# Table of Contents

## I Metadata Description

1.1 Scope .................................................. 9
1.2 Backfiles .............................................. 9
1.3 FTP delivery ......................................... 10
1.4 PDF Files ............................................. 10
1.5 Publication Type and Groups of Metadata on FTP ...

## II XML Documentation

2.0 Publication <publication> .......................... 15

## II Metadata Description

### 1.1 Scope

### 1.2 Backfiles

### 1.3 FTP delivery

### 1.4 PDF Files

### 1.5 Publication Type and Groups of Metadata on FTP

#### 1.5.1 New content

#### 1.5.2 IEEE Updates

#### 1.5.3 Inspec Updates

#### 1.5.4 Extended Objects/ Multimedia

#### 1.5.5 Early Access articles

### 1.6 Naming Convention for Article PDFs and Linking to IEEE Xplore

### 1.7 Weekly Updates

### 2.0 Publication <publication>

#### 2.1 Publication Full Title <title>

#### 2.2 Publication Abbreviated Title <titleabbrev>

#### 2.3 Publication Normalized Title <normtitle>

#### 2.4 Publication Parent Title <parent_title>

#### 2.5 Publication Conference Name <conference_name>

#### 2.6 Publication Standards Family Title <standardsfamilytitle>

#### 2.7 Publication Information <publicationinfo>

##### 2.7.1 Publication IDAMS Id <idamsid>

##### 2.7.2 Publication DOI <publicationdoi>

##### 2.7.3 Publication IEEE Catalog Number <invpartnumber>

##### 2.7.4 Publication IEEE Standard Number <stdnumber>

##### 2.7.5 Publication Type <publicationtype>

##### 2.7.6 Publication Subtype <publicationsubtype>

##### 2.7.7 Publication Standard Subtype <standard_subtype>

##### 2.7.8 Publication IEEE Abbreviation <ieeeabbrev>

##### 2.7.9 Publication Conference Acronym <acronym>

##### 2.7.10 Publication Status <pubstatus>

##### 2.7.11 Publication Open Access <publicationopenaccess>

##### 2.7.12 Publication Standard ID <standard_id>

##### 2.7.13 Publication Standard Associated PU Number <associated_punumber>

##### 2.7.14 Publication Standard Status <standard_status>

##### 2.7.15 Publication Standard Modifier Set <standardmodifierset>
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7.15.1</td>
<td>Publication Standard Modifier</td>
</tr>
<tr>
<td>2.7.16</td>
<td>Publication Standard Bundle</td>
</tr>
<tr>
<td>2.7.16.1</td>
<td>Publication Standard Bundle Name</td>
</tr>
<tr>
<td>2.7.16.2</td>
<td>Publication Standard Bundle Type</td>
</tr>
<tr>
<td>2.7.16.3</td>
<td>Publication Base Standard Product Number</td>
</tr>
<tr>
<td>2.7.16.4</td>
<td>Publication Standard Bundle Product Number</td>
</tr>
<tr>
<td>2.7.17</td>
<td>Publication Standard Relationship</td>
</tr>
<tr>
<td>2.7.18</td>
<td>Publication Package Member Set</td>
</tr>
<tr>
<td>2.7.18.1</td>
<td>Publication Output Package Member</td>
</tr>
<tr>
<td>2.7.19</td>
<td>Publication ISBN</td>
</tr>
<tr>
<td>2.7.20</td>
<td>Publication ISSN</td>
</tr>
<tr>
<td>2.7.21</td>
<td>Publication BMS Product Number</td>
</tr>
<tr>
<td>2.7.22</td>
<td>Publication Library of Congress Control Number</td>
</tr>
<tr>
<td>2.7.23</td>
<td>Publication TAB Conference Control Number</td>
</tr>
<tr>
<td>2.7.24</td>
<td>Publication Sponsor</td>
</tr>
<tr>
<td>2.7.24.1</td>
<td>Publication Sponsoring Society</td>
</tr>
<tr>
<td>2.7.25</td>
<td>Publication Standard Family</td>
</tr>
<tr>
<td>2.7.26</td>
<td>Publication Standard Root</td>
</tr>
<tr>
<td>2.7.27</td>
<td>Publication Standard Root Title</td>
</tr>
<tr>
<td>2.7.28</td>
<td>Publication Standard Package Set</td>
</tr>
<tr>
<td>2.7.28.1</td>
<td>Publication Standard Package</td>
</tr>
<tr>
<td>2.7.29</td>
<td>Publication Standard Topic Set</td>
</tr>
<tr>
<td>2.7.29.1</td>
<td>Publication Standard Topic</td>
</tr>
<tr>
<td>2.7.30</td>
<td>Publication ICS Codes</td>
</tr>
<tr>
<td>2.7.30.1</td>
<td>Publication Code Term</td>
</tr>
<tr>
<td>2.7.31</td>
<td>Publication Sponsoring Committee Set</td>
</tr>
<tr>
<td>2.7.31.1</td>
<td>Publication Sponsoring Committee</td>
</tr>
<tr>
<td>2.7.32</td>
<td>Publication Topical Browse Set</td>
</tr>
<tr>
<td>2.7.32.1</td>
<td>Publication Topical Browse</td>
</tr>
<tr>
<td>2.7.33</td>
<td>Publication Copyright Group</td>
</tr>
<tr>
<td>2.7.33.1</td>
<td>Publication Copyright</td>
</tr>
<tr>
<td>2.7.33.1.1</td>
<td>Publication Copyright Year</td>
</tr>
<tr>
<td>2.7.33.1.2</td>
<td>Publication Copyright Holder</td>
</tr>
<tr>
<td>2.7.34</td>
<td>Publication Publisher</td>
</tr>
<tr>
<td>2.7.34.1</td>
<td>Publisher Name</td>
</tr>
<tr>
<td>2.7.34.2</td>
<td>Publication Publisher Location</td>
</tr>
<tr>
<td>2.7.34.3</td>
<td>Publication Publisher Address</td>
</tr>
</tbody>
</table>
2.7.35  Publication Approval Date <PubApprovalDate> 28
2.7.36  Publication Hold Status <holdstatus> 28
2.7.37  Publication Conference Group <confgroup> 28
  2.7.37.1 Publication Conference Title <conftitle> 28
  2.7.37.2 Publication Conference Date <confdate> 28
  2.7.37.3 Publication Conference Location <conflocation> 29
  2.7.37.4 Publication Conference Country <confcountry> 29
  2.7.37.5 Publication Conference Type <conference_type> 29
  2.7.37.6 Publication DOI Permission <doi_permission> 29
2.7.38  Publication AMS Id <amsid> 30
2.7.39  Publication CODEN <coden> 30

3.0  Volume <volume>

3.1  Volume Information <volumeinfo>
  3.1.1 Volume Publication Year <year> 30
  3.1.2 Volume Number <volumenum> 30
  3.1.3 Volume IDAMS Id <idamsid> 30
  3.1.4 Volume Status <volumestatus> 31
  3.1.5 Volume Number of Issues <numissues> 31
  3.1.6 Volume Issue <issue>
    3.1.6.1 Volume Issue Number <issuenum> 31
    3.1.6.2 Volume Issue Part <issuepart> 31
    3.1.6.3 Volume Issue AMS Issue Id <amsid> 31
    3.1.6.4 Volume Issue Status <issuestatus> 32
    3.1.6.5 Volume Issue Complete Date <issue_complete_date> 32
    3.1.6.6 Volume Issue Number of Pages <numpages> 32
    3.1.6.7 Volume Issue Special Issue <specialissue> 32
    3.1.6.8 Volume Issue Filename <filename> 32

