NISO JATS Standing Committee Recommended Changes Between NISO/JATS 1.1 and Draft JATS 1.2

(in Response to Comments on NISO Z39.96-2015 (JATS V1.1) through May, 2018)

July 2018

1 Introduction

The NISO JATS Standing Committee has completed reviewing the requests for changes to ANSI/NISO Z39.96-2015 (V1.2d1) from the release of that version through May, 2018. This document lists the JATS Standing Committee recommendations made in response to those change requests as well as the recommendations that led to the development of JATS version 1.2d1 from JATS 1.1. These committee recommendations are reflected in the Committee Draft 1.2d2 non-normative DTDs, XSDs, RNGs, and Tag Library documentation.

1.1 This Report

This document is divided into seven sections:

- This Introduction

- Summary of the tag set changes (that is, changes to the DTDs and schemas) between JATS V1.1 and JATS Committee Draft V1.2d2

- JATS Standing Committee Recommendations

  - Standing Committee recommendations for requested changes to the tag sets. These changes are listed in order by NISO Comment number.

  - Standing Committee recommendations for requested changes to the tag sets, in which the recommendations were initially decided one way for Committee Draft JATS v1.2d1 and then reversed for the final JATS V1.2d2 Committee Draft. These changes are listed in order by NISO Comment number.

  - Standing Committee recommendations for requested changes to wording in the ANSI/NISO Standard Normative Documentation. These changes are listed in order by NISO Comment number.

  - Standing Committee recommendations for requested changes to the JATS non-normative documentation, that is, changes to the JATS Tag Libraries and sample files. These changes are listed in order by NISO Comment number.

- Change request comments from the NISO site that were denied, withdrawn, or otherwise deemed not to require a change to the JATS v1.1 standard, schema-grammars, or non-normative documentation. These items will not be discussed further in this report.

1.2 Caveat

The Standing Committee recommendations in this document are under Standing Committee review and *have not been approved* for incorporation in the NISO JATS Standard. Thus, any tools and supporting materials based on these recommendations must be considered drafts.

1.3 Key to Tag Set Changes

Key: The following Tag Set icons appear with each suggested change to indicate to which of the Tag Sets a change will apply (Scope):

A Archiving

P Publishing

A Article Authoring

2   JATS 1.1 to JATS 1.2d2 Tag Set Changes Summary

2.1 Changes to Elements

Elements are listed in alphabetical order by generic identifier (tag name) or in named groups such as "*Index Elements*". All changes are in all Tag Sets unless specifically noted below.

- **<array>** — [Authoring only] Added <array> to Authoring, but *only for use inside embedded index terms*. Model for <array> is the reduced one from Publishing.

- **<article-meta>**

    - Article Version (<article-version>) — Added new element <article-version> inside <article-meta> to hold one version number for the article. Optional in all three Tag Sets. In Publishing and Archiving, the <article-version> element may repeat inside <article-version-alternatives> to hold version numbers for the same article that were assigned by different systems.

    - Publication Date Alternative (<pub-date-not-available>)— [Publishing only] A new element <pub-date-not-available> (a flag for use when there is no available <pub-date>) was added to <article-meta>. The element <pub-date> is still required and repeatable, unless it is replaced by a <pub-date-not-available> element.

    - Publication Date Alternative (<pub-date-not-available>)— [Archiving only] A new element <pub-date-not-available> (a flag for use when there is no available <pub-date>) was added to <article-meta>. The element <pub-date> is still optional and repeatable, unless it is replaced by a <pub-date-not-available> element.

    - Publication History (<pub-history>) — [Publishing and Archiving only] Added an optional <pub-history> to hold one or more of <event>s. New elements: <event>, <event-desc>.

- **<chapter-title>** — [Publishing and Authoring only] In Archiving, the model for <chapter-title> includes all phrase-level elements. In Publishing and Authoring, added the following elements to <chapter-title> to more closely mirror the model of <article-title>:

    - abbrev.class (abbrev)
    - inline-display.class (alternatives | inline-graphic | private-char)
    - inline-math.class (chem-struct | inline-formula)
    - math.class (mml:math | tex-math) [Authoring mml:math only]
    - phrase-content.class (named-content | styled-content) [Authoring only]
    - simple-link.class (fn | target | xref)

- **<code>** — Both <inline-graphic> and <private-char> added to elements allowed in <code>.

- **<conf-date>** — [Archiving only] Allow face markup inside <conf-date>.

- **<contrib> —** Added <string-name> as an alternative to <name> in Publishing and Authoring. All Tag Sets are now the same.

- **<date-in-citation>** — [Archiving only] Allow <sub> and <sup> inside <date-in-citation>.

- **<data-title>** — Both <inline-graphic> and <private-char> allowed inside <data-title>.

- **<front-stub>** [in Publishing and Archiving only]

  - Added new element <article-version> inside <front-stub> to hold one version number for the sub-article or response. In Publishing and Archiving, the <article-version> element may repeat inside <article-version-alternatives> to hold version numbers for the same article that were assigned by different systems.

  - Publication Date Alternative (<pub-date-not-available>)— A new element <pub-date-not-available> (a flag for use when there is no available <pub-date>) was added to <front-stub>. The element <pub-date> is still optional and repeatable, unless it is replaced by a <pub-date-not-available> element.

  - Publication History (<pub-history>) — Added an optional <pub-history> to <front-stub> to hold one or more of <event>s. New elements: <event>, <event-desc>.

- **Index Elements** — Added the inline index terms from BITS, which are embedded in narrative text and used to automatically generate one or more indices. Elements added: <index-term>, <index-term-range-end>, <see>, and <see-also>. Models and attributes use BITS.

- **<index-term>** — See Index Elements

- **<index-term-range-end>** — See Index Elements

- **<inline-formula>** — Added accessibility elements <alt-text> and <long-desc> to the model of inline formula.

- **<inline-graphic>** — Added <long-desc> to <inline-graphic>, where it joins <alt-text>.

- **<inline-media> —** Added new element<inline-media>, which related to <media> as <inline-graphic> does to <graphic>. The new element is allowed anywhere <inline-graphic> is allowed.

- **Non-Monetary Support** — Previous support descriptions in JATS used the <funding-group> element, which could only be used to describe monetary support for the research described in the article.

  Added new element <contributed-resource-group> to hold descriptions of non-monetary

support (such as data, facilities, or any in-kind support) for the research described in the article. This changed the JATS models in several ways:

- Inside <article-meta>, added a new element <support-group> to hold both <funding-group> and <contributed-resource-group>. For backwards compatibility, <support-group> is a peer to <funding-group> inside <article-meta>, and (as the path going forward) <support-group> also contains <funding-group>.

- New elements inside <contributed-resource-group> (as its children or descendants) include:
  - support-description
  - resource-group
  - resource-wrap
  - resource-name
  - resource-id

- Inside <award-group>, added a new element <support-source> to describe the source of a non-monetary award. The element <support-source> is as an alternative to <funding-source> (which describes the source of a monetary award).

- **<part-title>** — [Publishing and Authoring only] In Archiving, the model for <part-title> includes all phrase-level elements. In Publishing and Authoring, added the following elements to <part-title> to more closely mirror the model of <article-title>:

  - abbrev.class (abbrev)

  - inline-display.class (alternatives | inline-graphic | private-char)

  - inline-math.class (chem-struct | inline-formula)

  - math.class (mml:math | tex-math) [Authoring mml:math only]

  - phrase-content.class (named-content | styled-content) [Authoring only]

  - simple-link.class (fn | target | xref)

- **<pub-history>** — Added <pub-history> to hold <event>s. Unlike in BITS, <pub-history> will contain ONLY <event> elements.

  - Added <event>, which will reside only inside <pub-history>. Took model from BITS.

  - Took <event> attributes from BITS.

  - Added <article-version> <article-version> and <article-version-alternatives> to JATS model of <event>.

