:documentMetadata` element[3], EBU-TT defined metadata elements are only allowed under `tt:metadata`.

Within the `tt:metadata` element, no further constraints are specified.

Cardinality for all metadata elements: 0..*.

Metadata elements are allowed in any order.

Some elements are only meaningful once within the document, these elements should be placed within a `tt:metadata` element that is placed in `/tt/head/`. Where an element appears multiple times in the document (perhaps as a 'historical record'), **but is considered meaningful only once**, ONLY the first occurrence in the document is considered significant. If the first occurrence of such a repeated element has no content, this is equal to setting the value for this element to empty and this empty value is still the significant occurrence. The first occurrence in the document is defined by the XPATH expression /tt//metadataElementName [7].The significance of specific metadata elements is documented in the following sections.

Note: For simplicity, the term 'containing element' of a metadata element in the following sections refers to the parent (containing) element of the `tt:metadata` element that contains the metadata.

The following metadata definition include elements to support the information that is present in the GSI block of the EBU-STL specification (EBU Tech 3264) [8]. EBU-TT has adopted the semantics from EBU Tech 3264. These metadata elements are identified by a corresponding STL Mapping and are listed in EBU-TT Metadata UseAnnex A: Metadata Support of the STL (Tech 3264) GSI Block in EBU-TT.

If more than one STL source file is used to generate an EBU-TT document the GSI metadata shall not be mapped into `ebuttm:documentMetadata` elements unless the value of a GSI field is the same across all STL documents. Note that in accordance with EBU-TT Part 2 (EBU Tech 3360) there is the possibility to preserve the GSI data from multiple STL source files by tunnelling the STL files as binary data.

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[3] Earlier versions of the EBU-TT Part 1 specification also allowed metadata elements under an ebuttm:documentMetadata container element in the document head. This element is deprecated and should only be used in documents that require strict conformance to EBU-TT Part 1 version 1.0. For more information please refer to the EBU-TT Part 1 version 1.0 document.

3.1   ebuttm:appliedProcessing

Type	Mixed content.
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants in addition to any appliedProcessing elements specified on ancestors.
Description	Label or identifier for a specific processing step that has been applied to the EBU-TT document. If more than one ebuttm:appliedProcessing element is specified in an EBU-TT document their order does not apply any meaning.

The applied ebuttm:appliedProcessing element may have zero or more elements as children. These elements, their attributes and their XML Content shall not be in a namespace defined by TTML 1.0 or in a namespace defined in the EBU-TT specification.

A specific usage of this element is documented in the EBU-TT Part 3 (EBU Tech 3370) specification and in the EBU-TT Part 2 (EBU Tech 3360) specification. |

The ebuttm:appliedProcessing element has the following optional attributes:

3.1.1   appliedDateTime (attribute)

Type	xs:dateTime
Cardinality	0..1
Position	//ebuttm:appliedProcessing
Description	Date and time the processing step has been applied to the EBU-TT document.

3.1.2   process (attribute)

Type	xs:string
Cardinality	0..1
Position	//ebuttm:appliedProcessing
Description	The process or action being recorded by this ebuttm:appliedProcessing element.

3.1.3   generatedBy (attribute)

Type	xs:anyURI
Cardinality	0..1
Position	//ebuttm:appliedProcessing
Description	An identifier for the processing context that performed any 'process' recorded by this ebuttm:appliedProcessing element.

3.1.4   sourceId (attribute)

Type	xs:anyURI
Cardinality	0..*
Position	//ebuttm:appliedProcessing
Description	An identifier for any processing context(s) that supplied any source content used in processing the document content 'tagged' by this ebuttm:appliedProcessing element.

3.2   *ebuttm:authoringDelay (attribute)*

Type	`xs:decimal ("h" | "m" | "s" | "ms")`
	
	This is a signed (positive or negative) number with an optional decimal fraction, followed by a time metric being one of:
	
	   • "h" (hours)
	   • "m" (minutes)
	   • "s" (seconds)
	   • "ms" (milliseconds)

Significance	Should be placed in /tt element.

Description	The value of `ebuttm:authoringDelay` is intended to express the latency associated with a live subtitle authoring or generation process. This value is a composite of the time taken to create or author the subtitle text and the time taken for the release of the subtitle. It is feasible for the authoring delay to be expressed as a negative value, (e.g. for an automated cueing process, where predicting and releasing a subtitle in advance might result in a negative value).
	
	The time interval expressed might typically be:
	
	   • Sub-frame for an automated prepared file play out process;
	   • the operator's reaction time for live cued subtitles;
	   • the 'listening and thinking' time of the subtitler plus the subtitling applications' processing time for stenography or re speaking in live origination.
	
	A specific usage of this element is documented in EBU-TT Part 3 (EBU Tech 3370).

3.3 ebuttm:authoringTechnique

Type	`xs:string`
Significance	Applies to containing element and descendants. Where a descendant specifies a different value that value overrides the inherited one. The first occurrence is significant where multiple values are specified on any single element.
Description	The `ebuttm:documentAuthoringTechnique` identifies tools and techniques used to create the content in the document. The value applies to the element that it is present on and all of its descendants except those that specify a different `ebuttm:authoringTechnique` element. It overwrites the value of an `ebuttm:authoringTechnique` element that was specified on an ancestor element. The EBU publishes a Classification Schema (CS) that may be used for values of `ebuttm:authoringTechnique`. The classification schema is available at: http://www.ebu.ch/metadata/cs/EBU-TTAuthoringTechniqueCS.xml If the above EBU CS is used the value of `ebuttm:authoringTechnique` should be the English name of the term in that classification scheme. The URI to the term should be specified by using the link attribute. **Note:See *https://tech.ebu.ch/MetadataReferenceData* for more information how a classification scheme is referenced.** Sample Value: "typing" or "respeaking"

3.3.1 link (attribute)

Type	`xs:anyURI`
Cardinality	0..1
Position	//ebuttm:authoringTechnique
Description	Reference to a term in a classification scheme. The `ebuttm:authoringTechnique` element may have a `link` attribute to reference a term in a classification scheme. **Note:It is recommended to use the CS published at http://www.ebu.ch/metadata/cs/EBU-TTAuthoringTechniqueCS.xml** Sample Value: http://www.ebu.ch/metadata/cs/EBU-TTAuthoringTechniqueCS.xml#1.1

3.4 *ebuttm:authorsGroupSelectedSequenceIdentifier (attribute)*

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant includes a specified value that value overrides the inherited one.
Description	The `ebuttm:authorsGroupSelectedSequenceIdentifier` carries the identifier of the sequence that was selected as the active sequence by a Handover Manager node in an EBU-TT Part 3 workflow. By receiving documents that contain this element a node can determine which sequence the transmitting node considers 'active'. This may be used to provide feedback to subtitle author (or document generating node) so they can know if their output is "on air" or if another author's output is currently selected.
	A specific usage of this element is documented in the EBU-TT Part 3 (EBU Tech 3370) specification.

