NISO STS (Standards Tag Suite) Technical Working Group Minutes for STS Draft Version 1.0

For NISO STS Technical Working Group
September 2016

September 21, 2016, 10:00 am - 11:00 pm EDT
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1 Introduction

These are the minutes for the Technical Working Group meeting for the NISO activity to create a standard tag set for Standards. Details on this work item are available to the public at:

http://www.niso.org/workrooms/sts/

These minutes record decisions made and action items assigned during the NISO STS Technical Working Group call on September 21, 2016.

1.1 Attendees for September 21, 2016

- Dreyfuss, Bob (ASTM)
- Galichet, Laurent (ISO)
- Gooskens, Frans (NEN)
- Hollowell, Bob (ASME)
- Imsieke, Gerrit (le-tex Publishing Services)
- Lapeyre, Debbie (Mulberry Technologies)
- Markantonatos, Nikos (Atypon)
- Rawson, Ken (IEEE)
- Rosenblum, Bruce (Co-chair, Inera)
- Juillerat, Serge (ISO)
- Gupta, Vinay (Edaptive Technologies)
- Wheeler, Robert (Co-chair, ASME)
- Winchell, David (XSB)

1.2 Administrative Business

- Minutes from the August 31, 2016 meeting were accepted as distributed.

1.3 NISO STS Technical Working Group Call

The NISO STS Technical Working Group will meet by conference call next week on Wednesday 28 September, 2016, at 10:00 am EDT.

US and Canada Toll free number and Passcodes are available at http://www.niso.org/apps/org/workgroup/sts-technical/ under “Upcoming events”.

Global numbers can be found via http://bit.ly/1KCHbsT
For security reasons, the Passcode will be required to join the conference.
2 NISO STS Unresolved Discussions from August 31, 2016

2.1 Resolved: Compound (Nested) Standards Documents

Adopting Standards

• The NISO STS DTD will add a second top-level element to the NISO STS Tag Sets to allow both a regular <standard> document and an <adoption> document, which is a standard that adopts (and therefore contains, within one document) one or more existing standards. In this model, the “core standard(s)” will take the current <standard> model, and <adoption> will allow this core to be enclosed in one or more outer <adoption> wrappers.

• The model for <adoption> will allow adopting standard front matter (metadata, possibly followed by notes and sections) and back matter before a <standard>, and adopting back matter after the <standard>.

Standards with Sub-Parts

• A full individual standard may contain components called sub-parts (<sub-part>), which do not fit the adoption model. Heather Flanagan’s RFC series is an example. The current model for <sub-part> is:

  (label?, title, body, back?)

• Heather states that <sub-part>s will need metadata. As a first approximation, we will model them with new metadata model (<std-metadata>) rather than full front matter and test this when there is a draft of the NISO STS DTD.

• Metadata will be optional in <sub-part>, since there are use cases from multiple organizations that contain no additional metadata.

Roads Not Taken (Bundles and Collections)

• A standard bundle or collection of standards is produced for packaging and distribution after the individual standard has been produced. Therefore, this is not a core issue for individual standards and is out of scope for NISO STS.

2.2 Resolved: Standard Life-cycle Events

• Release Date (<release-date>)

  • The <release-date> element is currently defined as “Date on which a particular version of the standard is (to be) published”.

  • The optional <release-date> will be allowed to repeat, with attributes differentiating the dates. The current ISO DTD allows only one <release-date>, so Schematron or other mechanism will need to check that restriction if desired.

  • <release-date> currently has no attributes. The following attributes will be added to <release-date>:

        date-type       CDATA       #REQUIRED
    publication-format CDATA       #IMPLIED
        iso-8601-date  CDATA       #IMPLIED
• The JATS-like attribute @date-type will name the standards life-cycle event that is associated with this date (i.e., where in the life-cycle of a standard), for example, ‘editorial-change’, ‘reaffirmed’, ‘withdrawn’, etc.) This attribute will contain data characters (CDATA) with a list of suggested values. [See Action Items for the current proposed value list.] This attribute (which we would like to require) will be optional for backward compatibility with ISO STS.

• The JATS-like attribute @publication-format can be used to name the format, if there are many being published or adopted. This attribute will contain data characters (CDATA) with a list of suggested values. [See Action Items for the current proposed value list.]

