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Release note of the Journal Article Input DTD JA 5.1.0

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version 0.2	14 June 2008	Final draft, with comments from SPe and RCa
version 0.3	13 August 2008	Small correction in Section 2.1 (ce:reader-see)
version 0.4	27 August 2008	Included new CRs 329 and 333 and feedback from review stage
version 1.0	31 August 2008	Final
version 1.1	12 September 2008	Final, with <code>sponsor-id</code>
version 1.2	18 February 2009	Final, with small corrections in Sections 2.2 and 2.3

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1 Introduction

The Journal Article Input DTD JA 5.1.0 is an update to the JA DTD 5.0.2 which has been in production since November 2007. Its implementation is expected in Q2 2009. The release comprises the following:

- the Journal Article DTD 5.1.0 (`art510.dtd`);
- the Common Element Pool 1.1.5 (`common115.ent`), which includes the same other declarations as earlier versions of the CEP;
- a complete set containing all relevant DTD files (`art510.zip`);
- this release note;
- an updated *Tag by Tag*, version 1.2.

Additionally, separate implementation notes and updates of other documentation can be expected. Sample files will be made available and distributed separately.

2 Changes with respect to JA DTD 5.0.2

The following sections list the changes with respect to JA DTD 5.0.2.

2.1 Common element pool

The new JA DTD 5.1.0 uses the latest version of the common element pool, CEP 1.1.5. This implies that the journal DTD can benefit from a number of modifications that were already commonplace in the books DTDs and the serial issue DTD:

- `ce:br` is allowed in table cells;
- multiple captions with different roles and/or languages are supported (for journals, presently no use cases for roles are known; there are, however, known roles for the paragraphs within captions, see [3]);
- `ce:source` is available in figures, tables and textboxes to capture the source of the object;
- `ce:indexed-name` and `ce:reader-see` are allowed in `ce:glossary`.

More information about these elements can be found in the *Tag by Tag*, both the printed (green) version, the updated version v1.1 and the version that accompanies JA DTD 5.1.0, v1.2 [4, 5, 6].

2.2 Grant information (CRs 315, 321)

Following industry recommendations, the common element pool CEP 1.1.5 introduces two new elements, `ce:grant-sponsor` and `ce:grant-number`. These elements can be used in paragraph context.

Model (CEP 1.1.5)

```
<!ELEMENT ce:grant-sponsor ( %text.data; )>
<!ATTLIST ce:grant-sponsor
            id                ID                #IMPLIED
            xlink:type        (simple)          #FIXED "simple"
            xlink:role        CDATA            #FIXED "http://www.elsevier.com/xml/
            linking-roles/grant-sponsor"
            xlink:href        CDATA            #IMPLIED
            sponsor-id        CDATA            #IMPLIED>
<!ELEMENT ce:grant-number ( %text.data; )>
<!ATTLIST ce:grant-number
            refid              IDREF           #REQUIRED>
```

`ce:grant-sponsor` contains the name of a funding body. Its optional attribute `xlink:href` contains a URI that belongs to the funding body. In this respect, `ce:grant-sponsor` works exactly like `ce:inter-ref`. For more information about the `xlink` attributes we refer to the documentation of `ce:inter-ref` in the *Tag by Tag* [4, 5, 6].

The `id` attribute is used to link the sponsor with one or more grant numbers. The attribute `sponsor-id` can be used to uniquely identify the sponsor.

`ce:grant-number` contains a grant number. Through its attribute `refid` it must be linked with a grant sponsor.

The following example is taken from the documentation of the NLM DTD v2.3 [2].

XML

```
<ce:acknowledgment>
<ce:para>This work was supported by the <ce:grant-sponsor
  xlink:href="http://www.pharmafoundation.org/" id="GS1">Pharmaceutical
  Research and Manufacturers of America Foundation</ce:grant-sponsor>,
  the <ce:grant-sponsor xlink:href="http://www.energy.gov" id="GS2">United
  States Department of Energy</ce:grant-sponsor> Office of Science (BER)
  grant number <ce:grant-number refid="GS2">DE-FG02-04ER63803</ce:grant
  -number>, the <ce:grant-sponsor xlink:href="http://www.nih.gov"
  id="GS3">National Institutes of Health</ce:grant-sponsor>, <ce:grant
  -sponsor xlink:href="http://www.nsf.gov" id="GS4">National Science
  Foundation</ce:grant-sponsor> FIBR Award <ce:grant-number
  rid="GS4">EF-0425719</ce:grant-number>, the <ce:grant-sponsor
  xlink:href="http://www.nhlbi.nih.gov/meetings/proteomics.htm"
  id="GS5">National Heart, Lung, and Blood Proteomics Initiative</ce:grant
  -sponsor> (<ce:grant-number refid="GS5">HHSN268200248178C</ce:grant
  -number>), the Whitaker Foundation, and Cellicon Biotechnologies,
  Inc.</ce:para>
</ce:acknowledgment>
```

Instructions for tagging grant information will be included in other documentation. Authors will have to supply grant information, including URIs, and modifications to the electronic submission are planned to make it easier to obtain that information.