- **<role>** — Added new attribute for Degree of Contribution (@degree-contribution). The value for this attribute shall be uncontrolled. Documentation will suggest three values: 'Lead', 'Supporting', or 'Equal'. The documentation will suggest that users of CRediT may wish to restrict their instances to these values.

- **<see>** — See Index Elements

- **<see-also>** — See Index Elements

- **<source>** — [Publishing and Authoring only] In Archiving, the model for <source> includes all phrase-level elements. In Publishing and Authoring, added the following elements to <source> to more closely mirror the model of <article-title>:

  - abbrev.class (abbrev)

  - inline-display.class (alternatives | inline-graphic | private-char)

  - inline-math.class (chem-struct | inline-formula)

  - math.class (mml:math | tex-math) [Authoring mml:math only]

  - phrase-content.class (named-content | styled-content) [Authoring only]

  - simple-link.class (fn | target | xref)

- **<std>** — Both <inline-graphic> and <private-char> added to elements allowed inside Standard <std>.

- **<table-wrap>** — Added <disp-formula> as a sibling to <graphic>, <list>, etc. as the content of a <table-wrap> that does not contain a <table>.

- **<x>** — [Archiving Only] Both <inline-graphic> and <private-char> allowed inside <x>.

2.2 Changes to Attributes

Various existing attributes, including the base JATS attributes, were added to all the new elements. In addition, there were the following attribute modifications.

Article Attributes (on <article>)

- **@dtd-version** becomes FIXED '1.2d2' replacing the value '1.1'.

- **Pseudo-attribute** *xsi:noNamespaceSchemaLocation* added to attribute list of <article>. Most modern processors do not need this, but a user with an older processor requested it, so the JATS Standing Committee acquiesced. This pseudo-attribute cannot be used with a DOCTYPE declaration and is for the use of XSD schema processing only.

Other Attribute Changes

- **@assigning-authority** — Added to the following elements:
  - <article-id>
  - <contrib-id>
  - <institution-id>

- <issue-id>
- <journal-id>
- <object-id>
- <volume-id>

(Note: <ext-link> and <pub-id> already took the @assigning-authority attribute.)

- **<article-version-type> attributes** — Attributes defined as @article-version-type, @designator, @specific-use, @content-type, @iso-8601-date, the four vocabulary attributes, the two JATS base attributes (@id and @xml:base), and all the linking attributes (might link).

- **<award-id> attributes** — Made the attributes for <award-id> like those of BITS; added @award-type and the might link attributes.

- **@person-group-type** — Authoring and Publishing use a restricted list of values. Added the values 'illustrator' and 'research-assistant' to this value list. Archiving uses an unrestricted CDATA list of values. Added values 'illustrator' and 'research-assistant' to Archiving's suggested value list in the non-normative documentation.

- **@pub-id-type** — The attribute @pub-id-type for <article-id> and <pub-id> in Publishing and Authoring is a fixed list of values which mixes types and authorities. Although these value lists will *not* change; the non-normative documentation will specify that for Best Practice, the attribute @pub-id-type should describe the type values and the attribute @assigning-authority should name the responsible agency.

  In Archiving, @pub-id-type is a CDATA attribute instead of as an explicit value list on both <article-id> and <pub-id>.

  The following elements used @pub-id-type as unrestricted CDATA values in version 1.1 in all three tag sets, and are still CDATA attributes:
  - <issue-id>
  - <object-id>
  - <volume-id>

- **@style-detail** — Added to <styled-content>, <verse-line>, and <verse-group>.

- **<term> attributes** — Added attributes @term-type, @term-status, and the four Vocabulary/Taxonomy attributes described below.

- **@use-type** — Added optional CDATA attribute to <mixed-citation> and <element-citation>. The first use-case documented describes cited data usage as 'analyzed', 'generated', etc.

- **Verse Attributes** —

  - Added @indent-level, @style, @style-detail, and @style-type to <verse-line>.

  - Added @style, @style-detail, and @style-type to <verse-group>.

- **Vocabulary/Taxonomy attributes** — Added four new attributes for naming (and possibly linking to) a general or controlled taxonomy, vocabulary, index, database or other source of terms: @vocab, @vocab-identifier, @vocab-term, and @vocab-term-identifier.

    - Attributes @vocab and @vocab-identifier were added to the elements:
        - \<article-version>
        - \<compound-kwd>
        - \<compound-subject>
        - \<inline-media>
        - \<institution-id>
        - \<kwd>
        - \<kwd-group>
        - \<named-content>
        - \<nested-kwd>
        - \<role>
        - \<subject>
        - \<subj-group>
        - \<term>
        - \<unstructured-kwd-group>

    - Attributes @vocab-term and @vocab-term-identifier were added to the elements:
        - \<article-version>
        - \<compound-kwd>
        - \<compound-subject>
        - \<inline-media>
        - \<kwd>
        - \<named-content>
        - \<nested-kwd>
        - \<role>
        - \<subject>
        - \<term>

2.3 Element/Parameter Entity Changes Made to Authoring/Publishing

- **\<person-group>** — Removed string-name.class PE from PE person-group-elements because \<string-name> was added to PE name.class, which the PE person-group-elements already used. No model change in either tag set.

2.4 Element/Parameter Entity Changes Made to Authoring

- **\<mml:math>** — Added math class (which in Authoring is just \<mml:math>) to simple phrase parameter entity, adding \<mml:math> to many places in Authoring, including the \<article-title>.

3 JATS Standing Committee Recommendations

3.1 #00566 Add \<disp-formula> element to table-wrap

Standing Committee Recommendation

The JATS 1.2d2 Tag Sets should permit the <disp-formula> element to be used within <table-wrap> as a sibling to <graphic>, <media>, <chem-struct-wrapper>, and other elements.

3.2 #00590 Add CRediT contributor role taxonomy to JATS

The original Comment was augmented and revised in email discussions and phone calls. The final Comment request was to add to JATS the ability to:

- Attach role information to a contributor (<contrib>)

- Support multiple roles for a single contributor

- Support CRediT taxonomy terms to describe this role, but also non-CRediT terms and free-text qualifiers to terms

- Specify the term source (such as the CRediT taxonomy)

Standing Committee Recommendation

- There may be many <role> elements associated with a single contributor (<contrib>). These elements should be used to carry role information, with one <role> element for each type of contribution for the individual. For example, these <role> elements may be used to record CRediT contribution taxonomy terms.

- The content of each <role> element should be the name of a role. That role might be a CRediT taxonomic term, the translation of such a term into another language, any short narrative role description, a CRediT term with 'free-text qualifiers', or a term from any non-CRediT taxonomy.

- As the <role> element holds the display text version of the contributor's role; metadata for the vocabulary/taxonomy should be collected in the <role> element's attributes:

  - A @vocab attribute on <role> should be available to name the vocabulary (taxonomy, ontology, database, term list), e.g., 'CRediT'.

  - A @vocab-identifier attribute should be available to point directly to the vocabulary (using a URI or DOI for example), for vocabularies for which that is possible.

  - A @vocab-term attribute on <role> should be available to contain the vocabulary/taxonomy term (such as a CRediT taxonomic term). This value holds a canonical form of the free-form-prose content of the element.
    NOTE: If the <role> element has no content, the value of this attribute should be considered to be the contributor's role.

- A @vocab-term-identifier attribute (also likely a URI) should be available to point directly to the term within the vocabulary, for vocabularies for which that is possible.

3.3 #00601 Add @xsi:noNamespaceSchemaLocation to <article>

Standing Committee Recommendation

The 'attribute' `@xsi:noNamespaceSchemaLocation` should be added to the document element in each of the JATS DTDs as:

```
xsi:noNamespaceSchemaLocation CDATA #IMPLIED
```

3.4 #00609 Add <long-desc> to <inline-graphic>

Standing Committee Recommendation

The accessibility element <long-desc> should be added to the model of <inline-graphic>.

