



Tag by Tag

**The Elsevier XML DTD 5.0 Family
The Converted Journal Article DTD 4.5**

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The authors are members of the DTD Development & Maintenance Team. That team is responsible for development, maintenance and support of the Elsevier DTDs and XML schemas. Comments about the DTDs and their documentation, as well as change requests, can be sent to the team. Change requests will be considered for implementation in a future DTD. The ES Information Structuring Working Group, chaired by Jan Visser, Director Electronic Production, makes decisions about DTD policy issues and new DTD versions.

The Elsevier DTDs and a fully clickable PDF file of this documentation are available via <http://www.elsevier.com/locate/sgml>.

This is version CJA:1.0r3 of the new DTD documentation for the DTD 5.0 family. The document is still being expanded: mistakes are being corrected and extra clarification is given when needed. The authors welcome comments, suggestions for improvement.

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Chapter 1

Journal article DTD 4.5

The Journal Article DTD 4.5.2 is an XML DTD meant for conversion of legacy material structured with Elsevier DTDs 2.1, 3.0 and 4.1–4.3. The most important difference is that it does not include MathML. Its version number should be interpreted as “4 $\frac{1}{2}$.2”, i.e. half-way between the DTD 4 and DTD 5 families. It relies heavily on the common element pool while making automated conversion from the legacy DTDs possible. Those DTDs were, for instance, much looser and therefore many documents would violate the stricter rules in the new DTDs.

Various elements have been adapted to make them suitable for conversion. The elements have been given the same name as their counterparts in the common element pool or in the JA DTD 5.0, but they are, of course, in a different namespace. Processing software should always take note of the namespaces, in particular correctly handle the default namespace. In that way, XML software such as XSLT stylesheets easily distinguish the elements [head](#) in JA DTD 4.5 and [head](#) in JA DTD 5.0. See the section on [namespaces](#).

Elements of the JA DTD 4.5

aid

Model

```
<!ELEMENT aid ( %string.data; )*>
```

See [aid](#) of the JA DTD 5.0.

body

Model

```
<!ELEMENT body ( ce:nomenclature?, ce:salutation?,
ce:sections, ce:acknowledgment?,
ce:appendices? )>
```

The element [body](#) is the counterpart of [body](#) of the JA DTD 5.0. See the documentation of that element.

converted-article

Model

```
<!ELEMENT converted-article ( item-info, ce:floats?, head?, body?,
tail? )>
<!ATTLIST converted-article
xmlns CDATA #FIXED %ESJA.xmlns;
version CDATA #FIXED '4.5.2'
xmlns:ce CDATA #FIXED %ESCE.xmlns;
xmlns:sb CDATA #FIXED %ESSB.xmlns;
xmlns:xlink CDATA #FIXED %XLINK.xmlns;
xml:lang %language; 'en'
docsubtype %docsubtype; "fla">
```

The top element of JA DTD 4.5 is [converted-article](#). It is the counterpart of the top elements of the JA DTD 5.0. For details about the attributes, we refer to those top elements.

display

Model

```
<!ELEMENT display ( ce:figure | ce:table | ce:textbox |
ce:e-component | formula )>
```

The element [display](#) replaces the element [ce:display](#) of the common element pool. It differs from its common counterpart in that it includes [formula](#) instead of [ce:formula](#). Otherwise, it is used in exactly the same way as [ce:display](#).

formula

Model

```
<!ELEMENT formula ( ce:label?, ( math | ce:link |
formula+ ) )>
<!ATTLIST formula
id ID #IMPLIED>
```

The `formula` replaces the `ce:formula` from the common element pool. The difference with that element lies in the fact that it contains `math` rather than `mml:math`. Otherwise it fulfills the same function.

head

Model

```
<!ELEMENT head ( ce:article-footnote*, ( ce:title
| ( ce:dochead, ce:title? ) ),
ce:subtitle?, ( ce:alt-title,
ce:alt-subtitle?)*, ce:presented?,
ce:dedication?, ce:author-group*,
ce:date-received?, ce:date-
revised*, ce:date-accepted?,
ce:miscellaneous?, ce:abstract*,
ce:keywords*, ce:stereochem* )>
```