4.0  Article <article>

4.1  Article Title <title> 33

4.2  Article Information <articleinfo>
  4.2.1 Article Sequence Number in Publication <articleseqnum> 33
  4.2.2 Article CS Sort Order <csarticlesortorder> 33
  4.2.3 Article Digital Object Identifier <articledoi> 33
  4.2.4 Article Pub Med ID <articlepubmedid> 33
  4.2.5 Article IDAMS Id <idamsid> 34
  4.2.6 Article Status <articlestatus> 34
  4.2.7 Article Content Type <contenttype> 34
  4.2.8 Article Open Access <articleopenaccess> 34
  4.2.9 Article Show Flag <articleshowflag> 34
  4.2.10 Article Plagiarized Flag <articleplagiarizedflag> 35
4.2.11 Article No DOI Flag <articlenodoiflag> 35
4.2.12 Article Scope/Quality <article_quality> 35
4.2.13 Article Cover Image Flag <articlecoverimageflag> 35
4.2.14 Article CS HTML Flag <csarticlehtmlflag> 35
4.2.15 Article Reference Flag <articlereferenceflag> 36
4.2.16 Article Peer Review Flag <articlereferenceflag> 36
4.2.17 Article Hold Status <holdstatus> 36
4.2.18 Article Issue Number <issuenum> 36
4.2.19 Article Issue Part <issuepart> 36
4.2.20 Article Issue Title <articleissuetitle> 36
4.2.21 Article Issue Subtitle <articleissuesubtitle> 37
4.2.22 Article Issue Summary <articleissuesummary> 37
4.2.23 Article Copyright <articlecopyright> 37
4.2.24 Article Copyright Statement <article_copyright_statement> 37
4.2.25 Article License URI <article_license_uri> 37
4.2.26 Article abstract <abstract> 38
4.2.27 Article Standard Scope <articlestdscope> 38
4.2.28 Article Standard Purpose <articlestdpurpose> 39
4.2.29 Article Impact Statement <articleimpactstatement> 39
4.2.30 Article Author Group <authorgroup> 39
4.2.30.1 Article Author <author> 39
4.2.30.1.1 Article Author Order <authororder> 39
4.2.30.1.2 Article Author ID <authorid> 40
4.2.30.1.3 Article Author Proximity ID set <authorid> 40
4.2.30.1.3.1 Article Author Proximity ID set <authorid> 40
4.2.30.1.4 Article Author Orcid <orcid> 40
4.2.30.1.5 Article Author Normalized Name <normname> 40
4.2.30.1.6 Article Author Non-Normalized Name <nonnormname> 41
4.2.30.1.7 Article Author Reference Number <authorrefid> 41
4.2.30.1.8 Article Author Honorific <honorific> 41
4.2.30.1.9 Article Author Lineage <lineage> 41
4.2.30.1.10 Article Author First Name <firstname> 41
4.2.30.1.11 Article Author Last Name <surname> 41
4.2.30.1.12 Article Author Native Name <nativename> 42
4.2.30.1.13 Article Author Affiliation ID <affiliationid> 42
4.2.30.1.14 Article Author Affiliation <affiliation> 42
4.2.30.1.15 Article Author Biography <authorbio> 42
4.2.30.1.16 Article Author Email <email> 42
4.2.31 Article Date <date> 42
4.2.32 Article Number of Page Images <numpages> 44
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2.33</td>
<td>Article PDF Size &lt;size&gt;</td>
</tr>
<tr>
<td>4.2.34</td>
<td>Article Filename &lt;filename&gt;</td>
</tr>
<tr>
<td>4.2.35</td>
<td>Article Page Numbers &lt;artpagenums&gt;</td>
</tr>
<tr>
<td>4.2.36</td>
<td>Article Graphical Abstract &lt;article-graphical-abstract&gt;</td>
</tr>
<tr>
<td>4.2.36.1</td>
<td>Article Graphical Abstract Summary &lt;graphical-abstract-summary&gt;</td>
</tr>
<tr>
<td>4.2.36.2</td>
<td>Article Graphical Abstract Type &lt;graphical abstract-type&gt;</td>
</tr>
<tr>
<td>4.2.36.3</td>
<td>Article Graphical Abstract File Size &lt;graphical abstract-file-size&gt;</td>
</tr>
<tr>
<td>4.2.37</td>
<td>Article Pubsnumber &lt;pubsnumber&gt;</td>
</tr>
<tr>
<td>4.2.38</td>
<td>Article Number of References &lt;numreferences&gt;</td>
</tr>
<tr>
<td>4.2.39</td>
<td>Article Uniform Resource Identifier &lt;uri&gt;</td>
</tr>
<tr>
<td>4.2.40</td>
<td>Article AMS ID &lt;amsid&gt;</td>
</tr>
<tr>
<td>4.2.41</td>
<td>Article Serial ID &lt;articleid&gt;</td>
</tr>
<tr>
<td>4.2.42</td>
<td>Article CS Article ID &lt;csarticleid&gt;</td>
</tr>
<tr>
<td>4.2.43</td>
<td>Article Multimedia &lt;multimedia&gt;</td>
</tr>
<tr>
<td>4.2.43.1</td>
<td>Article Multimedia Summary &lt;summary&gt;</td>
</tr>
<tr>
<td>4.2.43.2</td>
<td>Article Multimedia Compressed &lt;compressed&gt;</td>
</tr>
<tr>
<td>4.2.43.2.1</td>
<td>Article Multimedia Compressed Filename &lt;compressedfilename&gt;</td>
</tr>
<tr>
<td>4.2.43.2.2</td>
<td>Article Multimedia Compressed File Size &lt;compressedfilesize&gt;</td>
</tr>
<tr>
<td>4.2.43.2.3</td>
<td>Article Multimedia Compression Type &lt;compressiontype&gt;</td>
</tr>
<tr>
<td>4.2.43.2.4</td>
<td>Article Multimedia Environment Type</td>
</tr>
<tr>
<td>4.2.43.2.5</td>
<td>Article Multimedia Readme File &lt;readmefile&gt;</td>
</tr>
<tr>
<td>4.2.43.3</td>
<td>Article Multimedia Component &lt;component&gt;</td>
</tr>
<tr>
<td>4.2.43.3.1</td>
<td>Article Multimedia Component Filename &lt;componentfilename&gt;</td>
</tr>
<tr>
<td>4.2.43.3.2</td>
<td>Article Multimedia Component File Size &lt;componentfilesize&gt;</td>
</tr>
<tr>
<td>4.2.43.3.3</td>
<td>Article Multimedia Component Type &lt;componenttype&gt;</td>
</tr>
<tr>
<td>4.2.43.3.4</td>
<td>Article Multimedia Component Platform &lt;componentplatform&gt;</td>
</tr>
<tr>
<td>4.2.43.3.5</td>
<td>Article Multimedia Component Description &lt;componentdescription&gt;</td>
</tr>
<tr>
<td>4.2.43.3.6</td>
<td>Article Multimedia Component Title &lt;componenttitle&gt;</td>
</tr>
<tr>
<td>4.2.43.3.7</td>
<td>Article Multimedia Component DOI &lt;component_doi&gt;</td>
</tr>
<tr>
<td>4.2.43.3.8</td>
<td>Article Multimedia Component Person &lt;componentperson&gt;</td>
</tr>
<tr>
<td>4.2.43.3.8.2</td>
<td>Article Multimedia Component Surname &lt;componentpersonsurname&gt;</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>4.2.44</td>
<td>Article Keywordset <code>&lt;keywordset&gt;</code></td>
</tr>
<tr>
<td>4.2.45</td>
<td>Article Mesh Heading List <code>&lt;MeshHeadingList&gt;</code></td>
</tr>
<tr>
<td>4.2.45.1</td>
<td>Article Mesh Heading <code>&lt;MeshHeading&gt;</code></td>
</tr>
<tr>
<td>4.2.45.1.1</td>
<td>Article Descriptor Name <code>&lt;DescriptorName&gt;</code></td>
</tr>
<tr>
<td>4.2.46</td>
<td>Article Index Classification Set <code>&lt;indexclassificationset&gt;</code></td>
</tr>
<tr>
<td>4.2.46.1</td>
<td>Article Index Classification <code>&lt;indexclassification&gt;</code></td>
</tr>
<tr>
<td>4.2.47</td>
<td>Article Treatment Code Set <code>&lt;treatmentcodeset&gt;</code></td>
</tr>
<tr>
<td>4.2.47.1</td>
<td>Article Treatment Code <code>&lt;treatmentcode&gt;</code></td>
</tr>
<tr>
<td>4.2.48</td>
<td>Article Numerical Index Set <code>&lt;numericalindexset&gt;</code></td>
</tr>
<tr>
<td>4.2.49</td>
<td>Article Chemical Index Set <code>&lt;chemicalindexset&gt;</code></td>
</tr>
<tr>
<td>4.2.49.1</td>
<td>Article Chemical Index <code>&lt;chemicalindex&gt;</code></td>
</tr>
<tr>
<td>4.2.50</td>
<td>Article Astronomical Index Set <code>&lt;astronomicalindexset&gt;</code></td>
</tr>
<tr>
<td>4.2.50.1</td>
<td>Article Astronomical Index <code>&lt;astronomicalindex&gt;</code></td>
</tr>
<tr>
<td>4.2.51</td>
<td>Article Fundref Group <code>&lt;fundrefgrp&gt;</code></td>
</tr>
<tr>
<td>4.2.51.1</td>
<td>Article Fundref <code>&lt;fundref&gt;</code></td>
</tr>
<tr>
<td>4.2.51.1.1</td>
<td>Article Funder Name <code>&lt;funder_name&gt;</code></td>
</tr>
<tr>
<td>4.2.51.1.2</td>
<td>Article Funder Agency Name <code>&lt;agency_name&gt;</code></td>
</tr>
<tr>
<td>4.2.51.1.3</td>
<td>Article Funder ID <code>&lt;funder_id&gt;</code></td>
</tr>
<tr>
<td>4.2.51.1.4</td>
<td>Article Grant Number <code>&lt;grant_number&gt;</code></td>
</tr>
<tr>
<td>4.2.52</td>
<td>Article Linked Article Object ID <code>&lt;assocarticle&gt;</code></td>
</tr>
<tr>
<td>4.2.53</td>
<td>Article Journal Topic Set <code>&lt;articlejournaltopicset&gt;</code></td>
</tr>
<tr>
<td>4.2.53.1</td>
<td>Article Journal Topic <code>&lt;articlejournaltopic&gt;</code></td>
</tr>
<tr>
<td>4.2.54</td>
<td>Article Journal Section <code>&lt;joursec&gt;</code></td>
</tr>
</tbody>
</table>

APPENDIX: List of Content Types
## Document Status Record

<table>
<thead>
<tr>
<th>Release Date</th>
<th>Status</th>
<th>Version</th>
<th>Amendment / Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 March 2004</td>
<td>Revision</td>
<td>4.1</td>
<td>Document name change&lt;br&gt;Added data dictionary for IEEE metadata fields (MARC record)</td>
</tr>
<tr>
<td>1 July 2006</td>
<td>New</td>
<td>5.0</td>
<td>Metadata provided in XML format; documentation of all XML elements and attributes</td>
</tr>
<tr>
<td>8 September 2006</td>
<td>Revision</td>
<td>5.1</td>
<td>Updated XML fields</td>
</tr>
<tr>
<td>17 October 2006</td>
<td>Revision</td>
<td>5.2</td>
<td>Updated “Links to Xplore” and added “Naming convention for Article PDFs”</td>
</tr>
<tr>
<td>26 September 2008</td>
<td>Revision</td>
<td>5.4</td>
<td>DTD change. New elements added: pubtopicalbrowse, pubmedid, pubspussponsoringcommittee, meshheading.</td>
</tr>
<tr>
<td>19 Feb. 2010</td>
<td>Revision</td>
<td>5.5</td>
<td>Version for single article delivery</td>
</tr>
<tr>
<td>17 July 2012</td>
<td>Revision</td>
<td>5.6</td>
<td>DTD Change: Added copyright group and altered copyright element. Added: rapidpostdate, preprintdate, pubappprovaldate. Removed several attributes and elements- refer to DTD.</td>
</tr>
<tr>
<td>6 August 2013</td>
<td>Revision</td>
<td>5.7</td>
<td>Version for single article delivery with updates</td>
</tr>
<tr>
<td>21 November 2013</td>
<td>Revision</td>
<td>5.7a</td>
<td>Added new elements: standard_relationship, csarticlesortorder, articleflagflag, csarticlehtmlflag, articlerefenceflag, articlepeerreviewflag, authororder, csarticleid</td>
</tr>
<tr>
<td>21 March 2014</td>
<td>Revision</td>
<td>5.8</td>
<td>DTD Change.&lt;br&gt;Added new elements to support graphical abstract, fundrefgrp, standard_bundle, publicationdoi, issue_complete_date, conference_type, doi_permission, publicationopenaccess, article_quality, standardsfamilytitle.&lt;br&gt;Updated: articlecopyright element, attributes for productnumber/@pubtype, author data&lt;br&gt;Removed several attributes and elements- refer to DTD.</td>
</tr>
</tbody>
</table>
I Metadata Description

This document is a technical description of IEEE Publications content metadata records. It is intended for use by IEEE data customers. This includes customers who host IEEE metadata locally and those who link to IEEE Xplore via the metadata records. Customers of INSPEC can also use the URL information in the metadata records to link to IEEE content in IEEE Xplore.