3.5 #00618 Allow <string-name> as part of <contrib>

Standing Committee Recommendation

In the Publishing and Authoring Tag Sets, the element <contrib> should be allowed to contain either <name> or <string-name>, as <contrib> can do currently in Archiving.

3.6 #00621 Add <italic> to model of <copyright-holder> (denied)

Standing Committee Documentation Recommendation

The element <copyright-holder> is a metadata element for lookup and may not even be displayed, so <italic> should not be added to this model. The request is denied.

However, the Tag Library non-normative documentation should better explain the content and purpose of <copyright-holder> and <copyright-year> and how they differ from <copyright-statement>, and what it means to say that they contain the same 'information'.

3.7 #00626/#00627/#00665 Add xref/@ref-type values 'bio' and 'award'

Reference types 'bio' and 'award'" should be added to the fixed value list in Publishing and Authoring. and to the list of suggested values in Archiving.

3.8　#00650 Allow inline-formula within \<source\>

Standing Committee Recommendation

- The element \<inline-formula\> should be allowed inside \<source\>.

- Based on this Comment, the following elements were added to \<source\>, to more closely mirror the model of \<article-title\>:

  - inline-display class (alternatives | inline-graphic | private-char)

  - inline-math class (chem-struct | inline-formula)

  - math class (tex-math | mml:math)

  - phrase-content.class (named-content | styled-content) [Authoring only]

  - simple link class (fn | target |xref)

  - abbrev class (abbrev)

3.9　#00655 Add an \<emphasis\> tag (denied)

Standing Committee Recommendation

The request for a generic emphasis element was denied, since \<styled-content\> should be used in such cases. However, the request exposed inadequacies in what could be expressed using \<styled-content\> and its attributes. Many languages (including Japanese, Korean, Thai, Chinese, Arabic, Hungarian, and Armenian) use stress marks and similar typographic conventions (such as dots or sesamis) in the same way that English (as one example) uses \<bold\> or \<italic\> emphasis. JATS needs a more specific way to describe non-Latin emphasis options in their content, as additional information for \<styled-content\>.

The Tag Sets should add a @style-detail attribute (taken from the original request) to the @style and @style-type attributes already available for \<styled-content\>, thus providing three possibilities for additional style information on \<styled-content\>: @style, @style-type, and @style-detail.

For example, the following should be able to be tagged in JATS:

```
<p><styled-content specific-use="emphasis" style-type="dot" style-detail="open"
toggle="no">あいうえお</styled-content> ...</p>
```

3.10　#00656 Proposing to introduce the \<semantic\> tag (denied)

Standing Committee Recommendation

This request was denied. However, the request for a \<semantic\> element exposed the inadequacy of the attributes for \<named-content\>, for instance, the ability to name a taxonomy for a named component.

Since the <named-content> element holds the display text, the metadata for the CRediT, Dublin Core, or other taxonomy should be collected in the <named-content> element's attributes. The attributes must be able to name a generic vocabulary ('chemistry'), as well as a specific taxonomy ('CRediT'). The attributes originally defined for the <role> element to hold the CRediT taxonomy should be reused for <named-content>.

Therefore, the following attributes should be added to <named-content>:

- A @vocab attribute to name the vocabulary (taxonomy, ontology, database, e.g., 'dcc').

- A @vocab-identifier attribute to point directly to the vocabulary, for example, using a URI or DOI for vocabularies for which that is possible.

- A @vocab-term attribute to contain the vocabulary/taxonomic term, the canonical form of the free form prose content of the element.

- A @vocab-term-identifier attribute (also likely a URI) to point directly to the term within the vocabulary, for vocabularies for which that is possible.

3.11 #00659 Add attribute @term-type to <term> element

Standing Committee Recommendation

The following attributes should be added and/or documented for <term>:

- The @term-status attribute should talk about the status of the term within its source vocabulary with such suggested values as 'preferred', 'deprecated', 'admitted', etc. [Suggested values in documentation, not a specified value list.]

- The @term-type attribute should record information about the term with suggested values such as 'variant', 'borrowed', 'abbreviated', etc. [Suggested values in documentation, not a specified value list.]

- All four vocabulary elements (@vocab, @vocab-identifier, @vocab-term, and @vocab-term-identifier).

3.12 #00660/#00664/#00733/#00735 Add article version information

Summarized Request

With the recent increase in availability of early versions of journal articles, it is becoming more important to encode information about the article version/status within the XML. These comments requested a new element <article-version> within <article-meta> to hold this information. The element would have one required attribute @article-version-type.

Standing Committee Recommendation

- The complete recommendation, with definitions, valued attributes, examples, etc. is denied. In spite of the existence of NISO-RP-8-2008 (the NISO Journal Article Versions Recommendation (JAV)), there is little overall consensus of what a 'version' is for a

journal article, and how to name (or number) them. (The Standing Committee could not even agree whether the value 'proof' is a version, a status, a stage in the publication life-cycle, or something else.)

- However, the Standing Committee agrees that there is a need to be able to record, *in the XML document*, a status or version or lifecycle stage or similar descriptor, because many publishers are making more than one "version" (ordinary English word) of a document available to the public, for example, making public a proof, a corrected proof, and a copy of record (or perhaps that is version 0.1, 0.9, and 1.0). This relatively new practice argues in favor of allowing a "status-version-lifecycle-stage-whatever" element as part of the metadata that travels with an XML document rather than treating it as production information that is stored externally.

- **<article-version>** An <article-version> element should be added as an optional element (not directly repeatable, see <article-version-alternatives> below) inside the <article-meta> element in Publishing, Archiving, and Authoring. [*Editor's Note: The element <article-version> was also added to <front-stub>, <event>, and <event-desc>. In <event-desc> the element is repeatable.)*]

  The <article-version> element should have textual content (#PCDATA) and can be used to hold version information such as a version type, version status, version statement, or version number. For example, <article-version> may contain a word or phrase from a controlled vocabulary (for example, "revised-proof" from the NISO JAV recommendation), a non-JAV version status ('draft'), a version statement ('Second revised version'), or a version number ('2-a').

- **<article-version-alternatives>** Since the <article-version> element should describe the particular version in which the tag is embedded, the element should only be allowed to repeat when there are alternative current version numbers (for example, a NISO JAV version phrase as well as a publisher or aggregator version number). Since, under these circumstances, there will be more than one version number, JATS should add a new element <article-version-alternatives> to be allowed anywhere <article-version> is allowed. Documentation should make it clear that these alternatives are for the current document, not for prior or subsequent versions, which should most probably be tagged with <related-article>.

- The <article-version> element should take at least the following attributes:
  - The four new vocab attributes, so <article-version> can point to a controlled vocabulary such as NISO JAV when one is being used.
  - An @article-version-type attribute, to be used primarily on those occasions where there are multiple <article-version> elements, to differentiate between them. Such multiples should always be versions of this article in different systems, not versions of this article through time.
  - @specific-use
  - @iso-8601-date
  - @xml:base
  - @id

3.13 #00663 Storing extended publication events in the XML

A P

Standing Committee Recommendation

There was debate on whether to add <event> to <history> or to add a new element
<pub-history> to hold both dates and events. After much discussion, the compromise (not to the
complete liking of either side of the discussion) is:

- The model for <history> in both Publishing and Archiving should be unchanged. Publishing
  and Archiving model history differently, and this should remain so for the current round of
  changes. In both, history contains <date> elements.

- The model for <article-meta> in both Publishing and Archiving should now include both
  <history> and <pub-history>:
  ```
  history?, pub-history?,
  ```

- The model for <pub-history> in both Publishing and Archiving and should be one or more
  <event> elements. The model for <pub-history> should not, at this time, contain <date> or
  <string-date> elements as the BITS model does.
  ```
  pub-history  (event+)
  ```

- The <event> element should also contain the possibility of <date> element children.

- The associated <event> attributes from BITS should be added to JATS.