3.5 *ebuttm:binaryData*

Type	`xs:string`
Significance	If applies to the whole document, should be placed in /tt/head/metadata or in /tt/body/div[last()], i.e. the last tt:div element child of the tt:body element. Otherwise applies to containing element and descendants.
Description	Container for transporting binary data. The binary data is encoded in one text string.
	The `ebuttm:binaryData` element may be used to transport binary data of the input formats or associated documents used to generate an EBU-TT document.
	Where a sequence of source documents has been used to generate an EBU-TT document, multiple `ebuttm:binaryData` elements should be in the same order as the sources were processed.
	A specific usage of this element is documented in the EBU-TT Part 2 (EBU Tech 3360) specification.

The `ebuttm:binaryData` element has the following mandatory attributes:

3.5.1 textEncoding (attribute)

Type	`xs:string`
Enumeration	"BASE64"
Cardinality	1..1
Position	//ebuttm:binaryData
Description	Text encoding of the binary data. The text-encoding shall have the value "BASE64".

3.5.2   binaryDataType (attribute)

Type	xs:string
Cardinality	1..1
Position	//ebuttm:binaryData
Description	Internal format of the binary data. Any format that is not defined by this document or another EBU Specification shall be prefixed with "x-". To indicate that the binary data sent in a containing EBU-TT document is an STL file, the value "EBU Tech 3264" shall be used. To indicate that the binary data sent in a containing EBU-TT document is STL user data stored in TTI blocks, the value "STL User Data" shall be used.

The ebuttm:binaryData element may have the following optional attributes:

3.5.3   fileName (attribute)

Type	xs:string
Cardinality	0..1
Position	//ebuttm:binaryData
Description	A filename that may be used to identify the original filename of the tunnelled binary data.

3.5.4   creationDate (attribute)

Type	xs:date
Cardinality	0..1
Position	//ebuttm:binaryData
Description	The date of creation of the tunnelled data. If the tunnelled data is a STL file this attribute shall be used to store the value of the GSI field Creation Date (CD) of the tunnelled STL file. The metadata element ebuttm:stlCreationDate shall not be used in this case.

3.5.5   revisionDate (attribute)

Type	xs:date
Cardinality	0..1
Position	//ebuttm:binaryData
Description	The date of the most-recent modifications of the tunnelled data. If the tunnelled data is a STL file this attribute shall be used to store the value of the GSI field Revision Date (RD) of the tunnelled STL file. The metadata element ebuttm:stlRevisionDate shall not be used in this case.

3.5.6   revisionNumber (attribute)

Type	xs:nonNegativeInteger
Cardinality	0..1
Position	//ebuttm:binaryData
Description	The revision number of the tunnelled data. If the tunnelled data is a STL file this attribute shall be used to store the value of the GSI field Revision Number (RN) of the tunnelled STL file. The metadata element ebuttm:stlRevisionNumber shall not be used in this case.

3.6   ebuttm:broadcastServiceIdentifier

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value it is added to the inherited values. When multiple values are specified they all apply.
Description	Identifier for a broadcast service the subtitles of an EBU-TT document were distributed to, or intended for. **Note:A broadcast service is a TV channel, transmission or other distribution of AV content. Identical content (e.g. a live event) may be distributed on multiple services simultaneously. There exists a requirement to identify the service(s) that a captured archive (as an EBU-TT document) of live authored subtitles were distributed to, or are intended to be used for. The services associated with a stream of subtitles may change over the duration of the recorded archive.** A specific usage of this element is documented in the EBU-TT Part 3 (EBU Tech 3370) specification.

The `ebuttm:broadcastServiceIdentifier` element has the following mandatory attributes:

3.6.1   serviceBegin (attribute)

Type	`xs:dateTime`
Cardinality	0..1
Significance	//ebuttm:broadcastServiceIdentifier
Description	Start of the period (expressed as a date and time of day) for which subtitles within the document have been distributed or targeted to the identified service.

3.6.2   serviceEnd (attribute)

Type	`xs:dateTime`
Cardinality	0..1
Position	//ebuttm:broadcastServiceIdentifier
Description	End of the period (expressed as a date and time of day) for which subtitles within the document have been distributed or targeted to the identified service.

3.7 *ebuttm:conformsToStandard*

Type	xs:anyURI	
Significance	Should be placed in /tt/head/metadata since it applies to the whole document. Multiple occurrences in /tt/head/metadata indicate conformance to all listed standards.	
Description	Indicates the conformance with a specific standard that is derived from TTML 1.0. The following list of <u>**historical values**</u> for this element identify previous versions of related EBU-TT documents published prior to this document. To indicate conformance with later versions of specific EBU-TT specifications see the relevant specification documents for the correct/latest values.	
	EBU-TT Part 1 version 1.1[4]	"urn:ebu:tt:exchange:2015-09"
	EBU-TT Part 1 version 1.2	"urn:ebu:tt:exchange:2017-05"
	EBU-TT-D version 1.0	"urn:ebu:tt:distribution:2014-01"
	EBU-TT Part 3 version 1.0	" urn:ebu:tt:live:2017-05"
	EBU-TT Part 2 version 1.0	"urn:ebu:tt:exchange:stl-mapping:2017-05"

3.8 *ebuttm:documentBeginDate*

Type	ebuttdt:noTimezoneDateType
Significance	**Meaningful once.** Should be placed in /tt/head/metadata since it applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The value of ebuttm:documentBeginDate shall be the corresponding date of creation of the earliest begin time expression (i.e. the begin time expression that is the first coordinate in the document time line). The metadata element ebuttm:documentBeginDate may be used to establish a synchronisation point between the document timeline and a referenced real world time line (as may be identified by the metadata element ebuttm:localTimeOffset and metadata element ebuttm:referenceClockIdentifier) for documents that typically represent recordings of real world subtitles. The timezone shall not be specified. The timezone of metadata element ebuttm:documentBeginDate is the same timezone that is applied to the earliest begin time expression in the document. **Note: When ttp:timebase is "clock" the ebuttm:documentBeginDate metadata element would typically contain a date in the past, but could also be used to establish a synchronisation point between the document contents and a real world time and date that lies in the 'future'.**

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[4] EBU-TT Part 1 version 1.0 did not use the ebuttm:conformsTostandard metadata element. See ebuttm:documentEbuttVersion.