• The JATS attribute @specific-use will not be added to <release-date>.

• **Other Metadata Date** (<meta-date>)

  • The <meta-date> element will be redefined to indicate that it is used for all lifecycle stages not defined in <release-date>, and those that are unique to a particular standards organization. (Both ASME and CEN use internal-specific date types.)

  • The <meta-date> will be allowed to repeat, with attributes differentiating the dates.

  • <meta-date> currently has the following attribute:

    ```
    type CDATA #REQUIRED
    ```

  • This @type attribute on <meta-date> will be retained for backwards compatibility, but it will be made optional, and the new attribute @date-type will be preferred. The @type attribute will not be deprecated immediately.

  • The following attributes will be added to <meta-date>:

    ```
    date-type CDATA #IMPLIED
    publication-format CDATA #IMPLIED
    specific-use CDATA #IMPLIED
    iso-8601-date CDATA #IMPLIED
    ```

  • The JATS-like attribute @date-type will name the life-cycle event that this element contains, such as ‘rescinded’ (ASTM uses this value to describe the time when a standard is approved by the society, but before it is published) or ‘target-publication-date’, etc. This attribute will contain data characters (CDATA) with no list of suggested values. This attribute is for SDOs to use for their specific atypical date types. This attribute (which we would like to require) will be optional, because <meta-date> in ISO STS has a required @type attribute.

  • The JATS-like attribute @publication-format can be used to name the format, if there are many being published or adopted. This attribute will contain data characters (CDATA) with a list of suggested values. [See Action Items for the current proposed value list.]

• **Publication Date** (<pub-date>)

  • The element <pub-date> contains element-only content in JATS but data character (#PCDATA) content in ISO STS. Going forward, this incompatibility could present problems. Since <pub-date> is defined as the original publication date of the standard, we can leave <pub-date> in place for backwards compatibility and move forward using...
<release-date> instead of <pub-date> to describe original publication or release of a standard and modifications to or extensions of it, e.g., reaffirmation or addenda and <meta-date> to describe all other life-cycle dates.

- The element <pub-date> will not appear in the new metadata model (<std-meta>).
- The metadata models will keep the occurrence of <pub-date> as optional, for backwards compatibility.

Documentation Recommendations

- Over time, the current use of <pub-date> will be phased out (it is maintained for backwards compatibility) and the publication and release date functions will be recorded as <release-date>s, differentiated by type attributes. We will need to explicitly state this in the documentation, as well provide examples of how ISOSTS <pub-date> was tagged and the recommended practice for the same date, tagged in NISO STS as <release-date>.
- Over time, the @type attribute on <meta-date> will be deprecated in favor of the @date-type attribute. The @type attribute will immediately be made optional.
- Since the JATS attribute @specific-use will not be added to <release-date>, the documentation should suggest that if a special date is wanted, use the element <meta-date>.

3 Action Items

3.1 Resolved Action Items

- **Resolved: Amendments, Corrigenda, and Errata (ACE) Documents.**
  - The NISO Steering Committee defined three styles of ACE documents: ‘Structural Style’, ‘Format Style’, and ‘Embedded Style’. Steering Committee decided that only “Format Style” was in scope for Phase I NISO STS. Accordingly, they defined a new element <editing-instructions> to hold the instructions (not part of the standards document) such as “Replace Section 2.3 with the section below”.
  - **Action Item:** Mulberry will take a first cut at suggesting where the <editing-instructions> element can be used (for example, as the first thing in the <body>, to handle small errata) and provide rationales for these choices.
  - **Action Item:** The Technical Working Group takes as a future Action Item to test the various placements of <editing-instructions> when the Draft DTD is distributed.
  - **Action Item:** Robert Wheeler and Ken Rawson will make sure that Mulberry has examples of ACE documents from their organizations.

- **Resolved: @term-type:** Bruce Rosenblum reported the new @term-type attribute on the <term> element to the JATS Standing Committee, suggesting that the values ‘preferred’, ‘non-preferred’ and ‘admitted’ can be indicated for terms in JATS documents as well as in standards.
3.2 Open Action Items

For All Committee Members: Life-cycle @pub-date Attribute Values

- **Life-cycle @date-type Suggested Values** — The element <release-date> will be given a @date-type attribute, that will be defined as an open list (CDATA) attribute that names the stage in the life-cycle of a standard that was released/published on this date. The following values have been suggested for that recommended values list. Are there any values that should be added? Are there too many values?