1.1 Scope

This document refers to the content that is hosted on the IEEE Xplore website. It includes several classes of content:

- IEEE and IET copyrighted material published 1988 through the present.
- Legacy (pre-1988) data for selected publications that was added to the collections.
- Third party content such as IBM, MIT, etc.

All of the content hosted in IEEE Xplore is part of the IEEE/IET Electronic Library (IEL). Subset subscriptions are also available. This document is applicable to data customers who subscribe to the IEL or any other subsets.

Bibliographic data will be provided in XML format. Please refer to XML Documentation for more details (Section II). For the Data Delivery DTD (ieee_idams_exchange.dtd), please visit http://www.ieee.org/publications_standards/publications/services/services_resources.html and go under “Data deliveries” section.

1.2 Backfiles

At the outset of a data license subscription, if the contract includes backfiles, customers will receive a shipment consisting of the backfile of content requested. The initial content sent will contain article records from the oldest content through the present. Files can be put on a DVD or USB drive for shipping, or arrangements can be made for electronic delivery via FTP. For subscribers who wish to host the PDF data locally, the initial shipment will be in USB drives. Our archives are encrypted and are based on the following directory structure:
1.3 FTP delivery
Files will be sent to data customers twice every week, which coincides with the update to IEEE Xplore. Content will be available from a secure IEEE FTP site. Customer login and password information will be provided after the contract has been signed. An email will be sent to customers notifying them that new content is ready for pickup at the FTP site. Folder structure of the update directory is included in this specification.

1.4 PDF Files
PDF files may be made available to customers who wish to host them locally. Alternatively, customers may choose to link to the PDF files on the IEEE Xplore website. Full-page images are created in Adobe PDF format, which are organized by article. Earlier PDFs have been created in Acrobat version 4.0 and the PDFs since 2005 have been created in Acrobat version 7.0. These are optimized for byte serving.

1.5 Publication Type and Groups of Metadata on FTP
IEEE Data is offered by publication type. Currently files are delivered pertaining to the following publication types:
The customer will always receive the new content and updates to existing metadata, depending on the subscription. Content delivery consists of the following groups of metadata:

1.5.1  **New content**
These are the newly published articles, accompanied with corresponding PDF, if included in the subscription (XML only or XML + PDF).

1.5.2  **IEEE Updates**
These are corrections or updates to existing metadata (XML only, no corresponding PDF).

1.5.3  **Inspec Updates**
These are Inspec citation added to existing IEEE metadata (XML only, no corresponding PDF).

1.5.4  **Extended Objects/ Multimedia**
These are the ancillary material which are present for select conference and journals articles for which the author submitted the additional content and are available as updates. These can be a presentation, executable program, source code, data, or similar material. If present, these files will be placed in an article folder, the name of which will correspond to the article PDF filename.

1.5.5  **Early Access articles**
These are new content made available in advance of the final electronic or print versions, resulting from IEEE's Preprint or Rapid Post processes. This feed will include both new and updated articles. The
PDF and XML will always be supplied together. The volume number will always be ‘PP’ ad the issue will always be ‘99’ (pp:99). Once the early access article becomes a regular article, this will then be part of the IEEE periodicals feed. At this time, the issue will be supplied with a volume and issue number. The customer will need to replace the XML metadata once it becomes part of the regular feed. Only the issue amsid will change; publication and article amsid will remain the same.

Below is an example:
Early Access Article XML Metadata: /10/678543/0876456.xml
Published Article XML Metadata: 10/854321/0876456.xml
In this case, the user will have to replace "/10/678543/876456.xml" with "10/854321/876456.xml" based on the article number "876456".

Once logged in to the FTP account, under each folder (named after metadata group and publication type) will be the usual week# directory. Under the week # directory there will be zip files. Each zip file pertains to a publication title. Zip files are named as Publication AMS ID.zip. Sample directory structure for a newly published periodical is illustrated below:

```
The zip file will contain folders for issues and a manifest file. Issue folders are named by Issue ID. The manifest file will contain information about the publication such as the ISSN and/or ISBN, publication title, publication date, article count and filename. Under each issue folder, XML files and PDF files (if subscribed to) for each article will be present. Both XML and PDF have the same filename which is Article AMS ID. For example, files will be named 12355888.xml and 12355888.pdf. Article AMS ID is a unique ID that IEEE generates for the article. Sample folder structure is shown below:
```
1.6 Naming Convention for Article PDFs and Linking to IEEE Xplore

Article PDFs are named with the Article AMS Id `<amsid>`, padded to 8 characters with zeros. For example, `<amsid> 1644643 </amsid>` has a corresponding PDF file name `01644643.pdf`.

For subscribers linking to IEEE Xplore, the record syntax for constructing the url is as follows:

http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=<articleinfo><amsid>

1.7 Weekly Updates

Updates to the initial shipment are issued on a twice weekly basis via FTP with accompanying email alerts. A directory listing and week number comprising an update will be part of the email notification.

Updates to existing metadata records are sent in the following situations:

- The record has been upgraded to a full INSPEC citation record.
- Maintenance has been done on the record.
- Extended object/multimedia is available.

When there is an ISPEC update or maintenance has been done on the record, only the existing metadata record will need to be replaced in your system with the updated record.
PDF records are rarely updated. If maintenance is done on a PDF, the updated PDF and corresponding metadata will be included in the update file. Both of these should be replaced. When an extended object/multimedia is available for an article, the PDF and XML will both be present.

Contact Information

Contact IEEE Customer Service as follows:

Email: onlinesupport@ieee.org
Telephone: +1 800 678 4333 (U.S. and Canada)

+1 732 981 0060 (worldwide)
II XML Documentation

This section contains a full description of the sub-field tags within the IEEE data. Note that not all sub-fields will be present in every record.

Each XML metadata contains three groups in the following hierarchical structure:

- Publication
- Volume
- Article

2.0 Publication <publication>

*Definition:* This section contains all the Publication level attributes.

2.1 Publication Full Title <title>

*Definition:* Full (original) title of a publication or conference.

*Data Type:* string

*Length:* 255

*Example:* `<title>IEEE Transactions on Biomedical Engineering</title>`

2.2 Publication Abbreviated Title <titleabbrev>

*Definition:* Abbreviated title of a publication or conference.

*Data type:* string

*Length:* 255


2.3 Publication Normalized Title <normtitle>

*Definition:* Normalized title of a publication or conference. A ‘normalized’ title means that the title is in a specific format: subject matter, followed by year and/or IEEE, and other words.

*Data type:* string

*Length:* 255

*Example:* `<normtitle>Biomedical Engineering, IEEE Transactions on</normtitle>`
2.4 Publication Parent Title <parent_title>

Definition: The title of the parent which the publication belongs to.
Data type: string
Length: 255
Example: <parent_title> Data Engineering, International Conference on </parent_title>

2.5 Publication Conference Name <conference_name>

Definition: The name of the meeting (conference) and not the proceeding title.
Data type: string
Length: 500
Example: <conference_name> 2004 Automation Conference </conference_name>

2.6 Publication Standards Family Title <standardsfamilytitle>

Definition: Display title of the standards family on Xplore. This is for internal use only.
Data type: string
Length: 150
Example: <standardsfamilytitle> IEEE Standard for All-Dielectric Self-Supporting Fiber Optic Cable </standardsfamilytitle>

2.7 Publication Information <publicationinfo>

Definition: Information about the publication.

2.7.1 Publication IDAMS1 Id <idamsid>

Definition: System generated unique ID automatically assigned at the publication level when import is run.
Data type: string
Length: 16
Example: <idamsid> 0b0000798000a06a </idamsid>

2.7.2 Publication DOI <publicationdoi>

Definition: The Digital Object Identifier (DOI) number assigned to the publication. The DOI is registered with Crossref to provide a single unique global identifier for the publication.
Data type: string
Length: 50
Example: <publicationdoi> 10.1109/LSP.97 </publicationdoi>

1 IDAMS- IEEE Digital Asset Management System
2.7.3 Publication IEEE Catalog Number <invpartnumber>
Definition: IEEE catalog number of a publication.
Data type: string
Length: 100
Example: <invpartnumber>93CH3249-0</invpartnumber>

2.7.4 Publication IEEE Standard Number <stdnumber>
Definition: IEEE /ANSI number of a publication specifying an IEEE standard.
Data type: string
Length: 100
Example: <stdnumber>IEEE Std 1488-2000</stdnumber>

2.7.5 Publication Type <publicationtype>
Definition: General type of a publication.
Data type: string
Length: 50
Enumerated value list: Periodical, Conference, Standard
Example: <publicationtype>Periodical</publicationtype>

2.7.6 Publication Subtype <publicationsubtype>
Definition: Specific type of a publication; indicates whether the publication is an IEEE publication, an IEE publication or another type.
Data type: string
Length: 50
Example: <publicationsubtype>IEEE Transaction</publicationsubtype>

2.7.7 Publication Standard Subtype <standard_subtype>
Definition: The subtype of a standard document. This is only present if the publication subtype is “Standard Docs”.
Data type: string
Length: 32
Enumerated value list: IEEE Standard, SMPTE Standard, SMPTE Amendment, SMPTE Engineering Guideline, SMPTE Overview Documents, SMPTE Recommended Practice

Example: <standard_subtype>IEEE Standard</standard_subtype>

### 2.7.8 Publication IEEE Abbreviation `<ieeeabbrev>`

**Definition:** The IEEE abbreviation for a journal or conference. This is used in file name specification for all content imported from the journal or conference.