3.9   ebuttm:documentContentType

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value it overrides the inherited one. When multiple values are specified on an element the first one applies.
Description	The `ebuttm:documentContentType` element may be used to classify the document content by its intended presentation usage. The EBU publishes a Classification Schema (CS) that may be used for values of `ebuttm:documentContentType`. The classification schema is available at: http://www.ebu.ch/metadata/cs/EBU-TTContentTypeCS.xml If the above EBU CS is used the value of `ebuttm:documentContentType` should be the English name of the term in that classification scheme. The URI to the term should be specified by using the link attribute. **Note: See *https://tech.ebu.ch/MetadataReferenceData* for more information how a classification scheme is referenced.** Sample Value: "audio description" or "hard of hearing subtitles"

The `ebuttm:documentContentType` element has the following optional attribute:

3.9.1   link (attribute)

Type	`xs:anyURI`
Cardinality	0..1
Position	//ebuttm:documentContentType
Description	Reference to a term in a classification scheme. This element may have a `link` attribute to reference a term in a classification scheme. **Note: It is recommended to use the CS published at:** *http://www.ebu.ch/metadata/cs/EBU-TTContentTypeCS.xml* Sample Value: http://www.ebu.ch/metadata/cs/EBU-TTContentTypeCS.xml#1.1

3.10 *ebuttm:documentCountryOfOrigin*

Type	`xs:string`
STL mapping	Country of Origin (CO)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value it overrides the inherited value(s). Where multiple values are specified on the same element this indicates that the subtitle list originated in all the listed countries.
Description	The country of origin of the subtitle list. **The `ebuttm:documentCountryOfOrigin` element shall not be used as a substitute for the `xml:lang` attribute of the `tt:tt` element.** **Note: Although three letter country codes must be supported to be compatible with STL the use of two letter country codes is recommended. The use of ISO3166 country codes "Codes for the representation of names of countries and their subdivisions" [9] is also recommended.**

3.11 *ebuttm:documentCreationDate*

Type	`xs:date` OR `xs:datetime`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The date (and optionally the time) of creation of the EBU-TT document. The value of `ebuttm:documentCreationDate` shall not change for subsequent revisions of the EBU-TT document. The `ebuttm:documentCreationDate` metadata element should not be used for the date of creation of the STL file the EBU-TT document was created from. For this purpose the metadata element `ebuttm:stlCreationDate` should be used. **Note: The `ebuttm:documentCreationDate` value can differ from the `ebuttm:documentBeginDate` value (if present), as the earliest begin time expression in the document can occur before or after the creation date and time of the document.** Sample Value: "2012-06-30" A specific usage of this element is documented in EBU-TT Part 3 (EBU Tech 3370) where the use of `xs:datetime` values in this element is documented to support document latency tracking in live use cases.

3.12   ebuttm:documentCreationMode

Type	`xs:string`
Enumeration	`"live"	"prepared"`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value that value overrides the inherited one. Where multiple values are specified on an element only the first one is significant.
Description	The `ebuttm:documentCreationMode` identifies the overall workflow used to create the content in the document. The value "live" is intended to signify content that was originated out in real-time at the time of transmission. The value "prepared" is intended to signify content that has been prepared prior to transmission.

3.13   ebuttm:documentEditorsContactDetails

Type	`xs:string`
STL mapping	Editor's Contact Details (ECD)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value it overrides the inherited value(s). Where multiple values are specified on the same element this indicates that the document was edited by all the listed editors.
Description	Information about the editor named in the metadata element `ebuttm:documentEditorsName.`

3.14   ebuttm:documentEditorsName

Type	`xs:string`
STL mapping	Editor's Name (EN)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where a descendant specifies a value it overrides the inherited value(s). Where multiple values are specified on the same element this indicates that the document was edited by all the listed editors.
Description	Name of the editor of the subtitle list.

3.15   *ebuttm:documentFacet*

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata as applies to the whole document.
Description	The `documentFacet` element indicates a **document level summary** of a facet that applies to the document's content as defined by the `facet` element. The value may be the name of a term in a classification scheme, whose term should be identified by the `link` attribute. • Each distinctly identified facet that is summarised shall have a separate `documentFacet` element. • Empty `documentFacet` elements should have a `link` attribute. • Documents shall NOT contain more than one `documentFacet` element referring to the same term, where the term is identified by the combination of the element text contents and the value of the `link` attribute. A specific usage of this element is documented in the EBU-TT Part 3 (EBU Tech 3370) specification.

The `ebuttm:documentFacet` element may have the following optional attributes:

3.15.1   link (attribute)

Type	`xs:anyUri`
Cardinality	0..1
Position	//ebuttm:documentFacet
Description	Reference to a term in a classification scheme. The `link` attribute should be present if the `documentFacet` element is empty.

3.15.2   summary (attribute)

Type	`"all_has"` | `"mixed"` | `"all_has_not"` | `"unspecified"`
Cardinality	0..1
Position	//ebuttm:documentFacet
Initial	`"all_has"`
Description	The summary of document content for this facet, i.e. the application of `facet` elements with the same term. • The value `"all_has"` shall be used if all of the document's content has this facet. • The value `"mixed"` shall be used if the document's content contains multiple values of the `expresses` attribute for this facet, or if it is not applied to some of the content. • The value `"all_has_not"` shall be used if all of the document's content has this facet with the `expresses` attribute set to `"has_not"`. • The value `"unspecified"` shall be used if none of the document's content has this facet applied or if all of the document's content has this facet with the `expresses` attribute set to `"unknown"`.

3.16   ebuttm:documentIdentifier

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where descendants additionally specify a value the meaning is defined by the document processing context. Where multiple values are specified on a single element the meaning is defined by the document processing context.
Description	Identifier for an EBU-TT document that may be used as external reference to an EBU-TT document. The format of the identifier may be an URI.

3.17   ebuttm:documentIntendedTargetBarData

Type	`xs:string`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	When an `ebuttm:documentTargetActiveFormatDescriptor` element is used in an EBU-TT document, an `ebuttm:documentIntendedTargetBarData` element may be used whenever the AFD alone is insufficient to describe the extent of the image (i.e. AFD values 0000 and 0100). The Bar Data shall be specified in accordance with SMPTE ST 2016-1:2009 "Format for Active Format Description and Bar Data" [4] Table 3.

The `ebuttm: documentIntendedTargetBarData` element has the following mandatory attribute:

3.17.1   position (attribute)

Type	`xs:string`
Enumeration	`"topBottom"	"leftRight"`
Cardinality	1..1
Position	//ebuttm:documentIntendedTargetBarData
Description	Bar Data shall be defined in pairs, either top and bottom bars or left and right bars, but not both pairs at once. Bars may be unequal in size. One bar of a pair may be zero width or height. If the position attribute has the value "topBottom" then the `ebuttm:documentIntendedTargetBarData` element shall also contain the `lineNumberEndOfTopBar` and `lineNumberStartOfBottomBar` attributes. If the position attribute has the value "leftRight" then the `ebuttm:documentIntendedTargetBarData` element shall also contain the `pixelNumberEndOfLeftBar` and `pixelNumberStartOfRightBar` attributes.

