Tag Set Working Group Recommendations
October 2006
# Table of Contents

1 Tag Set Working Group Meeting .................................................................................................. 1
   1.1 Introduction .......................................................................................................................... 1
   1.2 Attendees ............................................................................................................................... 1
       1.2.1 NLM Staff ..................................................................................................................... 1
       1.2.2 Secretariat (Mulberry Technologies, Inc.) ..................................................................... 1
       1.2.3 Telephone Participants ................................................................................................. 1
2 Work Group Process Recommendations ....................................................................................... 2
3 Changes to the Tag Sets ................................................................................................................ 2
   3.1.2 Allow <nlm-citation> in Archiving Tag Set ..................................................................... 2
   3.2 New Features .......................................................................................................................... 2
   3.3 Conference sponsor ................................................................................................................ 2
       3.3.1 Anonymous (Reference List) ......................................................................................... 3
       3.3.2 Allow both <month> and <season> in <pub-date> ....................................................... 3
       3.3.3 Allow Punctuation in Person Group (Reference List) ................................................. 4
       3.3.4 Split <page-count> into two elements .......................................................................... 4
       3.3.6 Contract Number .......................................................................................................... 4
       3.3.7 Allow <title> and <contrib-group> in <supplement> ................................................. 5
       3.3.8 Add <permission> to <sec-meta> ............................................................................... 5
       3.3.9 Modify <sec> model to allow for <label> or <title> ...................................................... 5
       3.3.10 Add Elements to Citation ......................................................................................... 5
       3.3.12 New Attributes .......................................................................................................... 6
       3.3.13 Integrate OASIS Table model .................................................................................... 7
3.4 Tidying .................................................................................................................................... 7
       3.4.1 Add Degree to person-name ......................................................................................... 7
       3.4.8 Make DTD more easily customized ............................................................................. 8
       3.4.9 Allow only one Instance of <custom-meta-wrap> per document ............................ 8
4 Suggestions for Improvements to the Tag Library ..................................................................... 8
   4.1 On each element page: Resolve content models instead of showing parameter entities .... 8
   4.2 Link entities to parameters entity section ........................................................................... 9
   4.3 Make the navigation bar more compact (as an option) ..................................................... 9
4.4 Create a compact view for frequent users........................................................................ 9
4.5 Reformat the context table.............................................................................................. 10
4.6 Link entities to actual entity file.................................................................................... 10
4.7 Links from each Tag Library to equivalent page in others............................................ 10
Backwards Incompatibility..................................................................................................... 11
Working Group Action Items............................................................................................... 11
1 Tag Set Working Group Meeting

1.1 Introduction

The Working Group meeting took place by conference call on October 5, 2006.
This document contains a record of the advice of the Working Group when the group was able to reach consensus. Those items where the group was not able to make a recommendation, and those that were not addressed because of time limitations are not included here. They will be included in the list of discussion topics for the next Working Group call.

1.2 Attendees

1.2.1 NLM Staff

- Jeff Beck (Moderator)
- Marilu Hoeppner
- Laura Kelly
- Adeline Manohar
- Kim Tryka

1.2.2 Secretariat (Mulberry Technologies, Inc.)

- Deborah A. Lapeyre (Mulberry)
- B. Tommie Usdin (Mulberry)

1.2.3 Telephone Participants

- Alex Brown (Griffin Brown)
- Mark Doyle (American Physical Society)
- Beth Friedman (DCL)
- Sharon McCamant (Cadmus)
- John Meyer (Portico)
- Jules Milner-Brage (Highwire)
- Evan Owens (Portico)
- Bruce Rosenblum (Inera)
2 Work Group Process Recommendations

- Requests for additional changes will be posted on the mailing lists early next week, and change requests collected for the next Working Group meeting. (Note: Done via email 10/11/06)

- The next Working Group meeting will be in early November.

- From now on, Change Request Lists should:
  - Be distributed to the Working Group for comment before any Tag Set change is made;
  - Describe all changes to be made to the Tag Set;
  - Name explicitly all Tag Sets to which a particular change is relevant; and
  - Provide DTD code or XML-tagged examples (or both) illustrating the requested change or showing the scope/ramifications of the change.

3 Changes to the Tag Sets

3.1.2 Allow <nlm-citation> in Archiving Tag Set

Request:
There may be situations in which users of the Archiving Tag Set have citations in NLM format; they should be allowed to use the more rigorous model. Also, this would allow the Publishing Tag Set to be a proper sub-set of the Archiving Tag Set.

Working Group Advice:
<nlm-citation> will be added to Archiving Tag Set (Green) as an alternative to <citation> everywhere <citation> is allowed.