2.3 Multiple languages (CR 271)

The language of an article, of the alternative titles (`ce:alt-title`) and subtitles (`ce:alt-subtitle`), and of the element `ce:keywords`, has been expanded from just English, French, German, Portuguese, Russian and Spanish to the full list of ISO 639 [4, p. 141], [5, p. 147]. Abstracts could already take any language in the ISO 639 list.

CAP production of Italian (allowed in the Books DTDs but not yet in the JA DTDs) but also Japanese and Chinese journals was the driver for this expansion.

XML

```
<ce:alt-title xml:lang="ca">Les Etapes de l'ocupació borbònica a
  Catalunya (1706-1713)</ce:alt-title>

<article xml:lang="ja">
...
<head>
  <ce:title>大学におけるアカデミック看護実践の事業：構造、機能、協力関係</ce:title>
```

```
<ce:alt-title xml:lang="en">Making Academic Nursing Practice Work in  
Universities: Structure, Function, and Synergy</ce:alt-title>
```

Recall that the article language has an impact on the text generated by the elements `ce:date-received`, `ce:date-revised` and `ce:date-accepted`. Rendering applications which are not able to generate the text in the language of the article, may use an application or platform default, which will usually be English.

2.4 *New publication item types (CRs 234, 274)*

In JA DTD 5.1.0, the following publication item types (docsubtype) are introduced:

- `chp` – used for chapters in book series volumes (equivalent to `fla`);
- `cop` – used for an item containing the copyright information in book series volumes;
- `pgl` – used for practice guidelines.

Additionally, in order to make it easier to produce whole-article errata for documents that are structured with the top-level elements (doctypes) `book-review` and `exam`, the publication item type `err` is now allowed for these doctypes. Whole-article errata are corrected versions of the original book reviews or exams, and therefore must be structured using the relevant doctypes, but require the publication item type `err`.

2.5 *Intra-ref (CR 277)*

The existing common elements `ce:intra-ref` and `ce:intra-refs`, present in the Common Element Pool, were not accessible in the JA DTDs 5.0.1 and 5.0.2 because of a redefinition of the parameter entities `%cross-ref` and `%cross-refs`. In journal issues, especially special issues, and in book series volumes there is an increased need to make cross-references between articles and between objects within those articles. The element `ce:inter-ref` is less appropriate, as in practice this element has been interpreted as a hyperlink “out” of the application while `ce:intra-ref` makes sure the user remains within the application.

In JA DTD 5.1.0 PII-based intra-refs can be used.

The expected behaviour of a `ce:intra-ref` is similar to the behaviour of `ce:cross-ref` within an item. If the destination PII does not exist within the application’s database, this is not an error condition; in this case the content of the element should not be turned into a hyperlink.

In practice, the Vtool will limit the scope of `ce:intra-ref` to a journal issue or a book. In the case of articles in press, the destination’s existence is not guaranteed.

`ce:intra-ref` and `ce:intra-refs` must not be used to link to destinations within the same article. In the following examples we therefore assume that the links are from one item to another.

XML

See `<ce:intra-ref xlink:href="pii:S0004-3702(02)00193-5">`the article by Smith et al.`</ce:intra-ref>` in this issue.

XML

For more detail we refer to `<ce:intra-ref xlink:href="pii:S0004-3702(02)00193-5#tbl3">`Table 3 in Chapter 8`</ce:intra-ref>`.

The more complicated element `ce:intra-refs` is similar to `ce:cross-refs`, each of the `ce:intra-ref-end` elements works exactly like `ce:intra-ref`.