The `ebuttm: documentIntendedTargetBarData` element has the following optional attributes depending on the value of the mandatory `position` attribute:

3.17.2 lineNumberEndOfTopBar (attribute)

Type	`xs:nonNegativeInteger`
Cardinality	0..1[5]
Significance	//ebuttm:documentIntendedTargetBarData
Description	Last line of a horizontal letter-box bar area at the top of the reconstructed frame. Designation of line numbers shall be based on the video standards and information specified in accordance with SMPTE ST 2016-1:2009 [4]. All Bar Data values shall be stated in values appropriate to a progressive frame system.

3.17.3 lineNumberStartOfBottomBar (attribute)

Type	`xs:nonNegativeInteger`
Cardinality	0..15
Significance	//ebuttm:documentIntendedTargetBarData
Description	First line of a horizontal letter-box bar area at the bottom of the reconstructed frame. Designation of line numbers shall be based on the video standards and information specified in accordance with SMPTE ST 2016-1:2009 [4]. All Bar Data values shall be stated in values appropriate to a progressive frame system.

3.17.4 pixelNumberEndOfLeftBar (attribute)

Type	`xs:nonNegativeInteger`
Cardinality	0..15
Significance	//ebuttm:documentIntendedTargetBarData
Description	Last horizontal luminance sample of a vertical pillar-box bar area at the left side of the reconstructed frame. Pixels shall be numbered from zero, starting with the leftmost pixel, based on the video standards and information specified in accordance with SMPTE ST 2016-1:2009 [4].

3.17.5 pixelNumberStartOfRightBar (attribute)

Type	`xs:nonNegativeInteger`
Cardinality	0..15
Significance	//ebuttm:documentIntendedTargetBarData
Description	First horizontal luminance sample of a vertical pillar-box bar area at the right side of the reconstructed frame. Pixels shall be numbered from zero, starting with the leftmost pixel, based on the video standards and information specified in accordance with SMPTE ST 2016-1:2009 [4].

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[5] Depending on the value of the mandatory `position` attribute

3.18   ebuttm:documentIntendedTargetFormat

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where multiple values are specified they all apply.
Description	Indicates the format to whose constraints the EBU-TT document is intended to conform. This may be used to indicate that the document contents are suitable for conversion to the referenced format. The EBU publishes a Classification Schema (CS) that may be used for values of `ebuttm:documentIntendedTargetFormat` . The classification schema is available at: http://www.ebu.ch/metadata/cs/EBU-TTSubtitleTargetFormatCodeCS.xml If the above EBU CS is used the value of `ebuttm:documentIntendedTargetFormat` should be the English name of the term in that classification scheme. The URI to the term should be specified by using the link attribute. **Note: See *https://tech.ebu.ch/MetadataReferenceData* for more information how a classification scheme is referenced.** Sample Value: "Enhanced Teletext Level 1.5" or "DVBBitmapSubtititles"

The ebuttm: documentIntendedTargetFormat element has the following optional attribute:

3.18.1   link (attribute)

Type	`xs:anyURI`
Cardinality	0..1
Position	//ebuttm:documentIntendedTargetFormat
Description	Reference to a term in a classification scheme. The `ebuttm:documentIntendedTargetFormat` element may have a `link` attribute to reference a term in a classification scheme. **Note: It is recommended to use the CS published at:** *http://www.ebu.ch/metadata/cs/EBU-TTSubtitleTargetFormatCodeCS.xml* Sample Value: http://www.ebu.ch/metadata/cs/EBU-TTSubtitleTargetFormatCodeCS.xml#1.1

3.19   ebuttm:documentMaximumNumberOfDisplayableCharacterInAnyRow

Type	`xs:nonNegativeInteger`
STL mapping	Maximum Number of Displayable Characters in any text row (MNC)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Descendant values override inherited values. First occurrence (at each repeated occurrence) is significant value.
Description	Maximum number of characters in any row.

3.20   ebuttm:documentOriginalEpisodeTitle

Type	xs:string
STL mapping	Original Episode Title (OET)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The title of the episode of the programme in the original language.

3.21   ebuttm:documentOriginalProgrammeTitle

Type	xs:string
STL mapping	Original Programme Title (OPT)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The programme title in the original language.

3.22   ebuttm:documentOriginatingSystem

Type	xs:string
Significance	Should be placed in /tt/head/metadata if applies to the whole document. First occurrence in the document signifies value for whole document. Otherwise applies to containing element and descendants. Descendant values override inherited values.
Description	Software and version used to create the EBU-TT document.

3.23   ebuttm:documentPublisher

Type	xs:string
STL mapping	Publisher (PUB)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Where descendant values are specified, or multiple values are specified on an element, the meaning is defined by the document processing context.
Description	Name of the publisher of the subtitle list.

3.24   ebuttm:documentReadingSpeed

Type	xs:positiveInteger
Significance	Should be placed in /tt/head/metadata if applies to the whole document. First occurrence in an element signifies value for that element. Otherwise applies to containing element and descendants. Descendant values override inherited values.
Description	The intended average reading speed for each subtitle in words per minute.

3.25   ebuttm:documentRevisionDate

Type	`xs:date`
Significance	Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The date of the most-recent modifications to the EBU-TT document. The value of `ebuttm:documentRevisionDate` shall reflect the date of a published revision. The revision date of the first version shall be the same as the metadata element `ebuttm:documentCreationDate`. The `ebuttm:documentRevisionDate` element should only be used if the `ebuttm:documentRevisionNumber` metadata element is also present. The metadata element `ebuttm:documentRevisionDate` should not be used for the revision date of the STL file the EBU-TT document was created from. For this purpose `ebuttm:stlRevisionDate` should be used.

3.26   ebuttm:documentRevisionNumber

Type	`xs:nonNegativeInteger`
Significance	Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The revision number of the EBU-TT document may be used to specify a particular version of the subtitle list. The value of `ebuttm:documentRevisionNumber` shall be different for each published revision of the document. The metadata element `ebuttm:documentRevisionNumber` should not be used for the revision number of the STL file the EBU-TT document was created from. For this purpose `ebuttm:stlRevisionNumber` should be used. **Note:It is recommended that the revision number starts from 0 and 0 is the first version of the EBU-TT document.**

3.27   *ebuttm:documentStartOfProgramme*

Type	`ebuttdt:smpteTimingType	ebuttdt:clockTimingType`
STL mapping	Timecode: Start-of-Programme (TCP)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	If `ttp:timebase` has the value "smpte" the metadata element `ebuttm:documentStartOfProgramme` may be used to record the SMPTE timecode value for the start of the related media object. **Note: It is recommended to specify `ebuttm:documentStartOfPrograme` when the referenced start timecode of the video material the subtitles were authored for is NOT 00:00:00:00 (e.g. 10:00:00:00).** If `ttp:timebase` has the value "clock" then this `documentStartOfProgramme` element may be used to record the clock value for the 'start of the document'. For example, in the case of an archive recording of live subtitles, this element could be used to store the 'start of recording' time. **Note: If `ttp:timebase` has the value "clock", it is recommended to specify `ebuttm:documentStartOfPrograme` to establish a synchronisation point between the timecode values within the document and the 'real world'.**

3.28   *ebuttm:documentSubtitleListReferenceCode*

Type	`xs:string`
STL mapping	Subtitle List Reference Code (SLR)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Descendant values override inherited values.
Description	Free-format character string which may be used to provide an additional reference for the subtitle list. **Note: This attribute is provided to support conversion of STL subtitle files and to retain the metadata from the GSI block.**

3.29   *ebuttm:documentTargetActiveFormatDescriptor*

Type	`xs:string`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The code for the Active Format Descriptor (AFD) that specifies the active image in the active video (see "Definition of terms"). The code shall be one of the AFD codes specified in SMPTE ST 2016-1:2009 "Format for Active Format Description and Bar Data" Table 1 [4]. If the AFD code is specified the `ebuttm:documentTargetAspectRatio` element shall be specified and shall have the value "4:3" or "16:9". Sample Value: "0010" for full frame 16:9 image.