The element `head` is the counterpart of `head` of the JA DTD 5.0 — or `ce:simple-head`. For more information, refer to the subelements in the common element pool and to the description of `head` of the JA DTD 5.0.

item-info

Model

```
<!ELEMENT item-info ( jid, aid?, ce:pii, ce:doi?,
ce:document-thread?, ce:copyright,
ce:doctopics?, ce:preprint? )>
```

See `item-info` of the JA DTD 5.0.

jid

Model

```
<!ELEMENT jid ( %string.data; )*>
```

See `jid` of the JA DTD 5.0.

math

Model

```
<!ELEMENT math ( %f.data; )*>
<!ATTLIST math
    alting          CDATA          #REQUIRED>
```

The element `math` replaces the `mml:math` of the common element pool. It possesses the same strip-in attribute `alting`. The content of the element is the original formula structured with the legacy math fragment of FLA DTD 4.3 and earlier. This includes the legacy font declarations and the legacy superior and inferior tags, because the content models of their counterparts in the common element pool are too restricted.

The purpose of the element `math` is more for record keeping than to allow online rendering — it is, of course, used to generate the strip-in.

tail

Model

```
<!ELEMENT tail ( ce:bibliography?, ce:further-reading?,  
ce:glossary?, ce:biography* )>
```

The element `tail` is the counterpart of `tail` of the JA DTD 5.0. The only difference is that the latter element has additional subelements for examinations, a publication item type that did not exist in legacy material. For more information, see the JA DTD 5.0.

Converting legacy SGML

The following table is an overview of the elements of the FLA DTD 4.3, with its approximate counterpart in the JA DTD 4.5. See the documentation of these target elements for more detail.

Legacy SGML	5.0 XML
a	Unicode point for native accent, or math
abs	ce:abstract , generate ce:section-title in the correct language
acc	ce:date-accepted
ack	ce:acknowledgment , generate ce:section-title in the correct language
aff	ce:affiliation
anchor	ce:anchor
app	ce:section within ce:appendices
appm	ce:appendices
ar	use math or formula *
arrow	was not used
art	converted-article , attributes now found in item-info , note the differences such as formatted PIIs
atl	ce:title , ce:alt-title
atln	ce:article-footnote , generate ce:label
au	ce:author , beware that model has changed, older DTDs contain cross-references within au that must be preserved
aug	ce:author-group , reshuffling needed
author	sb:author , warning: order of first and surname changed
authors	sb:authors
b	ce:bold (in text); b (in math)
bb	sb:reference
bdy	head (but note differences)
bib	ce:bib-reference
bibl	ce:bibliography-sec , generate ce:bibliography and its ce:section-title
bm	tail (but note differences)
book	sb:book
book-series	sb:book-series
bottom-border	tb:bottom-border unless native CALS can be used
box	use math or formula *
c	entry (native CALS when possible)
caff	ce:collab-aff
caption	ce:caption
cny	no longer pertinent
collab	ce:collaboration or sb:collaboration
comment	sb:comment

Legacy SGML	5.0 XML
compound-f	ce:compound-formula
compound-info	ce:compound-info
compound-name	ce:compound-name
compound-struct	ce:compound-struct
conference	sb:conference
contribution	sb:contribution
copyright	ce:copyright
cor	ce:correspondence , always link through a ce:cross-ref
cp	use math or formula *
cross-ref	ce:cross-ref or ce:cross-refs
cty	no longer pertinent
date	sb:date
dd	ce:def-description
de	use math or formula *
ded	ce:presentation
degs	ce:degrees
dl	ce:def-list
dothead	ce:dothead
doctopic	ce:doctopics , ce:doctopic
dt	ce:def-term
e-host	sb:e-host
ead	ce:e-address (different place)
edited-book	sb:edited-book , note that sb:pages are now up within sb:host
edition	sb:edition
editor	sb:editor
editors	sb:editors
enun	ce:enunciation
et-al	sb:et-al
f	use math *
fd	use formula *
fen	use math or formula *
fig	ce:figure with ce:floats or display
first-page	sb:first-page
fm	head (but note differences)
fn	ce:footnote
fnm	ce:given-name
fr	use math or formula *
further-reading	ce:further-reading-sec , generate ce:further-reading and ce:section-title
ge	use math or formula
glossary	ce:glossary-sec , generate ce:glossary and ce:section-title