3.2 New Features

3.3 Conference sponsor

Request:
We adopted most but not all of CrossRef’s conference elements. One not taken was <conf-sponsor>. The request is that that it be native, for example:

  <conf-name>Extreme Markup Languages</conf-name>
  <conf-sponsor>IDEAlliance</conf-sponsor>

Working Group Advice:
<conf-sponsor> (an element already present in the article metadata for all the article Tag Sets) should be added to the model for <citation> through inclusion in the %references.class; parameter entity for:
- Publishing (Blue)
- the default references class, used in Archiving (Green) and Book (Purple)
- Authoring (Pumpkin)
- Historical Book

3.3.1 Anonymous (Reference List)

Request:
Requests an <anonymous> element (modeled as EMPTY) to be added to <person-group>. The word “anonymous” is currently tagged inside the <surname> of an <author> and she feels this (while the clear instructions of the Tag Library) is tag abuse.

Working Group Advice:
Add to Blue, as an empty element. Add to Green with content. Model on <etal>.

3.3.2 Allow both <month> and <season> in <pub-date>

Request:
The current model assumes that a <pub-date> will be either a season and a year

```
<pub-date pub-type="pub">
  <season>Spring</season>
  <year>1999</year>
</pub-date>
```

or a year with possible day and month

```
<pub-date pub-type="pub">
  <day>29</day>
  <month>01</month>
  <year>1999</year>
</pub-date>
```

The request is to allow both (such as “Fall 2006; October 3, 2006”) within a single <pubdate>.

```
<pub-date pub-type="pub">
  <season>Spring</season>
  <day>29</day>
  <month>01</month>
  <year>1999</year>
</pub-date>
```

Working Group Advice:
Add this to Green.

Ask original requestor for example of usage and discuss applicability for Blue in next meeting.
3.3.3 Allow Punctuation in Person Group (Reference List)

Request:
<person-group> has an element-only content model. This means that even in the situation where all of the punctuation is within the #PCDATA content of the tagged <citation>, the punctuation inside the <person-group> must be removed and generated on display. Some users do not want to generate anything; they wish to preserve the source punctuation and spacing.

Working Group Advice:
Change <person-group> in Archiving (Green) from:

```
(aff | etal | %name.class; | %x.class;)*
```

To the equivalent of

```
(#PCDATA | %aff | etal | %name.class; | %x.class;)*
```

<person-group> is unchanged in the other Tag Sets.

3.3.4 Split <page-count> into two elements

Request:
<page-count> is correctly an empty element when used in article-metadata, but in references.class it should allow content for use in <citation> and in <product> because all other elements in the references.class that might be “visible” on the page also allow content -- attribute only is sort of icky here. This is a little tricky to change since allowing content in this element would make the article-meta count structures non-orthogonal. However it’s almost useless as is in <product>.

Working Group Advice:
Add an element to <product> called <size> with an attribute designating units, which can be used for page count, length of an audio presentation, or any other product size. This will have data content. Add to all tag sets.

To be discussed later: approach to deprecate and/or remove <page-count> from <product>.

3.3.6 Contract Number

Request:
Contract and grant numbers are both gathered into the element <contract-sponsor>. We suggest that a separate <grant-sponsor> be added to make the semantic distinction between contract and grants. Similarly we suggest adding and <grant-num> to distinguish it from <contract-num>. This may be seen as non-backward compatible because we are distinguishing between two types of information that have been previously tagged identically.

Working Group Advice:
Allow <contract-number>, <contract-sponsor>, <grant-sponsor>, and <grant-sponsor> at the phrase level in Blue and Green. This information commonly occurs in acknowledgements, footnotes, and introductory sections. Add <grant-sponsor> and <grant-sponsor> to the article metadata in Blue and Green.

### 3.3.7 Allow <title> and <contrib-group> in <supplement>

**Request:**

Supplements may be separately authored content and should be identified by title and contributors.

**Working Group Advice:**

Add the following elements to `<supplement>` in all Tag Sets: `<title>` and `<contrib-group>`

### 3.3.8 Add <permission> to <sec-meta>

**Request:**

Section Metadata was recently added to the front of a Section to allow for independently authored sections. The requestor asks for an optional `<permissions>` to be added as well, to catch any copyright or licensing issues associated with a particular section.

**Working Group Advice:**

Add optional `<permissions>` to `<sec-meta>` in Blue, Green, and Purple.

### 3.3.9 Modify <sec> model to allow for <label> or <title>

**Request:**

To handle sections that have a `<label>` (“4.3”) but no formal `<title>`, modify the model of Section to require either a `<label>` or a `<title>` to be present (allowing that both may be present).

**Working Group Advice:**

Make one or the other required in Blue, with clear documentation of the implications of having no `<title>`.