**Data type:** string

**Length:** 20

**Example:** `<ieeeabbrev>T-BME</ieeeabbrev>`

### 2.7.9 Publication Conference Acronym `<acronym>`

**Definition:** Type of acronym used for a conference or journal.

**Attribute:** acronymtype

**Enumerated value list:** CONFERENCE_ACRONYM

**Definition:** The acronym used by the conference, which may be different from the IEEE assigned acronym.

**Data type:** string

**Length:** 50

**Example:** `<acronym acronymtype="CONFERENCE_ACRONYM">ESSCIR</acronym>`

**Enumerated value list:** PIMS2

**Definition:** The PIMS acronym for a journal.

**Data type:** string

**Length:** 40

**Example:** `<acronym acronymtype="PIMS">TBME</acronym>`

### 2.7.10 Publication Status `<pubstatus>`

**Definition:** The current status of a publication or conference. This is for internal use only.

**Data type:** string

**Length:** 20

**Enumerated value list:** Active, Inactive

**Example:** `<pubstatus>Active</pubstatus>`

---

2 PIMS- Internal IEEE journal tracking database
2.7.11 Publication Open Access <publicationopenaccess>

*Definition:* A flag that indicates whether all the research articles in the publication are available for free or not.

*Data type:* boolean

*Enumerated value list:* T= True, F= False

*Example:* `<publicationopenaccess>T</publicationopenaccess>`

2.7.12 Publication Standard ID <standard_id>

*Definition:* The unique key for specifying an IEEE standard used for tracking purposes. This is for internal use only.

*Data type:* integer

*Length:* 15

*Example:* `<standard_id>12346746</standard_id>`

2.7.13 Publication Standard Associated PU Number <associated_punumber>

*Definition:* The Xplore PU number for the Active standard which the Redline standard is associated with. This is for internal use only.

*Data type:* string

*Length:* 12

*Example:* `<associated_punumber>6145279</associated_punumber>`

2.7.14 Publication Standard Status <standard_status>

*Definition:* The current status of a standard.

*Data type:* integer

*Length:* 32

*Enumerated value list:* Active, Inactive

*Example:* `<standard_status>Active</standard_status>`

2.7.15 Publication Standard Modifier Set <standardmodifierset>

*Definition:* Information about publication standard modifier.

2.7.15.1 Publication Standard Modifier <standardmodifier>

*Definition:* The current modifier that is linked to the standard status.

*Data type:* string

*Length:* 100

*Enumerated value list:* Approved, Draft, Unapproved, Amended, Superseded, Withdrawn, Redline, Reserved, Stable, Under Review
Example: &lt;standardmodifier&gt;Approved&lt;/standardmodifier&gt;

2.7.16 Publication Standard Bundle &lt;standard_bundle&gt;
Definition: Information about the standard bundle. This is for internal use only.

2.7.16.1 Publication Standard Bundle Name &lt;bundle_name&gt;
Definition: The name of the grouping of standards to be sold.
Data type: string
Length: 400
Example: &lt;bundle_name&gt;American National Standard Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices - Redline&lt;/bundle_name&gt;

2.7.16.2 Publication Standard Bundle Type &lt;bundle_type&gt;
Definition: The name of the standards bundle- can be of type “Mandatory” which requires a base standard or “Suggested” which does not require a base standard.
Data type: string
Length: 20
Enumerated value list: Mandatory, Suggested
Example: &lt;bundle_type&gt;Suggested&lt;/bundle_type&gt;

2.7.16.3 Publication Base Standard Product Number &lt;base_standard_product_number&gt;
Definition: The product number that is required if the standard bundle type is “Mandatory”.
Data type: string
Length: 25
Example: &lt;base_standard_product_number&gt;STDSU95983&lt;/base_standard_product_number&gt;

2.7.16.4 Publication Standard Bundle Product Number &lt;bundle_product_number&gt;
Definition: The product number of the standard bundle.
Data type: string
Length: 25
Example: &lt;bundle_product_number&gt;STDRL95983&lt;/bundle_product_number&gt;

2.7.17 Publication Standard Relationship &lt;standard_relationship&gt;
Definition: The relationship for the standard.
Attribute: prodnumber
Definition: The product number for the related standard.
Data type: string
Length: 30

Attribute: relationship_date
Definition: The date that the relationship with other standard was established.

Attribute: type
Definition: The relationship for the standard with 12 type values.
Data type: string
Length: 2
Enumerated value list: See table below

Example: <standard_relationship prodnum="23565" relationship_date="12/31/1969 7:00:00 PM" type="V">4509</standard_relationship>

<table>
<thead>
<tr>
<th>A</th>
<th>Administratively Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Corrigendum to</td>
</tr>
<tr>
<td>E</td>
<td>An Errata is available</td>
</tr>
<tr>
<td>F</td>
<td>Reaffirmed</td>
</tr>
<tr>
<td>I</td>
<td>An interpretation is available</td>
</tr>
<tr>
<td>O</td>
<td>Adoption of</td>
</tr>
<tr>
<td>P</td>
<td>Supplement to</td>
</tr>
<tr>
<td>R</td>
<td>Replaced by</td>
</tr>
<tr>
<td>S</td>
<td>Superseded by</td>
</tr>
<tr>
<td>T</td>
<td>Amendment to</td>
</tr>
<tr>
<td>V</td>
<td>Revision of</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>X</td>
<td>Active: Reserved</td>
</tr>
<tr>
<td>Y</td>
<td>Inactive: Superseded</td>
</tr>
<tr>
<td>Z</td>
<td>Inactive: Reserved</td>
</tr>
<tr>
<td>B</td>
<td>Inactive: Withdrawn</td>
</tr>
</tbody>
</table>

2.7.18 Publication Package Member Set <packagememberset>
Definition: Information about publication package member set.

2.7.18.1 Publication Output Package Member <packagemember>
Definition: The package membership of a journal or conference, used for grouping publications into specific products sold
through Xplore. A publication must belong to at least one output package, but can belong to multiple output packages.

Data type: string
Length: 20
Enumerated value list: BTSDL, APSDL, CASDL, CESDL, CIP, CPES, CSCDL, CSDL, CSMDL, EDMCDL, EMBS, EMCSDL, GRSDL, IACDL, IELL, ITEL, ITSCDL, LEOS, MTTSDL, NPSSDL, None, OESDL, PELDL, PES, PESCDL, POP, POP2005, POPALL, POPALL2005, RASDL, RSCDL, SMCSDL, SSCS, STDSELECT, UFFCCDL
Example: <packagemember>POPALL</packagemember>

2.7.19 Publication ISBN <isbn>

Definition: The standard ISBN (International Standard Book Number) for a publication, if available.
Data type: string
Length: 30
Attribute: mediatype
Definition: Type of publication media that the ISBN number grouped with the media type applies to.
Data type: string
Length: 20
Enumerated value list: Paper, CD, DVD, Online, Microfiche, Electronic, USB
Attribute: isbnntype
Definition: This value describes which version of the ISBN number the ISBN record contains. This could be ISBN-13 (New) 13 digit ISBN or ISBN-10 (Historical) 10 digit ISBN.
Data type: string
Length: 20
Enumerated value list: New, Historical
Example: <isbn mediatype="Paper" isbnntype="Historical">0-7803-9137-3</isbn>

2.7.20 Publication ISSN <issn>

Definition: The standard ISSN (International Standard Serial Number) for a publication, if available.
Data type: string
Length: 20
Attribute: mediatype
Definition: Type of publication media that the ISSN number grouped with the media type applies to.

Enumerated value list: Paper, CD, DVD, Online, Microfiche, Electronic, USB

Data type: string
Length: 20

Example: <issn mediatype="Paper">0018-9294</issn>

2.7.21 Publication BMS Product Number <bms_product_number>

Definition: The BMS product number for the publication.
Data type: string
Length: 30

Attribute: mediatype
Definition: Type of publication media that the BMS product number grouped with the media type applies to.
Enumerated value list: Paper, CD, DVD, Online, Microfiche, Electronic, USB

Example: <bms_product_number mediatype="Electronic">CFP1202R-ART</bms_product_number>

2.7.22 Publication Library of Congress Control Number <lccn>

Definition: The control number for the Library of Congress.
Data type: string
Length: 50

Example: <lccn>C12349999</lccn>

2.7.23 Publication TAB³ Conference Control Number <tcn>

Definition: The TAB assigned conference number. This will not be part of the XML output. This is for internal use only.
Data type: string
Length: 20

Example: <tcn>456667-23</tcn>

2.7.24 Publication Sponsor <pubsponsor>

Definition: Information about the sponsor for the publication.

2.7.24.1 Publication Sponsoring Society <society>

Definition: The technical society that is the sponsor of a journal or conference. Multiple technical societies can sponsor either a

³ TAB- Technical Activities Board
journal or a conference. Journal sponsors typically do not change over time, but conference sponsors may frequently change.