3.30   ebuttm:documentTargetAspectRatio

Type	`xs:string`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The aspect ratio of the active video the EBU-TT document was authored for, in width by height. Sample Value: "4:3" **Note: It is common practice to author documents so that text is carefully placed spatially with respect to content within the video to achieve editorial goals such as avoiding the occlusion of in-video text, faces etc. A single EBU-TT document could be created for re-use to support different renditions of a video asset, where those renditions can themselves have different active video aspect ratios, calculated by multiplying the Storage Aspect Ratio (SAR) by the pixel aspect ratio. If preservation of the relative spatial positioning of text against the video contents is required care must be taken to manage the tts:origin and tts:extent values within the document, which are likely to need to be modified. In some scenarios strict preservation is not possible, for example if the active video width is reduced by a "centre cut-out" or "pan and scan" system.** **The `ebuttm:documentTargetAspectRatio` element can be used in such a transformation context to deduce if the coordinates need to be modified. It can also be used to deduce the intended pixel aspect ratio for a given root container extent expressed in pixels, however the `ttp:pixelAspectRatio` parameter is not used in EBU-TT.**

3.31   ebuttm:documentTotalNumberOfSubtitles

Type	`xs:nonNegativeInteger`
STL mapping	Total Number of Subtitles (TNS)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and all descendants. First occurrence (at each repeated occurrence) is significant value.
Description	The number of subtitles.

3.32 ebuttm:documentTransitionStyle

Type	`Empty Element`
Significance	Significant only in /tt/head/metadata and when placed there, applies to the whole document. The ebuttm:transitionStyle element is available to indicate the transition style applicable to /tt/body and its descendants. First occurrence (at each repeated occurrence) is significant value.
Description	A summary of the style of transition between successive subtitles or parts of subtitle within the document. The transition style is defined by the units of content that are added to the display and removed from it on each transition, specified by the attributes inUnit and outUnit. No content is defined for this element. **Note:This attribute could be calculated by a suitable algorithm based on `ebuttm:transitionStyle` metadata if present within the document, for example the value that has the largest count of `tt:p` elements to which it applies.** **Note In some regulatory environments `ebuttm:documentTransitionStyle` can be used for reporting the presentation style of the document as a whole, noting that it is possible that it does not accurately reflect all of the contents of the document.**

The `ebuttm:documentTransitionStyle` element has the following mandatory attributes:

3.32.1 inUnit (attribute)

Type	`xs:string`
Cardinality	1..1
Enumeration	"block" | "line" | "word" | "partOfWord" | "groupOfWords"
Position	//ebuttm:documentTransitionStyle
Description	Unit of removal. "block": "Multiple lines" "line": "a single line" "word": "a single semantic unit" "partOfWord": "a sub-part of a semantic unit" "groupOfWords": "more than one semantic unit"

3.32.2 outUnit (attribute)

Type	`xs:string`
Cardinality	1..1
Enumeration	"block" | "line" | "word" | "partOfWord" | "groupOfWords"
Position	//ebuttm:documentTransitionStyle
Description	Unit of removal. "block": "Multiple lines" "line": "a single line" "word": "a single semantic unit" "partOfWord": "a sub-part of a semantic unit" "groupOfWords": "more than one semantic unit"

3.33   ebuttm:documentTranslatedEpisodeTitle

Type	xs:string
STL mapping	Translated Episode Title (TET)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The title of the episode of the programme in the local language.

3.34   ebuttm:documentTranslatedProgrammeTitle

Type	xs:string
STL mapping	Translated Programme Title (TPT)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The programme title in the local language.

3.35   ebuttm:documentTranslatorsContactDetails

Type	xs:string
STL mapping	Translator's Contact Details (TCD)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. The meaning of multiple or descendant values is defined by the document processing context.
Description	The translator's contact details.

3.36   ebuttm:documentTranslatorsName

Type	xs:string
STL mapping	Translator's Name (TN)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. The meaning of multiple or descendant values is defined by the document processing context.
Description	Name of the translator.

3.37   ebuttm:documentUserDefinedArea

Type	xs:string
STL mapping	User-Defined Area (UDA)
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants.
Description	This field may be used to carry information about the programme or subtitle list, or other relevant details. **Note: This attribute is provided to support conversion of STL subtitle files and to retain the metadata from the GSI block.**

3.38   *ebuttm:facet*

Type	`xs:string`
Significance	Applies to containing element and descendants.
Description	The `facet` element indicates that a facet applies to the `metadata` element's parent element's content and all of its descendants **that do not specify a different `expresses` attribute.** • The value may be the name of a term in a classification scheme, whose term should be identified by the `link` attribute. • Each distinctly identified facet shall have a separate `facet` element, where facets are identified by combination of the text content and the `link` attribute. • A facet can be used to describe technical or editorial aspects of the content to which it is applied, other than editorial purpose (for which the `ttm:role` attribute should be used). For example a facet could be 'checked_for_spelling', 'ISO6937_code_points_only' etc. • Empty `facet` elements should have a `link` attribute. • Elements shall NOT contain more than one `facet` element referring to the same term. • Elements may specify a `facet` element referring to a term that is also referenced by a `facet` element applied to an ancestor or descendant element. A specific usage of this element is documented in the EBU-TT Part 3 (EBU Tech 3370) specification.

The `ebuttm:facet` element may have the following optional attributes:

3.38.1   link (attribute)

Type	`xs:anyUri`
Cardinality	0..1
Position	//ebuttm:facet
Description	Reference to a term in a classification scheme. The `link` attribute should be present if the `facet` element is empty.

3.38.2   expresses (attribute)

Type	`"has"	"has_not"	"unknown"`
Cardinality	0..1
Initial	`"has"`
Position	//ebuttm:facet
Description	The `expresses` attribute indicates if the content has the specified facet or does not have it. The value `"has"` implies that the element's content has this facet. The value `"has_not"` implies that the element's content explicitly does not have this facet. The value `"unknown"` implies that it is not known whether or not the element's content has this facet.