- An optional grouping (<article-version> or <article-version-alternatives>) should be added
  to <event>, although an <event> need not record the same date and happening as is recorded
  in an <article-version> element.

3.14 #00710 Make <pub-date> optional in Publishing

A P

Standing Committee Recommendation

- The request to make <pub-dare> optional was denied. Instead, to address this issue, a new
  element <pub-date-not-available> should be added to act as an alternative to the required
  <pub-date>. The element <pub-date-not-available> should be added to <article-meta>,
  <front-stub>, and <event-desc>, in both Publishing and Archiving. In both Publishing and
  Archiving, where the element <pub-date> is used now, a JATS user should be able to use
  either a <pub-date> or a <pub-date-not-available> element, but for Publishing, there must be
  at least one of these elements in <article-meta>.

- <pub-date-not-available> should be an empty element used as a flag. An article either has a
  <pub-date>, or this flag that means there will not be a <pub-date>. The presence of this flag
  does not mean that the article is unpublished necessarily; it indicates that a <pub-date> is
  not available.

- The JATS Standing Committee should mention this element to the BITS Working Group.

(Note: The element <date-not-available> was changed to <pub-date-not-available> as requested by comment *#00770c*.)

3.15 #00731 Presentation/indenting of Verse Lines

A P A

Standing Committee Recommendation

- An @indent-level attribute should be added to <verse-line>, to hold the relative number of units to be indented.

- For users where something fancier is required: JATS should add the style attributes (@style, @style-type, and @style-detail) to <verse-group> and <verse-line>.

- No guidance on use of this attribute should be given in the documentation; these changes are just to support a publisher's production requirements. The style attributes need not be used for CSS styles, although such use is common.

3.16 #00733 - Add @specific-use attribute to <article-version>

A P

Standing Committee Recommendation

A @specific-use attribute should be added to the new <article-version> element.

3.17 #00737 Allow alt-text in Inline Equations

A P A

Standing Committee Recommendation

The content model for the element <inline-formula> should be altered to allow both <alt-text> and <long-desc> as child elements.

3.18 Committee Request: Add vocabulary attributes to subjects and keywords

A P A

Standing Committee Recommendation

The following additions should be made to the JATS models for all 3 Tag Sets:

- Place the following attributes on <kwd-group>, <subj-group>, and (for Archiving) <unstructured-kwd-group>:

  - A @vocab attribute to name the vocabulary (taxonomy, ontology, database), (e.g., 'CRediT' or 'dcc').

  - A @vocab-identifier attribute to point to the vocabulary, using a URI or DOI for example, for vocabularies for which that is possible.

- Place the following attributes on all the keyword elements inside <kwd-group> (except the unstructured keyword group) and all the subject elements inside <subj-group>:

- A @vocab-term attribute to hold the canonical form of the free form prose content of the element.

- A @vocab-term-identifier attribute (also likely a URI) to point directly to the term within the vocabulary, for vocabularies for which that is possible.

3.19 #00738: Add Data Availability Statement (denied)

A P A

Standing Committee Recommendation

The Data Availability Statement contains very important information that is becoming more frequent among journal publishers. But the request for a special section-level structure in Back Matter to contain this material (because article back matter is typically not behind publisher pay walls) is denied.

Data Availability Statements in JATS documents should be tagged as ordinary sections (<sec>), with the @sec-type classing attribute used to indicate that the section contains data availability material. We understand that this may mean that Data Availability Statements are not restricted to any specific location in the document, but JATS documentation will indicate in a Best Practice note that such material is best placed in a location to which access is not restricted.

3.20 #00746 Allow font face changes in conf-date in Green

A

Face markup will be allowed inside the element <conf-date> in Archiving (Green).

3.21 #00761 Inline media

A P A

Standing Committee Recommendation

Add a new element <inline-media>:

```
<p>Again she called on <inline-media id="celtic-name-hafgan"
content-type="pronunciation" mimetype="audio" mime-subtype="mp3"
xlink:href="http://celtic.cmrs.ucla.edu/csana/pronunciation/hafgan.mp3"
vocab="CSANA Pronunciations for Celtic Texts"
vocab-identifier="http://celtic.cmrs.ucla.edu/csana/pronunciation.html"
Hafgan</inline-media>, to see if he would ... </p>
```

- The element <inline-media> will relate to <media> as <inline-graphic> does to <graphic>.

- The new element will be modeled as shown in the example above, with the addition of at least @vocab-term and @vocab-term-identifier.

3.22 #00763 Inline Index Terms for JATS

A P A

Standing Committee Recommendation

Add JATS inline index terms to JATS. As defined in BITS, these are embedded in the narrative text and used to generate indices automatically. Uses the BITS models and attributes to the extent possible.

3.23 #00764 CRediT Role Degree of Contribution

A P A

Standing Committee Recommendation

Add another attribute to the element <role> to hold the Degree of Contribution.

- The value for this attribute shall be uncontrolled.

- Documentation will suggest three values: 'Lead', 'Supporting', or 'Equal'. The documentation will suggest that users of CRediT may wish to restrict their instances to these values.

3.24 #00766 Add tagging for non-monetary research support and resources

A P A

Standing Committee Recommendation

JATS has had tagging for capturing monetary funding sources (<funding-group>, etc.), but there is a broader need to capture other, non-monetary support for research, and there was not a way to capture that material in JATS. In response to this request, functional requirements for such tagging were derived, and, based on those requirements, a new model was proposed and accepted.

The requirements are:

- Provide an overarching wrapper to hold information about both funding support and non-monetary support. Thus, non-financial support can be described independently of financial support.

- For each non-money resource provided, be able to describe (but do not require):

  - the source of the support, including institution identification

  - a textual description of the support

  - the type of support (what was provided)

  - the type of resource, e.g., user-facility, office-space, research-materials

  - name or description of resource

  - identifier of resource

  - award identifier

  - the principal award recipient

Context for new Metadata

Model an outer support container element (<support-group>) that can contain both <funding-group> (monetary support) and <contributed-resource-group> (non-monetary support such as data or facilities). The <funding-group> element will be allowed as a peer of this new group (for backwards compatibility) but the new element will also contain <funding-group>, as it may be used in the future. The model for the metadata will be as follows;

```
article-meta
...
   funding-group*
   support-group*
```

```
funding-group*
contributed-resource-group*
```

Model for <contributed-resource-group>

The new element <contributed-resource-group> has a model based on <funding-group> and is equivalent to <funding-group> for non-financial support. The <award-group> that is inside <funding-group> in current JATS was reused inside the new contributed support group to describe an award granted for contributed-resource support. In addition, several new elements were added to describe contributed resources:

- <support-source>
- <support-description>
- <resource-group>
- <resource-wrap>, <resource-name>, and <resource-id>

3.25 #00767 Add Embedded Index Terms to JATS

Standing Committee Recommendation (See Comment #00763)

Add inline index terms (as defined in BITS) to JATS. Such terms are embedded in the narrative text so that an Index may be generated programmatically.

3.26 #00769 Allow <sup> in <date-in-citation> in Green

Standing Committee Recommendation

The superscript and subscript elements (<sub> and <sup>) will be allowed inside <date-in-citation> in Green.

3.27 #00770 Where vocabulary attributes allowed

This Comment combined a numbers of request into a single comment. The Standing Committee made recommendations concerning each sub-request separately.

3.27.1 #00770a Where vocabulary attributes allowed

Standing Committee Recommendation

The keyword and subject elements inside a group level will be changed to allow all four attributes, i.e., @vocab, @vocal-identifier, @vocab-term, and @vocab-term-identifier, equally, so that each term can name its own vocabulary.

3.27.2 #00770b: Renaming vocabulary attributes (denied)

Standing Committee Recommendation

The four new vocabulary are shared with NISO STS, which has already voted to accept them. The attribute names should not be changed.

3.27.3   #00770c Concerning <date-not-available>

A P 𝒜

Standing Committee Recommendation

- The element <date-not-available> (added in JATS 1.2d1) should be renamed to <pub-date-not-available>.