Legacy SGML	5.0 XML
glossary-def	ce:glossary-def
glossary-entry	ce:glossary-entry
glossary-heading	ce:glossary-heading
host	sb:host
hsp	ce:hsp
index	ce:indexed-name
inf	ce:inf (in text); inf (in math)
inits	ce:initials
inline-fig	ce:inline-figure
inter-ref	ce:inter-ref or ce:inter-refs
intra-ref	ce:cross-ref to new-style ce:textbox (if pertaining to linked textbox); ce:intra-ref (if pertaining to cross-chapter reference in book projects)
issue	sb:issue , sb:pages
issue-nr	sb:issue-nr
it	ce:italic (in text); it (in math)
jr	ce:suffix
kwd	ce:keyword
kwdg	ce:keywords
l	ce:list (generate numbers / bullets)
last-page	sb:last-page
left-border	tb:left-border unless native CALS table
legend	ce:legend
li	ce:list-item (generate numbers / bullets)
lim	use math or formula *
link	ce:link
list	ce:list
list-item	ce:list-item
ll	use math or formula *
location	sb:location
misc	ce:miscellaneous
name	sb:name
no	ce:label
nomenclature	ce:nomenclature (different place)
note	ce:note
nu	use math or formula *
of	use math or formula *
op	use math or formula *
other-aff	ce:affiliation
other-ref	ce:other-ref
ov	use math or formula *
ovl	use math or formula *
ovr	use math or formula *
p	ce:para or ce:simple-para or ce:note-para

Legacy SGML	5.0 XML
pages	sb:pages
preprint	ce:preprint
prs	ce:presented
publisher	sb:publisher
qd	ce:displayed-quote
r	row
rad	use math or formula *
ranking	ce:ranking
rcd	use math or formula *
rdx	use math or formula *
re	ce:date-received
right-border	tb:right-border unless native CALS table
rm	use math or formula *
roles	ce:roles
rv	ce:date-revised
salutation	ce:salutation
sbt	ce:subtitle , ce:alt-subtitle , or sb:subtitle
sc	use math or formula *
scp	ce:small-caps (in text); scp (in math)
sec	ce:section (generate role for Materials and Methods)
series	sb:series
snm	ce:surname
ssf	ce:sans-serif (in text); ssf (in math)
st	ce:section-title
stereochem	ce:stereochem
sup	ce:sup (in text); sup (in math)
tbl	ce:table (native or extended CALS table)
tblbdy	tgroup
tblfn	ce:table-footnote
textbox	ce:textbox within ce:display or ce:floats ; possibly pull in linked textboxes that were SUBDOCs
top-border	sb:top-border unless native CALS table
title	sb:title , sb:maintitle
translated-title	sb:title-translated-title
ty	ce:monospace (in text); ty (in math)
ul	use math or formula *, or in text ce:underline
un	use math or formula *
unl	use math or formula *
unr	use math or formula *
upi	ce:e-component , if appropriate, otherwise use extended view; possibly pull in <code>elan.sgm</code>
vmk	tb:alignmark (also use tb:colspec)
vt	ce:biography , picture attribute to ce:link

* Elements that occur — or should occur — only in math should be encapsulated in a [math](#) element. Of course, when these are nested in other elements that should be encapsulated in [math](#), then this only needs to happen for the outer construct.

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