<table>
<thead>
<tr>
<th>Value</th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>addenda</td>
<td></td>
</tr>
<tr>
<td>adopted</td>
<td></td>
</tr>
<tr>
<td>adopt-modify</td>
<td></td>
</tr>
<tr>
<td>amendment</td>
<td></td>
</tr>
<tr>
<td>consolidate</td>
<td></td>
</tr>
<tr>
<td>corrigenda</td>
<td></td>
</tr>
<tr>
<td>editorial-change</td>
<td></td>
</tr>
<tr>
<td>errata</td>
<td></td>
</tr>
<tr>
<td>new-standard</td>
<td></td>
</tr>
<tr>
<td>reaffirmed</td>
<td></td>
</tr>
<tr>
<td>reaffirm-redesignate</td>
<td></td>
</tr>
<tr>
<td>redesignate-consolidate</td>
<td></td>
</tr>
<tr>
<td>reinstate</td>
<td></td>
</tr>
<tr>
<td>revised</td>
<td></td>
</tr>
<tr>
<td>revise-partition</td>
<td></td>
</tr>
<tr>
<td>revise-redesignate</td>
<td></td>
</tr>
<tr>
<td>revise-redesignate-consolidate</td>
<td></td>
</tr>
<tr>
<td>stabilized-maintenance</td>
<td></td>
</tr>
<tr>
<td>supplement</td>
<td></td>
</tr>
<tr>
<td>withdrawn</td>
<td>deprecated, cancelled</td>
</tr>
</tbody>
</table>

**Note:** This list was derived from this “Genericized” ANSI-Defined Project Intents list:

1. New standard
2. Revised (designation same w/new date)
3. Reaffirm same (adds to previous dated designation)
4. Reaffirm and Redesignate (new designation)
5. Adopt same IEC or ISO standard
6. Adopt ISO or IEC standard with modifications
7. Consolidation (combines previous designations, new date)
8. Revise and Redesignate (new designation, new date)
9. Redesignate and Consolidate (new designation, new date)
10. Revise, Redesignate, and Consolidate (new designation, new date)
11. Revise and Partition (new designation, new date)
12. Maintain ANS under stabilized maintenance (adds to previous dated designation)
13. Addenda (new product, creates a new designation by adding to previous dated designation)
14. Amendment (new product, creates a new designation by adding to previous dated designation)
15. Corrigenda (new product, creates a new designation by adding to previous dated designation)
16. Errata (new product, creates a new designation by adding to previous dated designation)
17. Supplement (new product, creates a new designation by adding to previous dated designation)
18. Withdrawn (no longer a formal standard; may still be available for historical reference)
19. Reinstall
20. Editorial change (change with no technical merit or required balloting)

Also For All Committee Members

• **Originator** Attribute — Debbie Lapeyre will resend the email of May 23rd describing the current state of the @originator attribute. In the light of new <adoption> model, this requirement should be reconsidered by all.

• **@publication-format Suggested Values** — The @publication-format attribute will be an open list (CDATA) attribute on <release-date> and <meta-date>. This will have values such as ‘epub’, ‘online’, etc. Can you suggest values that might be useful to illustrate?

For Gerrit Imsieke

• Last month Gerrit sent a PDF of his nested standard with colored frames and remarks that designate several of the formal note types. Wednesday he provided ISO STS XML for this material, for use in documentation. Gerrit will try to get clearance to use a more limited English language example and provide it to Mulberry, so that it can be used for the adoption elements in the documentation.

For Tommie Usdin

• Take a first cut at the content of the front matter for <adoption> and report to the group. Does this front matter need all 4 metadata groups or just <std-meta>? Does new metadata model (<std-meta>) cover all the metadata that an adoption model would need?

For Frans Gooskens

• Write a comparison of TBX and the new term and definition model submitted by Tommie Usdin and report to the Working Group.

For Debbie Lapeyre

• Resend the email of May 23rd describing the current state of the @originator attribute. In the light of new <adoption> model, this requirement should be reconsidered.