- Since <pub-date-not-available> can only be used where <pub-date> is used now, the content model should be changed to allow ONE and only one <pub-date-not-available> and/or multiple <pub-date>s (required or optional according to the document type), for example, for Publishing (Blue):

  ```
  ..., (pub-date-not-available | pub-date+), ...
  ```

3.28 #00771 Add @assigning-authority to <object-id>

A P 𝒜

Standing Committee Recommendation

The Standing Committee agreed that adding @assigning-authority to the element <object-id> was a very good idea, but this addition raised larger issues.

As it stands in the current release, JATS has a @pub-id-type attribute that conflates the two meanings of type-of-identifier and source-of-identifier (i.e., assigning authority). This conflation of meaning is likely to be true on many (possibly all) of the elements that use @pub-id-type (<article-id>, <issue-id>, <pub-id>, <volume-id>, etc.). The Committee decided that the attribute @assigning-authority may also be useful for other types of identifiers (<contrib-id>, <institution-id>, etc.).

Therefore the attribute @assigning-authority should be added to the following elements:

- <article-id>
- <contrib-id>
- <institution-id>
- <issue-id>
- <journal-id>
- <object-id>
- <volume-id>

(Note: <ext-link> and <pub-id> already had the attribute, so was not part of the recommendation)

3.29 #00773 Add a new element <display-aff> (denied)

A P 𝒜

Standing Committee Recommendation

The requestor stated that "Many publishers have a requirement to display several partial affiliations together in a single string or paragraph for the purpose of brevity *in display* on their websites and/or PDFs. An example of such a string is the following:

```
"Departments of Biologya, and Chemistryb, University of Whitehorse"
```

While the JATS Standing Committee members are sure this is a real *display* requirement, it is written in the JATS charter that JATS is intended for interchange and reuse and that JATS will not endeavor to preserve the "look and feel" of any journal. This material is not metadata; this is textual display. Such display-only text is not within the scope of the JATS charter; the request is denied.

However, this request sparked many documentation recommendations, which are detailed in *Section 6*.

4 Recommendations in 1.2d1 that were Reversed in 1.2d2

Until the ANSI and NISO voting membership has voted on a version of JATS, it remains a Committee Draft, and the committee can change its mind or reverse a recommendation without creating a backwards incompatible situation. The following 1.2d1 recommendation were reversed in 1.2d2.

4.1 #00594/#00595/#00596: Derestrict @pub-id-type

The original Standing Committee recommendation in JATS Committee Draft 1.2d1:

> "The attribute @pub-id-type should become an unrestricted list (CDATA attribute) with a list of suggested values in the documentation for the Publishing Tag Set."

was reversed in JATS Committee Draft 1.2d2. Therefore no action was taken. Publishing will continue to use a fixed list of values. Archiving is and has been a CDATA open list.

4.2 #00600 Use CRediT taxonomy for @person-group-type

The original Suggestion was denied.

A further request bundled with this one (to harmonize @person-group-type and @contrib-type) led to the attribute @person-group-type being made into a CDATA list in JATS Committee Draft 1.2d1 in Publishing and Authoring (as it already is in Archiving). This recommendation was then reversed in JATS Committee Draft 1.2d2, and no action was taken for JATS version 1.2d2. (So JATS version 1.1 remains unchanged in this respect, @person-group-type in Publishing and Authoring remain fixed value lists.)

This request also led to extensive documentation recommendations for all three Tag Sets (See Section 6 *Recommendations for Tag Libraries and Samples*).

4.3 #00626/#00627/#00665 Add xref/@ref-type values 'bio' and 'award'

For the attribute @ref-type, Authoring and Publishing use a restricted list of values. The two tag sets were made into CDATA lists for JATS Committee Draft 1.2d1, but that recommendation was reversed in JATS Committee Draft 1.2d2. Publishing and Authoring will continue to use a fixed list of values. Archiving is and has been a CDATA open list.

The values 'bio' and 'award' should be added to the list of suggested values for @ref-type in Archiving and to the value list for @ref-type in Publishing and Authoring.

4.4 #00654 Make @fn-type an unrestricted list (denied)

The original Standing Committee recommendation in JATS Committee Draft 1.2d1:

> "The attribute @fn-type should be made into an unrestricted (CDATA) list in Publishing and Authoring, as it already is in Archiving."

was reversed in JATS Committee Draft 1.2d2. Therefore no action was taken. Publishing and Authoring will continue to use a fixed list of values. Archiving is and has been a CDATA open list.

5 Recommendations for ANSI/NISO Standard Normative Documentation

Changes to content models are direct changes to the text of ANSI/NISO Z39.96-2012. In addition, changes to element names, element descriptions, attribute names, or attribute values are all reflected in the text of the NISO standard. The following changes are documentation-specific change requests as well as change requests repeated from the previous section that led to wording changes in normative text of the NISO standard.

5.1 #00569 Rename @designator Attribute

Standing Committee Text Recommendation

- Rename the @designator attribute from 'Designator of the Edition' to 'Designator'.

- Reword the definition of @designator to indicate that it can function for a variety of elements, using <edition> and <version> as examples but not precluding other contexts .

These are changes to the wording of ANSI/NISO z39_96-2015 (JATS V1.1), but not to the content models or the intent of the attribute; any documents valid to JATS 1.1 will still be valid.

5.2 #00757 Allow multiple <permissions> within <sec-meta> (denied)

Standing Committee Recommendation

The original request is denied.

However, in response to this request, the definitions of the following elements will be tightened to better define and explain how JATS (currently) defines the permissions wrapper, copyright statement, copyright holder, copyright year, attribution (<attrib>), and acknowledgements. The examples accompanying this request made it clear that the use and purpose of the current elements could be better described.

6 Recommendations for Tag Libraries and Samples

The Tag Libraries for the three ANIS/NISO JATS Tag Sets are non-normative documentation written as an aid to JATS users and maintained at the National Library of Medicine (NLM) site (https://jats.nlm.nih.gov). The following Comments are a mixture of:

- documentation-change-specific requests,

- one of the tag-set-specific change requests already discussed that also led to wording changes or extensive rewrites in the non-normative Tag Library documents, or

- inspired by a denied tag set change request that led to documentation changes.

6.1 #00568 No content model is given for <version>

P

Standing Committee Documentation Recommendation

Content model for <version> was added to the Publishing Tag Library for JATS Version 1.1. No action was necessary for JATS Publishing version 1.2d2.

6.2 #00570 Typo in page for @assigning-authority

P

Standing Committee Documentation Recommendation

The word "semantc" was changed to "semantic" in the Publishing Tag Library for JATS Version 1.1. No action was necessary for JATS Publishing version 1.2d2.

6.3 #00579/#00580 Add format description to @start_date

A P A

Standing Committee Documentation Recommendation

The following *Remark* was added to the "ali" dates in JATS 1.1:

   Best Practice: NISO RP-22-2015 recommends that the start date be given in the ISO-8601 format 'YYYY-MM-DD', without inclusion of a time or a time zone.

6.4 #00590 Add CRediT contributor role taxonomy to JATS

A P A

Standing Committee Documentation Recommendation

- The <role> of a contributor may be relative to acquiring the data, performing the research, writing the paper, data visualization, or even an organizational role. As JATS is an enabling standard, we are agnostic on this point, and a publisher, archive, aggregator, or other JATS user may identify <role>s for a contributor as they choose.

- Rather than attempting to duplicate the CRediT taxonomy of personal roles (or any other vocabulary or taxonomy) within the JATS as a suggested values list, the documentation for <role> should point to the CRediT taxonomy as one example of a source of roles and provide a few real CRediT-tagged JATS examples.

- A Best Practice Note should advocate use of the CRediT taxonomy for <role>, but the Tag Libraries should also illustrate non-CRediT terms.