_Data type:_ string  
_Length:_ 200  
_Example:_ `<pubsponsor>`
  `<society>Computer Society</society>`
  `<pubsponsor>`

### 2.7.25 Publication Standard Family <standard_family>

**Definition:** The parent (root standard) of a given standard. This is for internal use only.

_Data type:_ string  
_Length:_ 150  
_Example:_ `<standard_family>1044</standard_family>`

### 2.7.26 Publication Standard Root <standard_root>

**Definition:** The root of the standard.

_Data type:_ string  
_Length:_ 100  
_Example:_ `<standard_root>432</standard_root>`

### 2.7.27 Publication Standard Root Title <standard_root_title>

**Definition:** The title of the root standard.

_Data type:_ string  
_Length:_ 400  
_Example:_ `<standard_root_title>D-Cinema Signal Processing</standard_root_title>`

### 2.7.28 Publication Standard Package Set <standardpackageset>

**Definition:** Information about publication standard package set.

#### 2.7.28.1 Publication Standard Package <standard_package>

**Definition:** The package membership of a standard, used for standards products sold through Xplore. A standard must belong to at least one output package, but can belong to multiple output packages.

_Data type:_ string  
_Length:_ 500  
_Enumerated value list:_ All Inclusive, All Inclusive Information Technology, All Inclusive Power and Energy, All Inclusive Telecommunications, Aerospace Electronics, ArcFlash Hazard,
BusArchitecture/Microprocessor/Microcomputer, ColorBooks and Industrial Power Pack, Communications, Design Automation, Electric Machinery, Electromagnetic Compatibility, etc.

Example:  
<standardpackageset>
  <standard_package>Software</standard_package>
  <standard_package>Security</standard_package>
</standardpackageset>

2.7.29 Publication Standard Topic Set <standardtopicset>

Definition: Information about publication standard topic set.

2.7.29.1 Publication Standard Topic <standard_topic>

Definition: The topic of a standard.
Data type: string
Length: 200

Example:  
<standardtopicset>
  <standard_topic>Audio, D-Cinema</standard_topic>
</standardtopicset>

2.7.30 Publication ICS Codes <icscodes>

Definition: Codes used for storing ICS (International Classification for Standard) that come in the form of a number and a string value.

2.7.30.1 Publication Code Term <code_term>

Definition: The term for ICS code.
Data type: string
Length: 255

Attribute: codenum
  Definition: The string value for the ICS code.
  Data type: string
  Length: 50

Example:  
<icscodes>
  <code_term codenum="33.160.40">Video systems</code_term>
  <code_term codenum="33.170">Television broadcasting</code_term>
</icscodes>

2.7.31 Publication Sponsoring Committee Set
<pubsponsoringcommitteeset>

Definition: Information about the set of sponsoring committee.
2.7.31.1 Publication Sponsoring Committee
<pubsponsoringcommittee>

*Definition:* The committee that was responsible for sponsoring a standard.
*Data type:* string
*Length:* 500
*Example:* <pubsponsoringcommittee>Transformers Committee of the IEEE Power Engineering Society</pubsponsoringcommittee>

2.7.32 Publication Topical Browse Set <pubtopicalbrowseset>

*Definition:* Information about the set of topical browse for the publication.

2.7.32.1 Publication Topical Browse <pubtopicalbrowse>

*Definition:* Subject terms assigned to each publication used by Xplore 3.0 for topical browsing. There are 16 values currently.
*Data type:* string
*Length:* 500
*Example:* <pubtopicalbrowseset><pubtopicalbrowse>Aerospace</pubtopicalbrowse><pubtopicalbrowse>Nuclear Engineering</pubtopicalbrowse></pubtopicalbrowseset>

2.7.33 Publication Copyright Group <copyrightgroup>

*Definition:* Information about publication copyright group.

2.7.33.1 Publication Copyright <copyright>

*Definition:* This consists of pairs of values for the copyright holder and copyright year. Publications may have multiple copyright value pairs.
2.7.33.1.1 Publication Copyright Year <year>

Definition: The year or years that a publication was copyrighted.
Data type: string
Length: 10
Example: <year>2005</year>

2.7.33.1.2 Publication Copyright Holder <holder>

Definition: The copyright holder for a publication or conference.
Data type: string
Length: 300
Example: <holder>IEEE</holder>

2.7.34 Publication Publisher <publisher>

Definition: Information about the publisher of a publication.

2.7.34.1 Publisher Name <publishername>

Definition: The name of the publisher of a publication. This is used in conjunction with the publisher’s location and address.
Data type: string
Length: 100
Example: <publishername>IEEE</publishername>

2.7.34.2 Publication Publisher Location <publisherloc>

Definition: The location of the publisher of a publication.
Data type: string
Length: 200
Example: <publisherloc>Piscataway, NJ, USA</publisherloc>

2.7.34.3 Publication Publisher Address <address>

Definition: The address of the publication publisher. This includes the following:
<street> street
<otheraddr> other address
<city> city
<state> state
<country> country
<postcode> zipcode

Example: <address>123 Main St, Piscataway, NJ, USA 08854</address>
2.7.35 Publication Approval Date <PubApprovalDate>

**Definition:** The date that the standard was approved.

*Data type:* string  
*Length:* 300  
*Example:* `<PubApprovalDate>5 Dec. 2001</PubApprovalDate>`

2.7.36 Publication Hold Status <holdstatus>

**Definition:** A flag that indicates whether the publication should be withheld from being published to data clients. This is typically used to indicate that a conference is waiting for publishing approval from TAB.

*Data type:* string  
*Length:* 30  
*Enumerated value list:* Hold, Publish  
*Example:* `<holdstatus>Publish</holdstatus>`

2.7.37 Publication Conference Group <confgroup>

**Definition:** Information about the publication conference group.

2.7.37.1 Publication Conference Title <conftitle>

**Definition:** The name of the conference.

*Data type:* string  
*Length:* 500  
*Example:* `<conftitle>2005 International Conference on Control and Automation (ICCA)</conftitle>`

2.7.37.2 Publication Conference Date <confdate>

**Definition:** The year, month and day that the conference started and ended.

*Attribute:* confdatetype  
*Enumerated value list:* Start, End  
*Example:* `<confdate confdatetype="Start">  
  <year>2005</year>  
  <month/>  
  <day>29</day>  
</confdate>`

`<confdate confdatetype="End">  
  <year>2005</year>  
  <month/>  
  <day>29</day>  
</confdate>`
2.7.37.3 Publication Conference Location <conflocation>

Definition: The location where the conference was held.
Data type: string
Length: 200
Example: <conflocation>Budapest, Hungary</conflocation>

2.7.37.4 Publication Conference Country <confcountry>

Definition: The country that the conference was held.
Data type: string
Length: 50
Example: <country>Hungary</country>

2.7.37.5 Publication Conference Type <conference_type>

Definition: The type of conference and sponsorship information provided by TAB.
Data type: string
Length: 50
Enumerated Value List: See table below

<table>
<thead>
<tr>
<th>S</th>
<th>Conf with IEEE Financial Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Conf without IEEE Financial Sponsor (only IEEE Technical Sponsor(s))</td>
</tr>
<tr>
<td>E</td>
<td>Non IEEE Sponsored Conference</td>
</tr>
<tr>
<td>B</td>
<td>Board Meeting</td>
</tr>
<tr>
<td>C</td>
<td>Committee Meeting</td>
</tr>
<tr>
<td>N/A</td>
<td>If a sponsor is not found in our sponsor database, the conference temporarily set to N/A until the Operations staff resolves the sponsor issue</td>
</tr>
</tbody>
</table>

Example: <conference_type>S</conference_type>

2.7.37.6 Publication DOI Permission <doi_permission>

Definition: A flag that indicates whether the publication is permitted to be deposited to Crossref or not. This is for internal use only.
Data type: boolean
Enumerated Value List: T, F
Example: <doi_permission>T</doi_permission>
2.7.38 Publication AMS Id <amsid>

Definition: The unique key for the publication's record in the data converted from the IEEE AMS database.

Data type: string
Length: 50
Example: <amsid>10234</amsid>

2.7.39 Publication CODEN <coden>

Definition: Six character code for a publication.

Data type: string
Length: 6
Example: <coden>IEBEAX</coden>

3.0 Volume <volume>

Definition: This section contains all the Volume attributes.

3.1 Volume Information <volumeinfo>

Definition: Information about the volume.

3.1.1 Volume Publication Year <year>

Definition: The publication year of the volume.

Data type: integer
Example: <year>2005</year>

3.1.2 Volume Number <volumenum>

Definition: The optional volume number of a volume for a journal or other publication; can sometimes contain additional information aside from just a number.

Data type: string
Length: 20
Example: <volumenum>52</volumenum>

3.1.3 Volume IDAMS Id <idamsid>

Definition: System generated unique ID automatically assigned at the volume level when import is run.

Data type: string
Length: 16
Example: <idamsid>0b0000798000b2f9</idamsid>
3.1.4 Volume Status <volumestatus>

Definition: The current status of a publication volume.
Data type: string
Length: 50
Enumerated value list: Active, Inactive
Example: <volumestatus>Active</volumestatus>

3.1.5 Volume Number of Issues <numissues>

Definition: The number of issues present (publication frequency) for a particular volume of a publication. If the issues for a volume are not complete (volume is current and in progress), the number of issues will be incremented over time.
Data type: integer
Length: 10
Example: <numissues>12</numissues>

3.1.6 Volume Issue <issue>

Definition: Information about volume issue.

3.1.6.1 Volume Issue Number <issuenum>

Definition: An issue number that belongs to the volume. Multiple issue number records are allowed, to specify the complete list of issues that were published for a volume.
Data type: string
Length: 50
Example: <issuenum>12</issuenum>

3.1.6.2 Volume Issue Part <issuepart>

Definition: The issue part number of the volume.
Data type: string
Length: 50
Example: <issuepart>1</issuepart>

3.1.6.3 Volume Issue AMS Issue Id <amsid>

Definition: The list of primary keys for issue records present in the AMS database relating to the list of issues present for this volume in IDAMS.
Data type: string
Length: 50
Example: <amsid>18517</amsid>
3.1.6.4 Volume Issue Status <issuestatus>

**Definition:** Contains the processing status for the entire issue; values can be Open or Complete depending on whether there are still articles being processed to complete the full issue or not.