For Robert Wheeler

• Robert Wheeler will clarify some proposed section types and then share with Tommie and Debbie who will put together a proposal for the Technical Working Group.
4 Technical Decisions for NISO STS

4.1 Resolved: Bring ISO STS up to JATS 1.1

4.1.1 Resolved: Moving NISO STS from JATS 0.4 to JATS 1.1

The ISO STS was written as a superset of JATS Publishing (Blue) Version 0.4. NISO STS will be based on JATS Blue version 1.1.

Editor’s Note Concerning the Next Four Issues: Issues have been reported with moving from non-JATS ISO STS structures into JATS-based ones, so the next few related but separate discussion items have been added. The base issue: The Working Group has two stated goals: 1) to be compatible with JATS and 2) to be backwards compatible with ISO STS. On occasion these goals are mutually exclusive, as the element semantics or models are not the same in the ISO STS and JATS vocabularies.

4.1.2 Resolved: <version> compatibility between ISO STS and JATS

NISO STS will document the inward facing usage of the <version> element for standards and explain that inward or outward-facing (as JATS <version> element is) can be determined by context/ NISO STS will not modify JATS <version> or create an alternative element. Tabled: <pub-date> compatibility between ISO STS and JATS

The element <pub-date> is an element-only model in JATS, but a textual model (#PCDATA content) in ISO STS. There is also a related element <release-date> which will need to be considered as part of this item.

4.1.3 Resolved: Incompatibility <pub-date> and its attributes ISO STS/JATS

<pub-date> Content — The element <pub-date> contains element-only content in JATS but data character (#PCDATA) content in ISO STS. Going forward, this incompatibility could present problems. Since <pub-date> is defined as ‘the original publication date of the standard’, we can leave <pub-date> in place in NISO STS for backwards compatibility and move forward (away from <pub-date> ) using <release-date> instead of <pub-date> to describe original publication or release of a standard and modifications to or extensions of that standard, e.g., reaffirmation or addenda, and <meta-date> to describe all other life-cycle dates.

<pub-date> Attributes — The element <pub-date> has many attributes in JATS that ISO STS does not contain. However, ISO STS also has two additional elements: <release-date> and <meta-date> which will be phased in over time for <pub-date>. As part of the expanded metadata discussion, some JATS attributes will be added to the NISO STS <release-date>and <meta-date>, but not to <pub-date>.

4.1.4 Resolved: Does NISO STS standardize the standards lifecycle

Life-cycle event values will be entered as character data (CDATA) attributes; there will be no set list of values, but a suggested values list will be placed in the documentation for <release-date>.

4.2 Resolved: Add (optional) CALS Tables

The OASIS Interchange CALS table model will be added to NISO STS, but there will also be a model version (intended for interchange) that supports only the XHTML table model.
The following NISO STS models will be developed:

- An “Interchange” Model with only XHTML tables and MathML 2.0
- An “Interchange” Model with only XHTML tables and MathML 3.0
- A “Production” Model with both XHTML and OASIS CALS tables and MathML 2.0
- A “Production” Model with both XHTML and OASIS CALS tables and MathML 3.0

4.3 **Resolved: Move from MathML 2.0 to MathML 3.0**

Different document models will be written: one for NISO STS plus MathML 2.0 (the current ISO STS model) and a second model for NISO STS plus MathML 3.0. If there are other branching decisions by the group, each model will need to occur twice: once for each MathML.

4.4 **Resolved: Add Model for Structural Index**

A structural index model (optional) will be added to NISO STS (all tag sets).

4.5 **Resolved: Add XInclude**

The XInclude elements will be added to NISO STS, provisionally at the section `<sec>` level.

4.6 **Resolved: Add Normative Notes**

Normative notes will be added to the NISO STS model and allowed anywhere non-normative notes are currently allowed.

4.7 **Resolved: Add Normative Examples**

Normative examples will be added to the NISO STS model, allowed anywhere non-normative examples are allowed.

4.8 **Partially Resolved: Information Classing of Sections**

- **Resolved:** Information classing of sections by adding type attributes is useful and should be encouraged. The list of section types should not be restricted by the grammar.
- **Tabled:** The requirements for such section types are being considered by a Subcommittee.

4.9 **Partially Resolved: Add Elements to Capture CrossRef History Information**

- **Resolved:** The proposed new metadata model defines elements for capturing the new CrossRef history information.
- **Tabled:** Now that we have seen the new metadata proposal, we need to consider if we need to record the new CrossRef information anywhere else besides the metadata.