- There should be a <role> example for a collaboration (<collab>), when such a group wishes to be considered as a collective author. When the element <collab> is used inside <contrib> in place of a name, the <contrib> element should still hold the <role>. The element <collab> shall also be able to hold a <role> inside it.

6.5 #00592 Put a Closing Slash in the ali: Namespace URI

A P A

Standing Committee Documentation Recommendation

In JATS 1.1d3, the namespace for "ali" is defined as "`http://www.niso.org/schemas/ali/1.0`" (with no trailing slash). On the NISO site in NISO RP 22-2015, the same reference is given in the examples as "`http://www.niso.org/schemas/ali/1.0/`" (with a trailing slash).

Although this problem was resolved *before* this round of changes (the slash was added to the "ali" namespace URI in JATS 1.1), this information was insufficiently disseminated. The slash controversy is already mentioned in landing pages for the JATS Tag Sets:

- https://jats.nlm.nih.gov/archiving/1.1
- https://jats.nlm.nih.gov/publishing/1.1
- https://jats.nlm.nih.gov/articleauthoring/1.1

In this round of changes, a note should also be placed in the JATS 1.2d2 Change Report and additional discussion should be added to the JATS documentation.

6.6 #00593 Determine/document proper attributes when element <related-object> is an entire book

A P A

For the element <related-object>, the JATS 1.1 Tag Libraries suggest (Best Practice statement) that whenever an entire book is the related object, there should be no @source-id attribute present, but the book should be referenced via a @document-id attribute. This statement conflicts with the provided example on the same page.

Standing Committee Documentation Recommendation

A new <related-object> example that follows the stated Best Practice was produced, and it should be included in the Tag Library.

6.7 #00594/#00595/#00596: Derestrict @pub-id-type

P A

Standing Committee Documentation Recommendation

The following @pub-id-type examples should be added to the Publishing and Authoring Tag Libraries:

for the Mathematical Reviews (MR) article id

```
<article-id pub-id-type="mr">1707243</article-id>
```

and Zentralblatt MATH (zbMATH)

```
<article-id pub-id-type="zbl">06451297</article-id>
```

6.8 #00600 Harmonize @person-group-type and @contrib-type

A P A

Standing Committee Documentation Recommendation

- Document for <person-group>, that to link to the CRediT vocabulary terms explicitly, use <role> instead of @person-group-type-type and explain the use of the vocabulary attributes on <role>.

- Document that the @person-group-type values may include free text, some of the older values given in the JATS 1.1 Tag Library, or the new vocabulary terms, such as the CRediT taxonomy terms.

- Document for <contrib>, that to link to the CRediT vocabulary terms explicitly, use <role> instead of @contrib-type and explain the use of the vocabulary attributes on <role>.

- Document @content-type separately for <contrib-group>, explaining that to link to the CRediT vocabulary terms explicitly, <role> should be used instead of @content-type, and explaining the use of the vocabulary attributes on <role>.

- For @contrib-type, add a list of suggested values to the documentation, using the required values from @person-group-type. Mention the CRediT values on <role>.

6.9 #00618 Allow <string-name> as part of <contrib>

P A

Standing Committee Documentation Recommendation

The description of processing names should focus on the presence of <surname> or <given-names> and not be based on the <name> or <string-name> wrapper.

6.10 #00621 Add <italic> to model of <copyright-holder>

A P A

Standing Committee Documentation Recommendation (Tag Set request denied)

The Tag Library documentation should better explain the content and purpose of <copyright-holder> and <copyright-year> and how they differ from <copyright-statement>, and what it means to say that they contain the same 'information'. The element <copyright-holder> is there for lookup and may not even be displayed, so <italic> should not be added to this model.

6.11 #00622 Add 'preprint' to suggested values @related-article-type

Standing Committee Documentation Recommendation

Under CrossRef guidelines, a preprint may take a different DOI from a final article. The element <related-article> can be used to tie the final publication (which has DOI 'X') to the preprint publication (which has DOI 'Y'). The attribute @related-article-type is a CDATA value that can hold values for pointers in both directions (preprint-to-final and final-to-preprint).

The JATS Standing Committee agreed that the values 'has-preprint' and 'is-preprint' are inward-facing values that cannot express a type for <related-article> and <related-object>, because @related-article-type (and @content-type for <related-object>) always point outward, toward the object being targeted and they do not describe the article that contains the related element.

- The following suggested values should be added to @related-article-type:

  - 'preprint' — Used in version of record or published article to point to one of its preprints.

  - 'version-of-record' — Used in any article that is not a VoR, to point to the VoR of the article for which the current article is a different version, for example, a 'preprint' manuscript could point to the published article.

- The same attribute values should be added to the discussion of @content-type for <related-object>, with documentation making it clear that this concerns preprints of books, NOT articles.

- The description of @related-article-type should be rewritten to suggest that it describes *how* the related material is related, so 'addendum' means that Article X (which contains the <related-article> element) is related to Article Y (the target of the <related-article> element) by virtue of Y adding material to X. Document X is saying of Document Y "I am related to Document Y, because Y is my addendum". Related article describes something about the document to which it is pointing.

Suggested values for the @related-article-type attribute describe how the related article is related to the current article. As an example, the value 'addendum' indicates that the article being pointed to is acting as an addendum to the current article, not that the related article is necessarily of type 'addendum'. Most of the values for @related-article-type already made it clear that it was the relationship that was being named. The remaining suggested values should be reworded to the following:

- addendum — Additional material for this article, which, for example, was generated too late to be added to the main tex
- commentary — Used in an article to name a commentary or editorial that concerns this article

- commentary-article — Used in a commentary or editorial to name the article on which this one is commenting
- companion — Used in this article to name a companion (related or sibling) article
- corrected-article — Used in a correction to name the article being corrected. Sometimes called 'erratum'.
- correction-forward — Used in an article to name (point forward to) its associated correction (rarely used)
- in-this-issue — Names a related article in the same journal issue
- letter — Used in this article to name a letter to the publication or a reply to such a letter concerning this article
- partial-retraction — Points to a retraction or disavowal of part(s) of previously published material
- retracted-article — Used in a retraction to name the article being retracted
- retraction-forward — Used in an article to name (forward) its associated retraction (rare)

6.12 #00626/#00627/#00665 Add xref/@ref-type values 'bio' and 'award'
A P A

Standing Committee Documentation Recommendation

The values 'bio' and 'award' should be added to the list of suggested values for @ref-type in Archiving and to the value list for @ref-type in Publishing and Authoring.

6.13 #00628 Add a new suggested @date-type value
A P A

Standing Committee Documentation Recommendation

The value 'resubmitted' should be added as a suggested date type in the recommendations so that the tagging can be standardized across the JATS community.

6.14 #00633 Tagging Mentions of Clinical Trials
A P A

Standing Committee Documentation Recommendation

Clinical trial registration information from https://clinicaltrials.gov/ is typically a simple link plus the registration number, e.g., "Trial registration: NCT02442440 (https://register.clinicaltrials.gov/)".

- Simple links to Clinical Trials may be tagged as an <ext-link>, while more complex links may need <related-object>. Examples of both should be added to the Tag Libraries.

  - As an External Link — The issue is not about tagging Clinical Trials, but tagging external links to clinical trials that identify the Clinical Trial registry and have a UID for the trial. This is just like any other link to a known resource. The identifier and the resource information are supplied in the attributes, and the link display text is the element content.

- As a Related Object — There are cases where you may need more metadata (for instance, a clinical trial title or a DOI) and a stronger association between an article and a clinical trial than a mere <ext-link>.

- In the Tag Library Index, "clinical trials" should be cross-referenced to both <ext-link> and <related-object>.

- Two new examples for the Tag Libraries should be provided.

