

W3C TTML Working Group  
Att. Philippe Le Hégaret

## Liaison letter

**To:**

Philippe Le Hégaret      W3C Team Contact for the W3C TTML WG, [plh@w3.org](mailto:plh@w3.org)

**Copy:**

Jean-Pierre Evain      Coordinator EBU MIM Strategic Programme, [evain@ebu.ch](mailto:evain@ebu.ch)  
Frans de Jong      Coordinator EBU MIM-XMLSubs Group, [dejong@ebu.ch](mailto:dejong@ebu.ch)

Grand-Saconnex, 18 October 2013,

Dear Philippe,

EBU is developing specifications for the archiving, exchange and distribution of subtitle documents based on W3C TTML, within the EBU MIM-XML Subtitles group.

A number of use cases have been presented by the group's members that do not appear to have solutions in TTML 1.0 (Second Edition). As requested by the W3C TTWG chair Sean Hayes, we intend to raise issues for each of these on the TTWG's issue tracking system.

In summary we would like W3C to consider our proposals, or propose solutions where we have been unable to, for the following issues:

- 1 multiRowAlign: the ability to align a group of text rows to each other, and then to align the entire set relative to a region.
- 2 rowPadding: the ability to specify an extension to the background painting area relative to the extent of text on a given line, e.g. by the equivalent of one non-breaking space to the left and the right of each line.
- 3 Deterministic rendering: a way to specify sufficient information to be able to predict accurately how much text can fit within a given width and therefore avoid presentation processors either overflowing text beyond a specified region or inserting unwanted line breaks, either of which may result in words

being omitted from display, changing the meaning of the displayed text. This is understood to be a problem with the current mechanism for specifying fonts.

- 4 Profile designations: a mechanism to express the conformance of a document to one or more profile specifications, in addition to the existing mechanism for verifying that a processor can process a given document. Short form 'aliases' to profiles should be permitted in place of exhaustive profile feature sets for each document, to signal compliance with specifications not expressed in terms of TTML features but with normative textual or structural specifications.
- 5 Spatial coordinates: the ability to specify heights and widths relative to the size of the overall display area ("viewport" in some terminologies) independent of the number of device pixels present on the display.
- 6 Binary tunnelling: the ability to tunnel BASE64 encoded binary files within a TTML document for the purpose of maintaining compatibility with legacy infrastructures, for example EBU Tech 3264 ("STL") files.
- 7 Document segmentation: rules for breaking up a document into arbitrary smaller chunks or samples each with a specified time range, likely to be used for streaming e.g. in MPEG Dash or similar carriage mechanisms; for assembling a series of smaller documents into larger ones, e.g. for archive purposes; for combining these activities to create new samples with different temporal extents.

The resolution to these issues will improve readability and accessibility to subtitles and help to demonstrate further the feasibility of using TTML for subtitles throughout the chain from authoring to distribution including content that is subtitled live, and independent of the delivery mechanism.

Sincerely,

Nigel Megitt, [nigel.megitt@bbc.co.uk](mailto:nigel.megitt@bbc.co.uk)

Andreas Tai, [tai@irt.de](mailto:tai@irt.de)

Chairs, EBU MIM-XML Subtitles