XML

```
<ce:intra-refs>
  <ce:intra-refs-text>Figs. 1 and 2 in Chapter 2</ce:intra-refs-text>
  <ce:intra-ref-end xlink:href="pii:S0167-8396(00)00009-1#fig1">
    <ce:intra-ref-title>Fig. 1</ce:intra-ref-title>
  </ce:intra-ref-end>
  <ce:intra-ref-end xlink:href="pii:S0167-8396(00)00009-1#fig2">
    <ce:intra-ref-title>Fig. 2</ce:intra-ref-title>
  </ce:intra-ref-end>
</ce:intra-refs-link/>
</ce:intra-refs>
```

Explanation

In print and in the web PDF, `ce:intra-refs-text` is displayed. In online applications, it is suggested to display this as follows:

Figs. 1 and 2 in Chapter 2 [\[Fig. 1\]](#) [\[Fig. 2\]](#)

The links, taken from the `ce:intra-ref-title` elements, would not appear if the destinations are not available within the realm of the online application.

For more information about `ce:intra-ref` and `ce:intra-refs` please refer to the *Tag by Tag* [4, 5, 6].

With the introduction of CEP 1.1.5, the inter-ref scheme “pii” and the intra-ref scheme “doi”, which according to the documentation were allowed but not in use, are deprecated. “pii” is now exclusively used in `ce:intra-ref` and “doi” exclusively in `ce:inter-ref`.

2.6 *Biographies and glossaries (CRs 240, 333)*

The existing, well-known common elements `ce:glossary` and `ce:biography` are added to `simple-tail`, to enable author biographies in items such as book reviews and glossaries in items such as editorials.

2.7 *Chapter labels (CR 308)*

In book series volumes, in addition to the item title, the item may possess a designation like “Chapter 7”. This is neither a `ce:dochead` nor a part of `ce:title` (to which, as a workaround, the chapter number was often added despite its different nature and presentation).

Similar to the book DTDs, the element `ce:label` is added before `ce:title` in `head`, `simple-head` and `book-review-head`.

In tables of contents, the label should be rendered together with the title.

XML

```
<head>
  <ce:label>Chapter 7</ce:label>
  <ce:title>The evolution of the scoring system for NBPTS
    assessments</ce:title>
</head>
```

2.8 E-components (CR 329)

To allow the user to specify the role of an electronic component, the element `ce:e-component` now has a `role` attribute. One use case of this role attribute are editorial videos on Cell.com which need different treatment from general e-components.

Remark. Roles can be added at any time; recipients of content should ignore roles that are new to them. The currently valid roles are described in [3]. Most roles have a very specific use case and are not supported by the majority of users of our XML files. In the next version of the Common Element pool, more elements will be furnished with `role` and `view` attributes.

References

- [1] Change request list, available on Elsevier's Intranet through: <http://nonsolus/cap/crlists/dtd.htm>
- [2] Documentation of the NLM Journal Publishing DTD version 2.3, March 2007, <http://dtd.nlm.nih.gov/publishing/tag-library/2.3/index.html>
- [3] Implementation note: Roles in JA DTD 5.0 and SI DTD 5.1, <http://nonsolus/DTD/hawaii50/rs200409.pdf> (internal), <http://cap-extranet.elsevier.com/C5/DTD/DTD5%20Additional%20Information/rs200409.pdf> (external).
- [4] *Tag by Tag (print)*, Documentation of the Elsevier DTDs, March 2005.
- [5] *Tag by Tag (online)*, v1.1pl1, incorporating the latest changes and errata prior to JA 5.1.0 and CEP 1.1.5, <http://nonsolus/DTD/hawaii50/tagbytag5-v1.1.pdf> (internal), <http://cap-extranet.elsevier.com/C5/DTD/DTD5%20Additional%20Information/tagbytag5-v1.1.pdf> (external), <http://www.elsevier.com/locate/xml> (public), April 2007.
- [6] *Tag by Tag (online)*, v1.2, incorporating JA 5.1.0 and CEP 1.1.5, <http://nonsolus/DTD/hawaii50/tagbytag5-v1.2.pdf> (internal), <http://cap-extranet.elsevier.com/C5/DTD/DTD5%20Additional%20Information/tagbytag5-v1.2.pdf> (external), <http://www.elsevier.com/locate/xml> (public), September 2007.

Support

The Elsevier DTDs and schemas are developed by the DTD Maintenance & Development Team, who are happy to answer queries about the new DTD. For this release, please contact Rob Schrauwen (<mailto:r.schrauwen@elsevier.com>), Simon Pepping (<mailto:s.pepping@elsevier.com>) or Jos Migchielsen (<mailto:j.migchielsen@elsevier.com>).