**Data type:** string  
**Length:** 50  
**Enumerated value list:** Open, Complete  
**Example:** `<issuestatus>Complete</issuestatus>`

3.1.6.5 Volume Issue Complete Date <issue_complete_date>

**Definition:** The date that the issue was completed.

**Example:**
```
<issue_complete_date>
  <year>2006</year>
  <month>6</month>
  <day>21</day>
</issue_complete_date>
```

3.1.6.6 Volume Issue Number of Pages <numpages>

**Definition:** The number of pages in a conference proceedings or a standard publication.

**Data type:** string  
**Length:** 10  
**Example:** `<numpages>vi+37</numpages>`

3.1.6.7 Volume Issue Special Issue <specialissue>

**Definition:** Special topic for an issue.

**Data type:** string  
**Length:** 2000

3.1.6.8 Volume Issue Filename <filename>

**Definition:** The current name of the issue stored in our IDAMS repository.

**Attribute:** docpartition  
**Definition:** The partition where the file resides. This is for internal use only.  
**Data type:** string  
**Length:** 16  

**Attribute:** filetype  
**Definition:** The name of the PDF for the issue.  
**Data type:** string  
**Length:** 500
4.0 Article <article>

Definition: This section contains all the article attributes.

4.1 Article Title <title>

Definition: Full (original) title of an article.

Data type: string

Length: 2000

Example: <title>IEEE Trial-Use Standard for Message Set Template for Intelligent Transportation Systems</title>

4.2 Article Information <articleinfo>

Definition: Information about the article.

4.2.1 Article Sequence Number in Publication <articleseqnum>

Definition: Contains the sequence number of the article relative to the other articles abstracted in a particular publication.

Data type: integer

Example: <articleseqnum>1</articleseqnum>

4.2.2 Article CS Sort Order <csarticlesortorder>

Definition: Contains the sequence number of the article relative to the other articles abstracted in a particular publication assigned by Computer Society to the article. This is for internal use only.

Data type: integer

Example: <csarticlesortorder>23</csarticlesortorder>

4.2.3 Article Digital Object Identifier <articledoi>

Definition: The Digital Object Identifier (DOI) number assigned to the article. The DOI is registered with Crossref to provide a single unique global identifier for the article.

Data type: string

Length: 100

Example: <articledoi>10.1109/TBME.2005.860856</articledoi>

4.2.4 Article Pub Med ID <articlepubmedid>

Definition: The Pubmed ID for the article. It is a unique number assigned by PubMed to each biomedical journal article.
4.2.5 Article IDAMS Id <idamsid>
Definition: System generated unique ID automatically assigned at the publication level when import is run.
Data type: string
Length: 16
Example: <idamsid>0b0000798000b2fb</idamsid>

4.2.6 Article Status <articlestatus>
Definition: The current status of an article.
Data type: string
Length: 20
Enumerated value list: Active, Inactive
Example: <articlestatus>Active</articlestatus>

4.2.7 Article Content Type <contenttype>
Definition: Identifies the editorial content of an article.
Data type: string
Length: 40
Enumerated value list: Please see appendix for list of content types
Example: <contenttype>orig-research</contenttype>

4.2.8 Article Open Access <articleopenaccess>
Definition: A flag that indicates whether the article is available for free or not.
Data type: boolean
Enumerated Value List: T= True, F= False
Attribute: start_date
Definition: The date when the article became open access.
Attribute: end_date
Definition: The date when the article ended open access.
Example: <articleopenaccess end_date="4/20/2016" start_date="4/20/2015">T</articleopenaccess>

4.2.9 Article Show Flag <articleshowflag>
Definition: A flag that indicates whether the author presented in-person at the conference or not. This is for internal use only.
Data type: boolean
Enumerated Value List: T= True, F= False
Example: `<articleshowflag>T</articleshowflag>`

4.2.10 Article Plagiarized Flag `<articleplagiarizedflag>`

Definition: A flag that indicates whether or not the article is plagiarized. This is for internal use only.
Data type: boolean
Enumerated Value List: T= True, F= False
Example: `<articlesplagiarizedflag>F</articlesplagiarizedflag>`

4.2.11 Article No DOI Flag `<articlenodoiflag>`

Definition: A flag that indicates whether or not article DOIs will be assigned. This is for internal use only.
Data type: boolean
Enumerated Value List: T= True, F= False
Example: `<articlenodoiflag>F</articlenodoiflag>`

4.2.12 Article Scope/Quality `<article_quality>`

Definition: A flag that indicates the scope/quality of the conference article. This is for internal use only.
Data type: string
Length: 5
Enumerated Value List: Y, X, N
Example: `<article_quality>Y</article_quality>`

4.2.13 Article Cover Image Flag `<articlecoverimageflag>`

Definition: A flag that indicates whether an article contains a cover image or not. This is for internal use only.
Data type: boolean
Enumerated Value List: T= True, F= False
Example: `<articlecoverimageflag>F</articlecoverimageflag>`

4.2.14 Article CS HTML Flag `<csarticlehtmlflag>`

Definition: A flag that indicates whether or not the article has HTML in CSDL. This is used only by Computer Society.
Data type: boolean
Enumerated Value List: T= True, F= False
Example: `<csarticlehtmlflag>T</csarticlehtmlflag>"
4.2.15 Article Reference Flag <articlereferenceflag>

Definition: A flag that indicates whether or not an article has references. This is for internal use only.

Data type: boolean

Enumerated Value List: T= True, F= False

Example: <articlereferenceflag>F</articlereferenceflag>

4.2.16 Article Peer Review Flag <articlereferenceflag>

Definition: A flag that indicates whether or not an article has been peer reviewed.

Data type: boolean

Enumerated Value List: T= True, F= False

Example: <articlepeerreviewflag>F</articlepeerreviewflag>

4.2.17 Article Hold Status <holdstatus>

Definition: The current status of an article. This is for internal use only.

Data type: string

Length: 20

Enumerated value list: Publish, Preprint, Rapid Post, Skeletal, Conference

Example: <holdstatus> Publish</holdstatus>

4.2.18 Article Issue Number <issuenum>

Definition: The issue number of the journal in which the article was originally published, if available.

Data type: string

Length: 50

Example: <issuenum>12</issuenum>

4.2.19 Article Issue Part <issuepart>

Definition: The issue part number of the issue where the article was originally published if the issue was published in more than one part. If the issue was published in one part, this attribute will be left null.

Data type: string

Length: 50

Example: <issuepart>2</issuepart>

4.2.20 Article Issue Title <articleissuettile>

Definition: Theme or special title of the journal.

Data type: string
Length: 2000

4.2.21 Article Issue Subtitle <articleissuesubtitle>

Definition: The subtitle of the issue.
Data type: string
Length: 2000

4.2.22 Article Issue Summary <articleissuesummary>

Definition: Short description of an issue.
Data type: string
Length: 4000
Example: <articleissuesummary>Special issue on phased-array technology</articleissuesummary>

4.2.23 Article Copyright <articlecopyright>

Definition: Copyright for the article.
Data type: string
Length: 50
Attribute: holderisieee
  Definition: Specifies whether or not the IEEE is the copyright holder for the article.
  Data type: string
  Length: 50
  Enumerated value List: Yes, No
Attribute: year
  Definition: Specifies the copyright year for the article.
  Data type: integer
Example: <articlecopyright holderisieee="Yes" year="2014">IEEE</articlecopyright>

4.2.24 Article Copyright Statement <article_copyright_statement>

Definition: The copyright statement for an article.
Data type: string
Length: 250
Example: <article_copyright_statement>Copyright © 1921 by the Society of Motion Picture and Television Engineers, Inc.</article_copyright_statement>

4.2.25 Article License URI <article_license_uri>

Definition: The URI for license of the article.
Data type: string
Length: 255
Example: <article_license_uri>https://www.smpte.org/subscribe</article_license_uri>
4.2.26 Article abstract <abstract>

Definition: Contains the abstract for the article.
Data type: string
Length: 2000
Attribute: abstracttype
Definition: Type of article abstract.
Enumerated value list: Regular
Definition: Contains the primary (short) abstract for the article.
Example: <abstract abstracttype="Regular">In this paper, expression methods of fuzzy dynamical model on discrete system are presented, based on which a kind of design method on fuzzy state feedback controller is also given and its stability is discussed. In addition, a kind of design method on fuzzy state observer is also given and its stability is discussed.</abstract>

Enumerated value list: Long
Definition: Contains the complete (long version) abstract for the article.
Example: <abstract abstracttype="Long">A novel algorithm for high-precision edge location based on human visual properties is proposed considering characteristics of cannon barrel images, which improves the observation effect of spying bore images and diminishes the target image ambiguity caused by background and noise. The variable gray scale area method is applied according to the image feature diversity between the target and background/noise.</abstract>

Enumerated value list: Violation
Definition: Contains the abstract that should be displayed if a notice of violation is filed against a published article.
Example: <abstract abstracttype="Violation">Notice of Violation of IEEE Publication Principles Internal model control based on locally linear model tree (LOLIMOT) model with application to a PH neutralization process.</abstract>

Enumerated value list: Standard
Definition: Contains the full text of the abstract for IEEE/ANSI standards.
Example: <abstract abstracttype="Standard">The expanding use of digital communications among subsystems of the transportation infrastructure has spawned the development of message sets for the communications between these subsystems. A format for Intelligent Transportation System (ITS) message sets, including common terms (e.g., object identifier), as well as attributes necessary to document ITS data messages, is addressed in this standard.</abstract>

4.2.27 Article Standard Scope <articlestdscope>

Definition: The scope of the standard.
Data type: string
Length: 2000
Example: <articlestdscope>This guideline specifies the purpose, format, and usage of a television picture monitor alignment color bar test signal with chroma set and black set signals.</articlestdscope>