3.39   ebuttm:font

Type	Element content
Significance	Should be placed in /tt/head/styling as applies to the whole document's styling. Multiple 'matching' `ebuttm:font` elements may be defined.
Description	The `ebuttm:font` element allows the author to identify which font was used for authoring text with a particular fontFamily. See also §2.3 Fonts and Metadata (Informative) for further background on the need to do this. The algorithm for matching text content with an indicated font as specified by `ebuttm:font` is as follows: 1. Compute the values of tts:fontFamily, tts:fontSize, tts:fontStyle, tts:fontWeight for the text content. 2. Find the set of `ebuttm:font` elements whose specified attributes match the computed values (where unspecified attributes are not used in matching), using a case-insensitive comparison of the `tts:fontFamily` value. 3. If the set has zero entries, exit: no font that was used when the content was authored is indicated. 4. If the set has one entry, exit: this is the font that was used when the content was authored. 5. The set has more than one entry. Narrow the set to a single font using the attributes `fontStyle`, `fontWeight` and `fontSize` in that order. For each attribute in turn, if one or more `ebuttm:font` element specifies an exactly matching attribute, exclude the remaining `ebuttm:font` elements, stopping if the set has one entry: that is the font that was used when the content was authored. 6. Any of the remaining `ebuttm:font` entries in the set are considered acceptable for this content. **Note: This algorithm does not automatically replace generic font family names, which can therefore be matched directly.**

The `ebuttm:font` element has the following mandatory attributes:

3.39.1   fontFamilyName (attribute)

Type	`ebuttdt:fontFamilyType`
Cardinality	1..1
Position	//ebuttm:font
Description	The font family name that the font element should be matched against. The value should be exactly equal (case sensitively) to the value of a `tts:fontFamily` attribute in the `tt:style` elements intended to match this font. The font family name may be a generic name or a specific one.

3.39.2   src (attribute)

Type	`xs:anyUri`
Cardinality	1..1
Position	//ebuttm:font
Description	The identifier for a suitable resource that corresponds to this `ebuttm:font` element. **Note: It is recommended that a registered media type extension for a font resource is appended to the identifier, for example `.woff` for a Web Open Font Format. No other mechanism for identifying the font format is provided.**

The `ebuttm:font` element may have the following optional attributes:

3.39.3   fontStyle (attribute)

Type	`xs:string`
Enumeration	"italic" | "normal"
Cardinality	0..1
Position	//ebuttm:font
Description	The font style that this `ebuttm:font` element should be matched against. If present, only fonts with the specified value of `tts:fontStyle` will be matched against this font element; if absent, fonts that match the other attributes of `ebuttm:font` regardless of the value of `tts:fontStyle` will be matched.

3.39.4   fontWeight (attribute)

Type	`xs:string`
Enumeration	"bold" | "normal"
Cardinality	0..1
Position	//ebuttm:font
Description	The font weight that the font element should be matched against. If present, only fonts with the specified value of `tts:fontWeight` will be matched against this font element; if absent, fonts that match the other attributes of ebuttm:font regardless of the value of `tts:fontWeight` will be matched.

3.39.5   fontSize (attribute)

Type	ebuttdt:fontSizeType
Cardinality	0..1
Position	//ebuttm:font
Description	This attribute shall apply only when the source font is a bitmap font. The percentage metric shall not be used for fontSize. The font size that the font element should be matched against. If present, only fonts with the specified value of `tts:fontSize` will be matched against this font element; if absent, fonts that match the other attributes of `ebuttm:font` regardless of the value of `tts:fontSize` will be matched. **Note: The initial value of `tts:fontSize` was "1c 2c" in EBU-TT Part 1 v1.0 and has been changed to "1c" for better interoperability with TTML.**

3.40   *ebuttm:localTimeOffset*

Type	`xs:string`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	Specifies the timezone when `ttp:timebase` is "clock" and `ttp:clockmode` is "local". When `ttp:timebase` is "clock" and `ttp:clockmode` is "local" the `ebuttm:localTimeOffset` is optional and may be present in an EBU-TT document. The timezone is specified as defined in ISO 8601 [10]. Examples: "Z" - Universal Time (UTC) +hh:mm (e.g. +01:00) – local time zone is hh hours and mm minutes ahead of UTC -hh:mm (e.g. -08:00) – local time zone is hh hours and mm minutes behind UTC

3.41   *ebuttm:originalSourceServiceIdentifier*

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Descendant values override inherited values. Where multiple values are specified on an element the first value is significant.
Description	The `ebuttm:originalSourceServiceIdentifier` may be used to identify the stream of audio-visual content that was used as the source for authoring the document.

3.42   *ebuttm:referenceClockIdentifier*

Type	`xs:string`
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	Allows the reference clock source to be identified. Permitted only when `ttp:timeBase="clock"` AND `ttp:clockMode="local"` OR when `ttp:timeBase="smpte"`. A usage of this element is documented in EBU-TT Part 3 (EBU Tech 3370).

3.43   *ebuttm:relatedMediaDuration*

Type	`ebuttdt:mediaTimingType`
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants (e.g. /tt//div) if that element is authored against a specific related source media item, such as a video package. First occurrence in the document is significant value for whole document.
Description	Playtime of the related source media.

3.44 ebuttm:relatedMediaIdentifier

Type	xs:string
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants.
Description	Identifier of the related media for which the EBU-TT document or element was created. This identifier may be a production number.

3.45 ebuttm:relatedObjectIdentifier

Type	xs:string
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. The meaning of descendant values or multiple values on the same element is defined by the document processing context.
Description	Identifier for an object (e.g. another media object or documentation) that is associated with the EBU-TT document.

The ebuttm:relatedObjectIdentifier element has the following optional attribute:

3.45.1 type (attribute)

Type	xs:string
Cardinality	0..1
Position	//ebuttm:relatedObjectIdentifier
Description	Type of the identifier.

3.46 ebuttm:sourceMediaIdentifier

Type	xs:string
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. The meaning of descendant values or multiple values on the same element is defined by the document processing context.
Description	Identifier to be used as an external reference to the source media used to author the EBU-TT document, e.g. a video file or tape. The source media can be a proxy (e.g. a low resolution version of the program the subtitles are created for).
	Any format identifier may be used and no requirement or recommendation is made that a particular type of identifier be used. However the type of each identifier provided shall be described by use of the type attribute of ebuttm:sourceMediaIdentifier.
	Where multiple identifiers are required multiple elements should be included.

The `ebuttm:sourceMediaIdentifier` element has the following optional attribute:

3.46.1   type (attribute)

Type	`xs:string`
Cardinality	0..1
Position	//ebuttm:sourceMediaIdentifier
Description	The type of identifier carried. The value of this attribute should be defined with reference to the external context of the authoring system and media asset management in use.