Make both optional in Green.

### 3.3.10 Add Elements to Citation

**Request:**

There are several elements that are used by Cross-Ref that are not available in `<citation>`. Since many users want to manage their articles using the one of these Tag Sets and create Cross-Ref records, adding these elements would be helpful. There may be others, but we see immediate need for
• Institution (for example the institution granting the degree associated with a dissertation) and
• Identifier (such as the number or a report, standard, or the DAE number of a dissertation).

Working Group Advice:
Add <institution> to the model of <citation> in all Tag Sets.
Discuss <identifier> in a future meeting, with additional supporting information.
Discussion will include the need for different internal and external identifiers within a citation (<object-id> in Green compared to <xref> and <ext-link> in all Tag Sets).

3.3.12 New Attributes

3.3.10.1 Add type attribute to <fn-group>

Request:
The requestor asks for the addition of a “type” attribute to the <fn-group>. “An article may have different footnote groups. The first goes at the bottom of the first page (i.e. front matter footnotes), and the second would be footnotes at the bottom of the page where they are cited. It would be great if I could mark each footnote group for the type of notes it has.”

Working Group Advice:
Add the attribute “fn-group-type” to the element <fn-group> for all Tag Sets that use <fn-group>

3.3.12.2 Add IDREF to <named-content>

Request:
Requestor would like an IDREF attribute added to <named-content> because:
“We are working in a case where we have a multi-paragraph construct that isn’t quite a section that we need to identify as a ‘recommendation’. We would like to mark the start and end with <named-content> elements that cross-reference each other. This is similar, but not quite the same as the underline-start and underline-end constructs except that those elements don’t have bi-directional ID/IDREF pairs.”

An alternate suggestion to solve this user’s problem: to identify the start and end of subject matter in a way that accommodates overlap, we create an explicit milestone element. This way <named-content> will always contain the information it identifies and <milestone/> and <milestone-end/> will always be used for marking any asynchronous structures, and an attribute on the <milestone> elements can record the rationale for their use.

Working Group Advice:
Create a new element to use as a milestone in Green and Blue.
3.3.12.3 Add “type” attribute to appendix elements

Request:
Requests a “type” attribute be added to <app> and <app-group> to allow “a distinct typesetting template to be used based on an appendix type”.

Working Group Advice:
Add this attribute in Blue and Green.
Also, make a list of all elements that don’t have type attributes to discuss in a future meeting.

3.3.13 Integrate OASIS Table model

Request:
“Please include the OASIS table model AND HTML table models by default (as was done in version 0.1). It’s extra work to one-off the DTD to add in this module for organizations that prefer CALS. Please do this for both Green and Blue.”

An alternative would be to clearly document how other table models, such as the OASIS table model, be added to the DTD by users who choose to do so. Adding a second table model will add a significant number of elements, attributes, and parameter entities to the tag set and to the documentation, and may confuse users.

Working Group Advice:
Provide documentation on how to switch the table model for those users that want to do this.
Also, provide a small stand-alone Tag Library documenting the OASIS Exchange Table model for people who want to use it in conjunction with the Tag Set.

3.4 Tidying

3.4.1 Add Degree to person-name

Request:
Add <degree> to %person-name.class;
This class is used inside <speaker> and <string-name>. Currently the degrees follow the names within an outer container.

Working Group Advice:
The element <degrees> will be added to %person-name.class; changing it from
“given-names | prefix | surname | suffix”
To the equivalent of
“given-names | degrees | prefix | surname | suffix”
This will affect the models for <speaker> and <string-name> in all the Tag Sets using these elements.

### 3.4.8 Make DTD more easily customized

**Request:**

Make all element models and attribute lists into parameter entities so that users can override them without modifying the base files. Specifically:

- Make contents of <publisher> into a parameter entity
- Make the attribute lists for the elements <array>, <in-line-formula>, and <ack> into parameter entities.

**Working Group Advice:**

This is a good idea; do it.

Also, provide a version of the DTD, or of the models in the Tag Library, with all of the PEs expanded.

### 3.4.9 Allow only one Instance of <custom-meta-wrap> per document

**Request:**

The element <custom-meta-wrap> is allowed to occur 0 or 1 time in Archiving, but 0 or more times in Publishing. Since there is no way to distinguish among repetitions of <custom-meta-wrap> and <custom-meta> is allowed to repeat inside <custom-meta-wrap> there is no reason to allow <custom-meta-wrap> to repeat. We suggest changing it to optional but NOT repeatable in the Publishing model.

**Working Group Advice:**

This is backward incompatible, and should be listed with other backward incompatible changes for the next phone call, but it is clearly an error and should be fixed.