4.2.28 Article Standard Purpose < articlestdpurpose >
Definition: The purpose of the standard.
Data type: string
Length: 2000
Example: <articlestdscope>This guideline describes three feasible examples of mechanical designs and test conditions for achieving the record dimensions specified in SMPTE 224M. The parameters are for reference purposes only.</articlestdscope>

4.2.29 Article Impact Statement < articleimpactstatement>
Definition: The impact statement about the article.
Data type: string
Length: 1000
Example: <articleimpactstatement>Recounts the career and contributions of Samuel Sensiper.</articleimpactstatement>

4.2.30 Article Author Group < authorgroup >
Definition: Information about article author group.
Attribute: source
Enumerated value list: IEEE, Inspec, Author Network
Example: <authorgroup source="IEEE">

4.2.30.1 Article Author < author >
Definition: The author of the article.
Attribute: role
Data type: string
Length: 50
Enumerated value list: primary-corresponding, corresponding, primary, coauthor
Definition: The role of the author.
Example: <author role="primary-corresponding">

4.2.30.1.1 Article Author Order < authororder >
Definition: Designates the order of the author. This is used only by Computer Society.
Data type: string
Length: 30
Example: &lt;authororder&gt;1&lt;/authororder&gt;

4.2.30.1.2 Article Author ID &lt;authorid&gt;

Definition: Unique identifier for the author assigned by IEEE. This is for internal use only.
Data type: string
Length: 100
Example: &lt;authorid&gt;37274458000&lt;/authorid&gt;

4.2.30.1.3 Article Author Proximity ID set &lt;authorid&gt;

Definition: The set of the author proximity. This is for internal use only.

4.2.30.1.3.1 Article Author Proximity ID set &lt;authorid&gt;

Definition: The select topic for an article. This is for internal use only.
Data type: string
Length: 100
Example: &lt;authoridset&gt;&lt;authorid&gt;37274458000&lt;/authorid&gt;&lt;/authoridset&gt;

4.2.30.1.4 Article Author Orcid &lt;orcid&gt;

Definition: The unique identifier linkable to an author’s research output. Orcid stands for Open Research and Contributor ID.
Data type: string
Length: 50
Example: &lt;orcid&gt;1234567890123456&lt;/orcid&gt;

4.2.30.1.5 Article Author Normalized Name &lt;normname&gt;

Definition: The normalized name of an author of the article. A ‘normalized’ author name means that the name is in a specific format: surname, initials, suffix (if any) for non-Asian names, exactly as published for Asian names where the family name can’t be determined.
Data type: string
Length: 300
Example: &lt;normname&gt;Al-Nashash, H.A.&lt;/normname&gt;
4.2.30.1.6 Article Author Non-Normalized Name <nonnormname>

*Definition*: The non-normalized name of an author of the article. The non-normalized name is the original format of the name captured from metadata prior to any attempt at normalization.
*Data type*: string
*Length*: 300
*Example*: <nonnormname>Ed Cetron</nonnormname>

4.2.30.1.7 Article Author Reference Number <authorrefid>

*Definition*: The primary key of the record in the Inspec master author database for the author.
*Data type*: string
*Length*: 30
*Example*: <authorrefid>3</authorrefid>

4.2.30.1.8 Article Author Honorific <honorific>

*Definition*: The title of an individual.
*Data type*: string
*Length*: 20
*Example*: <honorific>Mr.</honorific>

4.2.30.1.9 Article Author Lineage <lineage>

*Definition*: The portion of a person’s name indicating a relationship to ancestors.
*Data type*: string
*Length*: 20
*Example*: <lineage>Jr.</lineage>

4.2.30.1.10 Article Author First Name <firstname>

*Definition*: The first name of an author for the article.
*Data type*: string
*Length*: 50
*Example*: <firstname>Kevin</firstname>

4.2.30.1.11 Article Author Last Name <surname>

*Definition*: The last name of an author for the article.
*Data type*: string
Length: 100
Example: <surname>Gao</surname>

4.2.30.1.12 Article Author Native Name <nativename>

Definition: The name of the author in his is her native/foreign language using Unicode character set.
Data type: string
Length: 300
Example: <nativename>&amp;#x6a;Sel&amp;#xe9;snick &amp;#x306a; &amp;#x307f;</nativename>

4.2.30.1.13 Article Author Affiliation ID <affiliationid>

Definition: Unique identifier for the author affiliation assigned by IEEE. This is for internal use only.
Data type: string
Length: 100
Example: <affiliationid>60023256</affiliationid>

4.2.30.1.14 Article Author Affiliation <affiliation>

Definition: The institutional affiliation for the author.
Data type: string
Length: 1800
Example: <affiliation>Northeastern Univ., Hebei, China</affiliation>

4.2.30.1.15 Article Author Biography <authorbio>

Definition: The author biography.
Data type: string
Length: 4000
Example: <authorbio>Adam J. Wilt is now with Borland International, Scotts Valley, CA 95066. At the time of the work described in the article, he was with Abekas Video Systems, Redwood City, CA 94063.</authorbio>

4.2.30.1.16 Article Author Email <email>

Definition: The email address of the author.
Data type: string
Length: 500
Example: <email>chb.hust@gmail.com</email>

4.2.31 Article Date <date>

Definition: Information about the article date.
Attribute: datetype
**Enumerated value list: LastEdit**

*Definition:* The date that the information for the article record was last edited.

*Example:* `<date datetype="LastEdit">
    <year>2006</year>
    <month>6</month>
    <day>21</day>
</date>`

**Enumerated value list: LastInspecUpd**

*Definition:* The date that the information for the article record was last edited by Inspec.

*Example:* `<date datetype="LastInspecUpd">
    <year>2006</year>
    <month>6</month>
    <day>21</day>
</date>`

**Enumerated value list: OriginalPub**

*Definition:* The original publication date of the article in its original media, if available.

*Example:* `<date datetype="OriginalPub">
    <year>2004</year>
    <month>1</month>
    <day>12</day>
</date>`

**Enumerated value list: preprintdate**

*Definition:* The date when the preprint version of the article was received in IDAMS/IEEE Xplore.

*Example:* `<date datetype="preprintdate">
    <year>2005</year>
    <month>1</month>
    <day>12</day>
</date>`

**Enumerated value list: rapidpostdate**

*Definition:* The date when the rapidpost version of the article was received in IDAMS/IEEE Xplore.

*Example:* `<date datetype="rapidpostdate">
    <year>2006</year>
    <month>1</month>
    <day>12</day>
</date>`

**Enumerated value list: ePub**

*Definition:* The date that the article was first published in Xplore.

*Example:* `<date datetype="ePub">
    <year>2007</year>
    <month>1</month>
    <day>12</day>
</date>`
4.2.32 Article Number of Page Images <numpages>

*Definition:* The number of page images contained in the PDF file for the article. This may or may not have a value.

*Data type:* integer

*Example:* `<numpages>1</numpages>`

4.2.33 Article PDF Size <size>

*Definition:* The size of a PDF article in bytes.

*Data type:* integer

*Example:* `<size>1325941</size>`

4.2.34 Article Filename <filename>

*Definition:* The current name of the article stored in our IDAMS repository. It may not match the PDF filename in Xplore.

*Attribute:* docpartition

  *Definition:* The partition where the file resides. This is for internal use only.

  *Data type:* string

  *Length:* 32

*Attribute:* filetype

  *Definition:* The type of the file.

  *Data type:* string

  *Length:* 32

*Enumerated value list:* MainPDF

  *Definition:* The name of the article PDF, which may or may not match the PDF filename in Xplore.

  *Example:* `<filename docpartition="5" filetype="MainPDF">01528200.pdf</filename>`

*Enumerated value list:* SourcePDFName

  *Definition:* The source name of the article PDF.

  *Example:* `<filename filetype="SourcePDFName">ICCA-2-1.pdf</filename>`

*Enumerated value list:* Graphical-Abstract-Cover-Image

  *Definition:* The cover image of the graphical abstract.

  *Example:* `<filename filetype="Graphical-Abstract-Cover-Image">2260813_gabstract.jpg</filename>`

*Enumerated value list:* Graphical-Abstract-Filename

  *Definition:* The filename of the graphical abstract.

  *Example:* `<filename filetype="Graphical-Abstract-Filename">2260813_mm.mp4</filename>`

*Enumerated value list:* AAMPDF

  *Definition:* The author accepted manuscript PDF. This is for internal use only.
**Data type:** string  
**Length:** 500  
**Example:** `<filename filetype="AAMPDF">tnn-aam-2354712.pdf</filename>`

*Enumerated value list:* REFXML  
*Definition:* The XML references. This is for internal use only.  
*Data type:* string  
*Length:* 500  
**Example:** `<filename filetype="REFXML">tnn-aam-2354712.pdf</filename>`

### 4.2.35 Article Page Numbers <artpagenums>

*Definition:* The page numbers or designators of the start page of an article and the end page of an article.  
*Data type:* string  
*Length:* 2000  
**Attribute:** endpage  
*Definition:* The page number or designator for the end page of an article if there is a single end page. Page numbers provided in metadata and by Inspec may need to be parsed in order to obtain the end page value to use.  
*Data type:* string  
*Length:* 40  
**Attribute:** startpage  
*Definition:* The page number or designator for the start page of an article if there is a single start page. Page numbers provided in metadata and by Inspec may need to be parsed in order to obtain the first page value to use.  
*Data type:* string  
*Length:* 40  
**Example:** `<artpagenums endpage="1257 Vol. 2" startpage="1254">1254-1257 Vol. 2</artpagenums>`

### 4.2.36 Article Graphical Abstract <article-graphical-abstract>

*Definition:* Information about the article graphical abstract.