3.47   ebuttm:stlConversion

Type	Element content
Cardinality	0..1
Significance	Should be placed in /tt/head/metadata if applies to the whole document. Otherwise applies to containing element and descendants. Descendant values override inherited values. Where multiple values are present on the same element they all apply.
Description	The `ebuttm:stlConversion` element MAY be used to contain child elements that record the parameters and/or Document Processing Context determinations relevant to the conversion process used to create this document (in accordance with EBU-TT Part 2 (EBU Tech 3360).

3.47.1   ebuttm:stlParameter

Type	`xs:string`
Cardinality	0..*
Position	//ebuttm:stlConversion
Description	The `ebuttm:stlParameter` element MAY be used to record the value of multiple identified parameters or Document Processing Context determinations applied to the conversion process used to create this document (in accordance with EBU-TT Part 2 (EBU Tech 3360)).

The `ebuttm:stlParameter` element shall have the following mandatory attribute:

3.47.1.1   key (attribute)

Type	`xs:string`
Enumeration	"regionStrategy"	"safeAreaOrigin"| "safeAreaExtent"	"teletextStyleFont"	"justificationStrategy"	*
Position	//ebuttm:stlConversion/stlParameter
Description	This attribute identifies the parameter value recorded by this element. **Note: Other values for the key attribute may be used by a specific processing implementation but the meaning of the associated element content is undefined by this specification.**

When present, and the key attribute value is an enumerated value defined by this specification,

the `ebuttm:stlParameter` element shall contain content in accordance with in accordance with EBU-TT Part 2 (EBU Tech 3360).

3.48   *ebuttm:stlCreationDate*

Type	`xs:date`
STL mapping	Creation Date (CD)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The date of creation of the STL file the EBU-TT document was created from. **Note: If an STL file is tunnelled in the EBU-TT document in accordance with the EBU-TT Part 2 (EBU Tech 3360) standard by using the `ebuttm:binaryData` element then this element shall not be used and the attribute `creationDate` of the `ebuttm:binaryDataElement` shall be used instead.**

3.49   *ebuttm:stlRevisionDate*

Type	`xs:date`
STL mapping	Revision Date (RD)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The date of the most-recent modifications to the STL file the EBU-TT document was created from. **Note: If an STL file is tunnelled in the EBU-TT document in accordance with the EBU-TT Part 2 (EBU Tech 3360) standard by using the `ebuttm:binaryData` element this element shall not be used and the attribute `revisonDate` of the `ebuttm:binaryDataElement` shall be used instead.**

3.50   *ebuttm:stlRevisionNumber*

Type	`xs:nonNegativeInteger`
STL mapping	Revision Number (RN)
Significance	**Meaningful once.** Should be placed in /tt/head/metadata as applies to the whole document. First occurrence in the document is significant value for whole document.
Description	The revision number of the STL file the EBU-TT document was created from. **Note: If an STL file is tunnelled in the EBU-TT document in accordance with the EBU-TT Part 2 (EBU Tech 3360) standard by using the `ebuttm:binaryData` element this element shall not be used and the attribute `revisonNumber` of the `ebuttm:binaryDataElement` shall be used instead.**

3.51   ebuttm:subtitleZero

Type	`xs:string`
Significance	Should be placed in /tt/head/metadata if applies to the whole document and the first occurrence in the document is then the significant value for the whole document. This element may also be used in a subsection of the document and should then be placed within the containing element for that subsection, in which case the first occurrence within that section is the significant value.
Description	A convention exists within the subtitling industry to use the first subtitle of a subtitle file for programme related metadata. This first subtitle is typically known as "subtitle zero" and is used operationally for example within play-out services to check that the correct subtitles have been loaded during pre-roll. The convention arose because the (non-EBU-TT) file formats in use do not support all the metadata that users wish to convey and information stored can be displayed and edited by all systems. A 'subtitle zero' is not intended to be broadcast, and this is achieved by ensuring that the presentation timing values ('incue' and 'outcue' times) for the subtitle are deliberately set outside of the SMPTE timecode values that occur in the corresponding media. This 'subtitle zero' information cannot automatically be mapped into structured metadata fields without knowledge of the labelling and formatting conventions used for "subtitle-zero" content. To allow this metadata to be persisted the content of a "subtitle zero" subtitle may be placed into an `ebuttm:subtitleZero` element. For example this element can be populated with the text content of a 'subtitle zero' subtitle from a non EBU-TT source subtitle file during a conversion into an EBU-TT document. • When converting a single subtitle file, a single `ebuttm:subtitleZero` element may be placed in /tt/head/metadata. • If multiple subtitle files are combined into a single EBU-TT document the 'outermost' element that contains the content from each original subtitle file (typically a `tt:div` element) may contain a metadata element with an `ebuttm:subtitleZero` element containing the subtitle zero content for that original file. This element should not be used as a generic metadata mechanism for directly created EBU-TT files and is intended only for the preservation of 'legacy' data. **Note:It is recommended that a subtitle file conversion implementation, that is able to correctly identify legacy subtitle zero content, moves this information into the head of an EBU-TT file as metadata because it is possible that some processors and display renderers of EBU-TT documents do not respect the 'do not display' convention of a 'subtitle zero' that is retained in the body of the document.**

3.52   ebuttm:transitionStyle

Type	Empty Element
Significance	Applies to containing element and descendants except those that specify a different value of transitionStyle, which overrides the inherited value. Should not be placed in /tt/head/metadata; use ebuttm:documentTransitionStyle in /tt/head/metadata to summarise the transition style(s) used within the document.
Description	A description of the style of transition between successive subtitles or parts of subtitle within the element. The transition style is defined by the units of content that are added to the display and removed from it on each transition, specified by the attributes `inUnit` and `outUnit`. No content is defined for this element.

The `ebuttm:transitionStyle` element has the following mandatory attributes:

3.52.1   inUnit (attribute)

Type	xs:string
Cardinality	1..1
Enumeration	"block" | "line" | "word" | "partOfWord" | "groupOfWords"
Position	//ebuttm:transitionStyle
Description	Unit of removal. • "block": "Multiple lines" • "line": "a single line" • "word": "a single semantic unit" • "partOfWord": "a sub-part of a semantic unit" • "groupOfWords": "more than one semantic unit"

3.52.2   outUnit (attribute)

Type	xs:string
Cardinality	1..1
Enumeration	"block" | "line" | "word" | "partOfWord" | "groupOfWords"
Position	//ebuttm:transitionStyle
Description	Unit of removal. • "block": "Multiple lines" • "line": "a single line" • "word": "a single semantic unit" • "partOfWord": "a sub-part of a semantic unit" • "groupOfWords": "more than one semantic unit"

4.   TTML Metadata References (Informative)

The following metadata elements are available as defined in the referenced version of the TTML specification. [6]

Element	Description
ttm:title	A human-readable title of a specific element instance.
ttm:desc	A human-readable description of a specific element instance.
ttm:copyright	A human-readable copyright that applies to some scoping level. When a child of /tt/head/metadata the copyright element defines the copyright for the document. When a child of other elements, applies to its parent element and its parent element's other descendants, unless they specify a different value.
ttm:agent	Defines an agent for the purpose of associating content information with an agent who is involved in the production or expression of that content. Significant only when specified as a child of the `head` element or as a child of a `metadata` element child of the `head` element. Note that the ttm:agent attribute on an element is used to reference an agent.
ttm:name	The name of a person, character, group, or organization defined by a ttm:agent element.
ttm:actor	Links the definition of a (role-based) character agent with another agent that portrays the character.