6.15 #00653 Correction of the "<date>" example

A P A

Standing Committee Documentation Recommendation

*The third e*xample of <date> in the Tag Library is as follows:

```
<date date-type="received" calendar="Japanese" iso-8601-date="2013-07-01">
  <day>1</day>
  <month>7</month>
  <year>25</year>
  <era>昭和</era>
</date>
```

should be changed to read:

```
<date date-type="received" calendar="Japanese" iso-8601-date="2013-07-01">
  <day>1</day>
  <month>7</month>
  <year>25</year>

  <era>平成</era>
</date>
```

6.16 #00660/#00664/#00733 Add article version information

A P A

Standing Committee Documentation Recommendation

- Documentation should make it clear that the alternatives inside the <article-version-alternatives> element are for the current document, when that document has two separate version numbers in two separate systems. Article version alternatives are *not* for prior or subsequent versions, which should most probably be tagged with <related-article>. In any given system, and article can have only one <article-version> at a time.

- Documentation should explain the difference between the singular <article-version> and the production lifecycle changes described by history/date.

- Some users will choose to use the NISO JAV phrases (such as 'revised-proof') as content for this element. Some will just use a version number such as 'ver 2.0' or '3286'. As another example, Elsevier has an extensive taxonomy for a version that is completely unrelated to JAV. Several <article-version> variations should be illustrated.

- For NISO JAV and other controlled vocabularies, show as many vocabulary attributes as possible in the samples.

- As with other uses of the vocabulary attributes, the attribute @vocab-term should hold the canonical version of the term in a controlled vocabulary such as NISO JAV, and the <article-version> element should hold the display version of the term, possibly the same, but possibly translated into another language or a local variant. [For example, the attribute is: 'vocab-term="post-version-of-record""' and the element content is the phrase-for-display 'Post Version-of-Record'.

- Documentation can suggest the usefulness of this version metadata when multiple parties are involved, for example, moving XML between a customer and a vendor.

6.17 #00663 Storing extended publication events in the XML

A P

Standing Committee Documentation Recommendation

- If possible, the Tag Libraries should describe best practice recommendations for both <date> and <event> to help make it more obvious how to use <date> inside <event> versus inside <history>.

- Events (<event>) may include those things that are usually handled by <history> such as when the manuscript was received or accepted, but an <event> need not be used for any date in history. An <event> could be pre- or post-publication events including dates, link(s), an article version, and/or descriptive commentary. An <event> element may also contain details of earlier versions of the article. For example, one publisher has articles that have been posted on a preprint server, then one version of an author's accepted manuscript was published, then a subsequent version of this format, then the version of record and then another updated version of record. There are no official corrections published with any of these event changes.

Samples Recommendation

- Of all the dates in an article, the publication date <pub-date> is the most important date, and the publication date is *not* tagged as a <date>. Thus for CrossRef deposit, dates must already be pulled from multiple contexts. A standard can best help folks who ingest JATS by providing best practice samples. There should be clear date examples to aid CrossRef deposits and other data ingest.

- Samples provided by the original requestor and edited by the JATS Secretariat should be added to the Tag Libraries.

6.18 #00666 Add @specific-use or type to <fig-count>

A P 𝓐

Standing Committee Documentation Recommendation

While the request was denied, it was felt that the fact of the request exposed inadequacies in the descriptions of the specific counts elements (<fig-count>, <word-count>, etc.) in the Tag Libraries. The following text (edited only slightly) should be placed into all three Tag Libraries in the Related Element descriptions of the specific count elements:

RELATED ELEMENTS

Inside the <counts> container element are the counts of various components of the document in two styles: 1) the pre-defined counting elements (specific to an element type and shown below) and 2) the generic count element <count> (which is used to count anything that is *not* one of the pre-defined specific types and for which the @count-type attribute names what is being counted).

Best Practice: For counting *all* of a named element (such as all figures or all tables), the specifically named count elements (<fig-count>, <table-count>) should always be used. The <count> element is reserved for counting elements or conditions for which a *-count element has not been defined (all contributors, all footnotes, etc.) or to count only *some* of a named element. For example, to sub-divide a count into smaller sub-counts, e.g., color figures vs. black-and-white figures, use <fig-count> for the total number of figures, and then use separate <count> elements for the subsets, e.g.:

```
<counts>
  <count count-type="fig-color" count="3"/>
  <count count-type="fig-bw" count="7"/>
  <fig-count count="10"/>
</counts>
```

Named Counting Elements: The JATS pre-defined named counting elements are:

- **<fig-count>** is the total number of *labeled Figures* (see definition of the element <fig>). This is *not* a count of images or of <graphic> elements. Do not include unlabeled graphics, such as images embedded in table cells, in the count of figures. Also do not make this the count of images *inside* a figure; for example, if a <fig> contains four panels (a-d) and each panel is a separate image file (4 <graphic>s), the <fig-count> would be '1', not '4'.

- **<table-count>** is the total number of tables (<table-wrap>). Do not include uncaptioned/untitled tables (<array>) in this count.

- **<equation-count>** is the number of display equations (<disp-formula>). Do not include inline equations in this count (<inline-formula>). If you have a display equation that consists of multiple MathML objects, this counts as one equation.

- **<ref-count>** is the number of bibliographic references *within the bibliographic reference list*. This may be the number of reference elements (<ref>) or the number of mixed or element citations (for publishers who put multiple citations into a single <ref>). Do not include cases of <mixed-citation> or <element-citation> that appear outside of a <ref-list>.

- **<page-count>** is the page count of the print and/or PDF item (includes all Roman & Arabic number pages).

- **<word-count>** is the number of words in the document.

6.19 Committee Request: Add new vocabulary attributes to subjects and keywords

A P 𝓐

Standing Committee Documentation Recommendation

- The current @kwd-group-type (defined as: Keyword Authority — The name of a an ontology, thesaurus, index or other term source where the keywords in this group are defined. Alternatively, the name of the standards organization, indexing service, or other

group that established a particular group of keywords, for example, 'IEEE', 'ISO', 'ASTM', 'Inspec', etc.) is overloaded.

- JATS should recommend as Best Practice going forward, to use the new @vocab attribute to name the ontology, thesaurus, taxonomy, index, database, etc.

- The existing attribute @kwd-group-type should be retained to say, for example, that the keywords were supplied by the authors of the article.

6.20 Committee Request: CrossRef Funding Data Example
A P A

Standing Committee Documentation Recommendation

- The recommendations for handling funding data should be the same across all 3 JATS DTDs.

- A series of new funding examples were provided and edited by the Standing Committee through email. Those new examples (some showing the use of the Open Funder Registry and some not) should be added to the Tag Libraries. There should be new samples added for <funding-group>, <award-group>, <institution-wrap>, and their child elements.

6.21 <elocation-id> (NISO STS Technical Committee Comment)
A P A

Standing Committee Documentation Recommendation

Since the <elocation-id> is intended as a replacement for page numbers, it should be (at least in books and standards) an *internal* link. The JATS standing Committee (at the urging of Standards) should remove all references to DOI or URI and eliminate any examples showing such an <elocation-id>.

Since some journal publishers are using a DOI as an <elocation-id>, that usage should not be prohibited, but the JATS documentation should not describe it or provide an example.

6.22 #00738 Add Data Availability Statement
A P A

Standing Committee Documentation Recommendation (Tag Set request denied)

- Data Availability Statements in JATS documents should be tagged as ordinary sections (<sec>), with the @sec-type classing attributes classing used to indicate that the section contains data availability material. We understand that this may mean that Data Availability Statements are not restricted to any specific location in the document, but JATS documentation will indicate in a Best Practice note that such material is best placed in a location to which access is not restricted.

- JATS can also suggest, but not require, that Data Availability Statement information be made available in the part of the article that is not behind access controls.

- A new attribute @use-type will be added to both citation elements. (<mixed-citation> and <element-citation>). We note that this is probably material that only authors know, and that publishers may have no reliable way to determine; there is typically nothing in the text (currently) that states this. Because @use-type is fairly ambiguous English, the documentation will describe the data use case, explaining values such as: generated data, analyzed data, non-analyzed data, and referenced data.