4.10 **Resolved: Check Adequacy of Term Section Model**

- The TBX model for terminology will be retained unchanged in NISO STS.
- Expand the existing `<term-display>` model so it can be used as an alternative to TBX tagging in simple cases. The new model should “make it easy to tag existing documents in display
order and retain, but not require, semantic tagging of term components. The new model expands <term-display> to include semantic elements and loosens the <term-sec> model.

- Add an attribute to <term> to indicate ‘preferred’, ‘non-preferred’, or ‘admitted’.

**Documentation Recommendations**

- In current ISO STS DTD, <term-sec> is allowed as a direct child of <body>. The Working Group agreed that best practice would not use <term-sec> anywhere but inside a terms and definitions section and that the prose documentation should discourage its use elsewhere.
- Add a term and definitions section to the list of section types.

4.11 **Resolved: Add a Structure for a Group of Notes**

NISO STS will create a new block-level structure to hold a group of notes. The model will include an optional label, an optional title, followed by an OR group of normative notes and non-normative notes. The new object will be allowed anywhere normative and non-normative notes are allowed.

4.12 **Resolved: Markup of Forms in Standards Content**

- Add a new attribute (@is-form) to identify an object (such as a table or figure) as a form. This attribute will be needed on at least the following elements: figure, graphic, table-wrap, pre-format, and boxed-text.
- Also add a new @form-type attribute (CDATA unrestricted values) that describes the content of the form. Suggested values from Gerrit Imsieke’s email:
  - ‘blank’ or ‘none’ (i.e., no content, empty form)
  - ‘filled-in-example’ or ‘exemplar’ (e.g., “phone: +1 301-315-9631”),
  - ‘placeholder-explanations’ or ‘instruction’ (e.g., “insert phone number, including country prefix”), and
  - ‘unspecified’.

4.13 **Resolved: Add Markup for Structural Table of Contents**

The BITS model for a structural Table of Contents will be added to all of the NISO STS tag sets.

4.14 **Resolved: Add <long-desc> to <inline-graphic>**

For reasons of accessibility, the element <long-desc> will be added to the model of <inline-graphic>.

4.15 **Resolved: Handle additional material for adopted standards**

- Add a second top-level element to the NISO STS Tag Sets to allow both a regular <standard> document and an <adoption> document, which is a standard that adopts (and therefore contains, within one document) one or more existing standards. In this model, the “core standard(s)” will take the current <standard> model, and <adoption> will allow this core to be enclosed in one or more outer <adoption> wrappers.
• The model for <adoption> will allow adopting standard front matter (metadata, possibly followed by notes and sections) and back matter before a <standard>, and adopting back matter after the <standard>.

Roads not taken: The nested-standards model was considered and rejected.

4.16 Resolved: Add a less ISO-specific Metadata Model

This requirement led to a number of changes, based on the following decisions concerning direction, that were first articulated by the STS Metadata Subcommittee, and reaffirmed by the Working Group.

• Decision: The metadata models be enabling not enforcing. (Individual standards producers may want to create a more restrictive model for internal use.)

• Decision: The metadata shall be (if possible) backward compatible with ISO STS metadata (by which we mean that documents tagged to current ISO STS should be valid, but the NISO STS content models may not be the same as those of ISO).

• Decision: The metadata should avoid recording information redundantly.

• Decision: As much as possible, it should be possible to tag the sections of a standard in reading order.

The details concerning the changes for this item can be found in the report NISO STS Metadata Summary, Options, Discussion Points (2016/06/10) in the NISO STS website.

5 Documentation Requests

5.1 Resolved: Make Standards-specific examples

The current ISO STS documentation sometimes uses element and attribute examples taken from the JATS Publishing Tag Set (Blue). Such samples will be replaced by standards-specific samples.

5.2 Resolved: Extend and define the list of section types

NISO STS documentation should list recommended section types and define them, so organizations can choose to regularize their practice. A Section Type Subcommittee was formed to work on the specific values for such a list, both names and definitions.

5.3 Resolved: Document that <term-sec> is not a section

The element <term-sec> is not a section, it is a container element that surrounds TBX entries, and has specific (restricted) contexts within a standards document. This element should be documented and clearly differentiated from an ordinary section (whose type attribute has a value such as “term” or “terminology”).