The following metadata attributes are available as defined in TTML [6].

Attribute	Description
ttm:agent	An IDREFS value used to link some elements of content to a significant defined ttm:agent element to designate the agents that perform or are involved in the performance of the content..
ttm:role	Expresses the roles, functions, or characteristics of the Content element that is so labelled.

5.   Deprecated EBU-TT metadata

Several metadata elements previously defined by earlier versions of the EBU-TT standards documents are now deprecated. These deprecated elements have been included in this document for informative completeness.

It should also be noted that earlier versions of the EBU-TT standards documents originally defined greater constraints regarding the position and usage of metadata elements within a conforming document. Document authors who require to create documents conforming to earlier versions of the EBU-TT document standards should refer to those earlier versions of the standards documents for the relevant element definitions and conformance requirements.

5.1   ebuttm:documentMetadata (deprecated - informative)

Type	Element content
Description	The element `ebuttm:documentMetadata` is **deprecated** and should only be used in documents that require strict conformance to EBU-TT Part 1 version 1.0 or version 1.1. This element was used to contain specific EBU-TT metadata that applied to the whole EBU-TT document. For information related to the use of this element please refer to the EBU-TT Part 1 version 1.0 document or version 1.1 document.

5.2   ebuttm:documentEbuttVersion (deprecated - informative)

Type	`xs:string`
Description	The element `ebuttm:documentEbuttVersion` is **deprecated** and SHALL only be used to indicate conformance to EBU-TT Part 1 version 1.0 or version 1.1. For information related to the use of this element please refer to the EBU-TT Part 1 version 1.0 document or version 1.1 document. *Note: Documents that conform simultaneously to EBU-TT Part 1 version 1.0 and later versions can include this element to facilitate processing by implementations that are only able to handle version 1.0 documents or version 1.1 documents.*

5.3   ebuttm:documentCopyright (deprecated - informative)

Type	`xs:string`
Description	The copyright of the document. Sample Value: "© EBU 2011" The use of `ebuttm:documentCopyright` is deprecated and `ttm:copyright` as defined in TTML 1.0 shall be used instead (see §3.51 ttm:copyright). For information related to the use of this element please refer to the EBU-TT Part 1 version 1.0 document or version 1.1 document.

6.   References

[1] **EBU Tech 3350**   EBU-TT Part 1. Subtitling format definition.
                             http://tech.ebu.ch/publications/tech3350

[2] **EBU Tech 3360**   EBU-TT Part 2. EBU-TT-D Subtitling Distribution Format
                             https://tech.ebu.ch/publications/tech3360

[3] **EBU Tech 3370**   EBU-TT Part 3. Subtitling format definition.
                             http://tech.ebu.ch/publications/tech3370

[4] **SMPTE ST 2016-1:2009**   "SMPTE Standard - Format for Active Format Description and Bar Data"

[5] **EBU Tech 3380**   EBU-TT Part D . Subtitling format definition.
                             http://tech.ebu.ch/publications/tech3380

[6] **TTML 1.0**   Glenn Adams. Timed Text Markup Language (TTML) 1.0. W3C Rec.
                             18 November 2010. http://www.w3.org/TR/ttaf1-dfxp/

[7] **XML Path**   James Clark, Steve DeRose, XML Path Language (XPATH)
                             Version 1.0 W3C Recommendation 16 November 1999
                             (Status updated October 2016). https://www.w3.org/TR/xpath/

[8] **EBU Tech 3264**   Specification of the EBU Subtitling data exchange format.
                             http://tech.ebu.ch/publications/tech3264

[9] **ISO 3166**   Codes for the representation of names of countries and their

subdivisions. https://www.iso.org/obp/ui/#search

[10]	**ISO 8601**	Data elements and interchange formats; Information interchange; Representation of dates and times https://www.iso.org/iso-8601-date-and-time-format.html

7. Bibliography

EBU R 95	Recommendation on Safe areas for 16:9 television production. http://tech.ebu.ch/publications/r095
EBU R 133	Recommendation on transport of subtitles inside and outside MXF files http://tech.ebu.ch/publications/r133
SMPTE-12M-1:2008	"SMPTE Standard for Television -- Time and Control Code"
SMPTE ST 2052-1:2010	"SMPTE Standard for Television -- Timed Text Format (SMPTE-TT)
XML 1.0	Tim Bray, et al. Extensible Markup Language (XML) 1.0 (Fifth Edition), W3C Rec. 26 November 2008. http://www.w3.org/TR/2008/REC-xml-20081126/
URI	IETF RFC3986. Uniform Resource Identifier (URI): Generic Syntax https://tools.ietf.org/html/rfc3986
ISO/IEC 6937:2001	Coded graphic character set for text communication -- Latin alphabet

Annex A: Metadata Support of the STL (Tech 3264) GSI Block in EBU-TT

The following table indicates if an element or attribute is defined for the information stored in the GSI block of EBU Tech 3264 format subtitle files (STL) in EBU-TT metadata:

-       No element or attribute defined
X   Supported (Metadata element or attribute defined for the STL Information)

STL Information	Mnemonic	EBU-TT Support
Code Page Number	CPN	-
Disk Format Code	DFC	-
Display Standard Code	DSC	-
Character Code Table Number	CCT	-
Language Code	LC	X
Original Programme Title	OPT	X
Original Episode Title	OET	X
Translated Programme Title	TPT	X
Translated Episode Title	TET	X
Translator's Name	TN	X
Translator's Contact Details	TCD	X
Subtitle List Reference Code	SLR	X
Creation Date	CD	X
Revision Date	RD	X
Revision Number	RN	X
Total Number of Text Timing Information (TTI) blocks	TNB	-
Total Number of Subtitles	TNS	X
Total Number of Subtitle Groups	TNG	-
Maximum Number of Displayable Character in any text row	MNC	X
Maximum Number of Displayable Rows	MNR	-
Time Code: Status	TCS	-
Time Code: Start-of-Programme	TCP	X
Time Code: First In-Cue	TCF	-
Total Numbers of Disks	TND	-
Disk Sequence Number	DSN	-
Country of Origin	CO	X
Publisher	PUB	X
Editor's Name	EN	X
Editor's Contact Details	ECD	X
User-Defined Area	UDA	X