- The JATS documentation will stress that full, structured citations should be provided for any referenced data (externally archived generated data, analyzed data, and referenced data).

6.23 #00757 Allow multiple <permissions> elements within <sec-meta>

A P 𝒜

Standing Committee Documentation Recommendation (Tag Set request denied)

Although this seemed like a straightforward change request, the examples provided by the requestor did *not* show multiple permissions. However, the examples made it obvious that current JATS documentation has muddled the concepts of acknowledgements and permissions. The request is denied, but non-normative documentation changes should be made.

The Tag Libraries need to make it clear that <permissions> records "who you ask if you want to use this material now" and <ack> is used to thank various parties for what was included in the research or the article.

New material should be incorporated into the Tag Libraries to better define and explain:

- How JATS (currently) defines the <permissions> wrapper, the copyright elements (<copyright-statement>, <copyright-holder>, and <copyright-year>), <attrib>, and Acknowledgements (<ack>);

- How current definitions differ from what this requestor is trying to do; and

- Other mechanisms (without tag abuse) by which this material might be handled.

6.24 #00764 CRediT Role Degree of Contribution

A P 𝒜

Standing Committee Documentation Recommendation

Document that the new attribute to hold the degree of contribution will suggest three values: 'Lead', 'Supporting', or 'Equal'. The documentation will suggest that users of CRediT may wish to restrict their instances to these values.

6.25 #00768 Rename @fn-type value 'conflict of interest'

A P 𝒜

Standing Committee Documentation Recommendation

- Change the suggested value of @fn-type (and any values in the examples) from 'conflict' to 'coi-statement' to identify conflict-of-interest statements. The value 'conflict' could be misinterpreted to indicate the existence of a conflict rather than just the presence of a statement concerning any conflicts within the article metadata.

- The following sample should be added to the documentation:

```
<fn fn-type="coi-statement">
<p>Competing Interests: The authors have declared that no
 competing interests exist.</p>
</fn>
```

6.26 #00771 Add @assigning-authority to <object-id>

Standing Committee Documentation Recommendation

See specific elements to which the @assigning-authority attribute was added in *2.33 #Comment 00771*. The documentation for values of existing attributes on these elements needs to make it clear that, starting with version 1.2d2, JATS has disambiguated assigning authority from type-of-identifier.

- The documentation for @pub-id-type should be updated to acknowledge this change in our suggested best practice:

  Best Practice: With the addition of the assigning-authority attribute in [version 1.2d2], this attribute is reserved for the type of identifier: DOIs, PMID, aggregator, archive, indexing service, publisher-id. The name of the agency which assigned the identifier (Crossref, OCLC, Ringgold) should be tagged using @ assigning-authority rather than using @pub-id-type.

- The definitions for the following attributes should also be updated:

  - @contrib-id-type: Names the type of contributor identifier.

  - @institution-id-type: Names the type of the institution identifier, such as INSI.

  - @journal-id-type: Names the type of journal identifier.

  - @pub-id-type: Names the type of publication identifier.

- Remarks should be added to the documentation for each of these attributes along these lines:

  Beginning with [version 1.2d2] of the Tag Suite, this attribute is to be used to describe *only the type* of the identifier.

  The source or assigning authority responsible for the identifier is to be tagged in the new assigning-authority attribute.

- This sample should be added to the documentation:

```
<journal-meta>
  ...
  <journal-id pub-id-type="nlmid"
    assigning-authority="USNLM">17140140R</journal-id>
  ...
</journal-meta>
<article-meta>
```

```
...
<volume>10</volume>
<volume-id pub-id-type="barcode"
  assigning-authority="USNLM">NLM015667370</volume-id>
<volume-series>Ser 3</volume-series>
<issue>37</issue>
<issue-id pub-id-type="scantrac"
  assigning-authority="USNLM">75270</issue-id>
...
```

6.27 #00772 Clarification of Long Description

The current JATS/BITS documentation of <long-desc> is confusing because it mixes advice on how <long-desc> should be tagged in the XML with how <long-desc> should be displayed to end users on the Web. Tommie Usdin takes an Action Item to confer with Accessibility experts and make a change recommendation. Evan Owens agrees to help edit.

The Standing Committee approved this item, pending new documentation. We can discuss the wording by email. Documentation updates can be made at any time; they do not need to be synchronized with JATS releases.

6.28 #00773 Add a new element <display-aff>

Standing Committee Documentation Recommendation (Tag Set request denied)

The requestor stated that

> "Many publishers have a requirement to display several partial affiliations together in a single string or paragraph for the purpose of brevity *in display* on their websites and/or PDFs. An example of such a string is the following:
>
> ```
> "Departments of Biologya, and Chemistryb, University of Whitehorse"
> ```

While the JATS Standing Committee members are sure this is a real *display* requirement, it is written in the JATS charter that JATS is intended for interchange and reuse and that JATS will not endeavor to preserve the "look and feel" of any journal. This material is not metadata; this is textual display. Such display-only text is not within the scope of the JATS charter; the request was denied.

Affiliation information should always be taken from the full <aff> tagging, and only this can be used for reuse and interchange. There is no way a string affiliation could be picked apart programmatically.

Therefore, JATS non-normative documentation will suggest that each <aff> element should contain a single and complete affiliation. The element <aff-alternatives> should be reserved for legitimate alternatives (perhaps in more than one language) to a single affiliation. The JATS documentation will recommend:

- If a string-of-departments affiliation is all that is available (historical content, for example), do not pretend you have interchangeable/discoverable affiliations. Tag the information as a single

affiliation not inside a <contrib-group>, so that it does not belong to any one contributor (as shown below), or after all the <contrib-group>s are closed.

```
<contrib-group>
<contrib>...</contrib>
<contrib>...</contrib>
<contrib>...</contrib>
<aff @content-type="combined-aff">Departments of Biology<label><sup>a</sup></label>
and Chemistry<label><sup>b</sup></label>, University of Whitehorse</aff>
<contrib-group>
```

JATS documentation will suggest that these types of affiliations are NOT reusable and this style should be avoided. Not all content can be made reusable by machines.

- The documentation may remind (not recommend) that such display text *could* be stored in <custom-meta>.

- The documentation may remind (not recommend) that if the intent is to say that anybody who receives JATS should be able to understand this combined affiliation content, one *could* use a processing instruction.

6.29 Committee Request: Placement of Vocab Attributes

A P A

Standing Committee Documentation Recommendation

Samples showing the use of the vocabulary attributes should be added for <index-term>, <see>, and <see-also>.

```
<index-term>
  <term vocab="yyy">Poodles</term>
  <see vocab="yyy">Dogs</see>
  <see-also><term vocab="yyy"
    vocab-term-identifier="yyy-642">small mammals<see-also>
  </index-term>
```

7 Comment Requests That Did Not Result in Changes

7.1 Denied or Inapplicable

The following Suggestions were denied or otherwise deemed not to require a change to the JATS v1.1 standard, schema-grammars, or documentation. These items will not be discussed further in this report.

- Comment #00581 *Add 'ownership' to <inline-supplementary-material>*
- Comment #00744 *Separation of content/structure and layout*
- Comment #00758 *Where is the documentation?*
- Comment #00759 *Creating deductive networks with XML tagged journal articles*
- Comment #00760 *Allow <disp-quote> within <list-item>*
- Comment #00765 *CRediT Role Names and Identifiers*

7.2 Withdrawn

The following Suggestions were withdrawn by their submitters:

- Comment #00587 *Intramural Funding*. The description of intramural funding will depend on how CrossRef intramural funding will be deposited, which has not yet been established. This issue may be raised for the next version of JATS.
- Comment #00620 *Add <page-count> element for <book-part>s* is outside the scope of the JATS Standing Committee, which does not deal with BITS. The JATS Standing Committee should forward this suggestion to the BITS Working Group.
- Comment #00661 *Add 'attrib' & 'permissions' to inline-graphic*.