Also, <custom-meta-wrap> should be added to <journal-meta> in Blue (it is already there in Green).

### 4 Suggestions for Improvements to the Tag Library

#### 4.1 On each element page: Resolve content models instead of showing parameter entities.

**Request:**

That is, instead of:

```xml
<!ELEMENT  date         %date-model;>
```

Show:

```xml
<!ELEMENT  date         (((day?, month?) | season)?, year)>
```
Note: This would be more helpful to people who want to read the Tag Set syntax to learn the “true” model, but misleading to people trying to understand the structure of the Tag Set.

**Working Group Advice:**
Provide BOTH versions in the Tag Library. Perhaps both on screen, perhaps (if affordable) the expansion on mouse-over or on click.

### 4.2 Link entities to parameters entity section

**Request:**
If/when showing parameter entities in content models, such entities (e.g., %date-model; in the previous example) should definitely link to the entries in the Parameter Entities Section of the Tag Library.

**Working Group Advice:**
Linking is good. Add these links.

### 4.3 Make the navigation bar more compact (as an option)

**Request:**
When viewing the Tag Library, it would be nicer if the element/attribute list frame down the left side were settable for item height. I’d much rather have twice as many items packed in vertically, so I did less scrolling.

**Working Group Advice:**
If possible, a compact or user-customizable version would be nice.

### 4.4 Create a compact view for frequent users

**Request:**
In general, most of the time I’d like a much more vertically packed display:

- create a compact view of element pages
- pitch the “Element: <abstract>“ line since “Abstract” is the next line anyway
- drop the definition, or just put in the text of the definition in without the head below the name of the element
- move remarks way down
- move related elements almost that far down
- combine model and attributes into one head (with real content model)
- maybe hide description under a link from the content model
- reduce entries in “may be contained in” to just the GIs, eliminate full element names
Working Group Advice:
Create a compact version of each Tag Library in addition to the current version.

4.5 Reformat the context table

Request:
A much tinier version of the element context table would be much more helpful, I think. As is it’s so long I never use it. Each row is now a list; maybe make it a true 2D table: container down, contained across. No names, just tags (linked, of course). No need for < and >. If you can set the column heads vertically you’d only need enough width for a plus or minus in each cell, though once you scroll down it would be much nicer to have the name in each cell since browsers don’t do locked headers.

An alternative to this suggestion for the context table would be to make the list in each row invisible, represented by a check-box. You simply check the box to make it appear for that one row.

Working Group Advice:
Do this as part of the compact version discussed above.

4.6 Link entities to actual entity file

Request:
Under parameter entities, when I click on something like %ISOgrk1, I just see the declaration; I think I should either get the entity itself, or both, or get the declaration with a link to the actual file.

Working Group Advice:
Linking is good. Add these links.

4.7 Links from each Tag Library to equivalent page in others

Request:
On each page that has an equivalent in the other tag libraries (for example, all the tag libraries have element pages for <caption>). Have a way to link to the Publishing, Authoring, and Book <caption> pages from the Archiving <caption> page.

One possible design for this would be to have a “Tab Bar” at the top of each Tag Library page, showing all of the equivalent pages in other Tag Libraries. So, on the <article-meta> page in the Archiving Tag Library there would be a blue tab that said “Publishing” that opened the <article-meta> page in the Publishing Tag Library and a pumpkin color tab that says “Authoring” that opens the equivalent page in the Authoring Tag Library.

Working Group Advice:
There is limited need for this in the user community; don’t waste resources on this.
Backwards Incompatibility

- The next release will be a major release (3.0). Further discussion will be needed for the Working Group to make a recommendation about whether this should be a backwards incompatible release.

- A distinction was made between incompatibility severe enough to be detected by an XML parser and practice incompatibility, where some tag usage or content placement might be inconsistent between old and new versions. (As an example, an archive could experience inconsistent tagging if previous best-practice guidelines had been followed, then were changed, and the new best-practice guidelines were different.)

Working Group Action Items

- **All:** Provide feedback on the differences between, the appropriate audience for, and the rationales behind the Archiving, Publishing, and Authoring DTDs.

- **Mark Doyle:** provide example of modeling and use of abbreviated references attribute (Note: Done via email 10/5/06)

- **Bruce Rosenblum:** provide example of journal that uses month and season in date.

- **Mulberry:**
  - Re 3.3.10: write up summary of available ID and ID-like elements, including DOIs. Remember distinction between internal and external pointers.
  - In response to 3.3.11, write up citation type documentation and examples for discussion at the November meeting.
  - Provide a list of all non-backward compatible changes that have been proposed.
  - Provide a list of all elements that do not have type attributes.

- **Evan Owens:** Submit change requests he’s been holding on to.