#### 4.2.36.1 Article Graphical Abstract Summary <graphical-abstract-summary>

*Definition:* Short description of the graphical abstract.  
*Data type:* string  
*Length:* 1800
Example: `<graphical-abstract-summary>Millimeter wave mobile communications for 5G cellular: It will work!</graphical-abstract-summary>

### 4.2.36.2 Article Graphical Abstract Type `<graphical-abstract-type>`

**Definition:** The media format of the graphical abstract.

**Data type:** string

**Length:** 50

**Example:** `<graphical-abstract-type>video</graphical-abstract-type>`

### 4.2.36.3 Article Graphical Abstract File Size `<graphical-abstract-file-size>`

**Definition:** File size of the graphical abstract.

**Data type:** integer

**Length:** 25

**Example:** `<graphical-abstract-file-size>232MB</graphical-abstract-file-size>`

### 4.2.37 Article Pubsnumber `<pubsnumber>`

**Definition:** Unique ID assigned to an article.

**Attribute:** pubidtype

**Enumerated value list:** InspecAccession

**Definition:** The Inspec accession number assigned by Inspec to the article. This number is a unique number allocated as bibliographic records are included in the INSPEC Database Tape Service.

**Data type:** string

**Length:** 100

**Example:** `<pubsnumber pubidtype="InspecAccession">8681198</pubsnumber>`

**Enumerated value list:** InspecSICI

**Definition:** The Inspec SICI code assigned by Inspec to the article. This field contains the Serial Item Contribution Identification (SICI) code as defined in ANSI Standard Z39.56 (1991).

**Data type:** string

**Length:** 200

**Example:** `<pubsnumber pubidtype="InspecSICI">0018-9294(200512)52:12L.2119:MGCI;1-R</pubsnumber>`

**Enumerated value list:** InspecBatch

**Definition:** Contains an internal INSPEC code uniquely identifying the publication issue for serials or simply the publication for non-serials.

**Data type:** string
Example: `<pubsnumber pubidtype="InspecBatch">X94-00123</pubsnumber>`

**Enumerated value list: IEEELog**

*Definition:* Contains a variable length alphanumeric string published by IEEE to identify uniquely a published article. This is used for historical data only, not generated in IDAMS.

*Data type:* string

*Length:* 50

*Example:* `<pubsnumber pubidtype="IEEELog">9414446</pubsnumber>`

**Enumerated value list: CCCCode**

*Definition:* Conveys authorizations to photocopy to users of copyrighted material from thousands of copyright owners, mainly publishers.

*Data type:* string

*Length:* 50

*Example:* `<pubsnumber pubidtype="CCCCode">0-7803-9137-3/05/$20.00</pubsnumber>`

**Enumerated value list: InspecNonStdSICI**

*Definition:* Contains a non-standard Inspec ‘SICI’ code assigned by Inspec to the article.

*Data type:* string

*Length:* 200

*Example:* `<pubsnumber pubidtype="InspecNonStdSICI">0-7803-9137-3(20050629)L.1242;ODAW;1</pubsnumber>`

**Enumerated value list: PublisherItemID**

*Definition:* Contains the Publisher Item Identifier assigned to the article by Inspec. This attribute is no longer used, but is stored here for historical reasons.

*Data type:* string

*Length:* 200

*Example:* `<pubsnumber pubidtype="PublisherItemID">1234-5678(96)12345-x</pubsnumber>`

### 4.2.38 Article Number of References <numreferences>

*Definition:* Contains the number of references cited by the article.

*Data type:* integer

*Example:* `<numreferences>1</numreferences>`

### 4.2.39 Article Uniform Resource Identifier <uri>

*Definition:* The IEEE uniform resource identifier (URL) for a single article.

*Data type:* string
4.2.40 Article AMS ID <amsid>

**Definition:** The unique key for the article’s record in data converted from the IEEE AMS database. This is used for constructing the url to Xplore PDFs.

**Data type:** string

**Length:** 50

**Example:** <amsid>1542447</amsid>

4.2.41 Article Serial ID <articleid>

**Definition:** The unique identifier which some journals use instead of the start page, especially applicable in the physics community.

**Data type:** string

**Length:** 50

**Example:** <articleid>2043727</articleid>

4.2.42 Article CS Article ID <csarticleid>

**Definition:** The unique ID assigned by Computer Society to the article.

**Data type:** string

**Length:** 80

**Example:** <csarticleid>mco2013050084</csarticleid>

4.2.43 Article Multimedia <multimedia>

**Definition:** Information about the multimedia.

4.2.43.1 Article Multimedia Summary <summary>

**Definition:** Summary of the article multimedia.

**Data type:** string

**Length:** 2000

**Example:** <summary>Contains 10 JPEG and 4 MPEG files illustrating the article’s main points</summary>

4.2.43.2 Article Multimedia Compressed <compressed>

**Definition:** Contains descriptive information that is stored in a downloadable zip package.
4.2.43.2.1 Article Multimedia Compressed Filename
<compressedfilename>

Definition: Compressed file name of the zipped multimedia package.
Data type: string
Length: 500
Example: <compressedfilename>graphics.zip</compressedfilename>

4.2.43.2.2 Article Multimedia Compressed File Size
<compressedfilesize>

Definition: Compressed file size in bytes of the zipped multimedia package.
Data type: integer
Length: 10
Example: <compressedfilesize>3MB</compressedfilesize>

4.2.43.2.3 Article Multimedia Compression Type
<compressiontype>

Definition: Compression type of the zipped multimedia package.
Data type: string
Length: 256
Example: <compressiontype>zip</compressiontype>

4.2.43.2.4 Article Multimedia Environment Type
<environmenttype>

Definition: Environment type of the zipped multimedia package.
Data type: string
Length: 256
Example: <environmenttype>Windows</environmenttype>

4.2.43.2.5 Article Multimedia Readme File <readmefile>

Definition: Readme file that is contained in the zipped multimedia package.
Data type: string
Length: 500
Example: <readmefile>01lgrs02-smith-mm-readme.txt</readmefile>
4.2.43.3 Article Multimedia Component <component>

Definition: Contains DOI style link to multimedia from the article PDF.

4.2.43.3.1 Article Multimedia Component Filename <componentfilename>

Definition: File name of the article multimedia component.
Data type: string
Length: 500
Example: <componentfilename>presen.ppt</componentfilename>

4.2.43.3.2 Article Multimedia Component File Size <componentfilesize>

Definition: File size in bytes of the article multimedia component.
Data type: integer
Length: 10
Example: <componentfilesize>3.67MB</componentfilesize>

4.2.43.3.3 Article Multimedia Component Type <componenttype>

Definition: Type of the article multimedia component.
Data type: string
Length: 256
Example: <componenttype>ppt</componenttype>

4.2.43.3.4 Article Multimedia Component Platform <componentplatform>

Definition: Platform of the article multimedia component.
Data type: string
Length: 256
Example: <componentplatform>Windows</componentplatform>

4.2.43.3.5 Article Multimedia Component Description <componentdescription>

Definition: Description of the article multimedia component.
Data type: string
Length: 2000
Example: <componentdescription>Summarizes the paper's results and shows why the proposed method is better.</componentdescription>

4.2.43.3.6 Article Multimedia Component Title <componenttitle>

Definition: Title of the article multimedia component.
Data type: string
Length: 1024
Example: <componenttitle>Performance enhancement using quadplex encoding</componenttitle>

4.2.43.3.7 Article Multimedia Component DOI <component_doi>

Definition: Digital object identifier of the article multimedia component.
Data type: string
Length: 100
Example: <component_doi>10.1109/TED.2006.1234566/mm1</component_doi>

4.2.43.3.8 Article Multimedia Component Person <componentperson>

Definition: The author of the article multimedia component.

4.2.43.3.8.1 Article Multimedia Component First Name <componentpersonfirstname>

Definition: First name of the author of the article multimedia component.
Data type: string
Length: 50
Example: <componentpersonfirstname>Bob</componentpersonfirstname>

4.2.43.3.8.2 Article Multimedia Component Surname <componentpersonsurname>

Definition: Last name of the author of the article multimedia component.
Data type: string
Length: 50
Example: <componentpersonsurname>Smith</componentpersonsurname>
4.2.44 Article Keywordset <keywordset>

**Definition**: Information about the set of article keywords.

**Attribute**: keywordtype

**Enumerated value list**: Inspec

**Definition**: Contains controlled index terms assigned to the document from the Inspec Thesaurus.

**Data type**: string

**Length**: 500

**Example**: 
```
<keywordset keywordtype="Inspec">
  <keyword>
    <keywordterm>automated highways</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>IEEE standards</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>transportation</keywordterm>
  </keyword>
</keywordset>
```

**Enumerated value list**: InspecFree

**Definition**: Contains additional indexing terms assigned to the article by Inspec indexers that are not part of the standard Inspec Thesaurus.

**Data type**: string

**Length**: 500

**Example**: 
```
<keywordset keywordtype="InspecFree">
  <keyword>
    <keywordterm>digital communications</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>ITS data messages</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>Intelligent Transportation System</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>message sets</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>transportation infrastructure</keywordterm>
  </keyword>
</keywordset>
```

**Enumerated value list**: IEEE

**Definition**: Contains controlled index terms assigned to the document as per the IEEE Thesaurus.

**Data type**: string

**Length**: 500
Example: <keywordset keywordtype="IEEE">
  <keyword>
    <keywordterm>Automated highways</keywordterm>
    <keywordmodifier>intell. transportation, message set template</keywordmodifier>
  </keyword>
</keywordset>

Enumerated value list: IEEEFree

Definition: Contains additional indexing terms assigned to the article by IEEE indexers that are not part of a standard Thesaurus.
Data type: string
Length: 500
Example: <keywordset keywordtype="IEEEFree">
  <keyword>
    <keywordterm>Active model initialization</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>phase congruence</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>multiresolution analysis</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>low level representation</keywordterm>
  </keyword>
</keywordset>

Enumerated value list: AuthorFree

Definition: Contains a list of author specified free-language words or phrases which are assigned by the author, indexers, or may be present as "keywords" in the original paper.
Data type: string
Length: 500
Example: <keywordset keywordtype="AuthorFree">
  <keyword>
    <keywordterm>motion analysis</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>shadow remova</keywordterm>
  </keyword>
</keywordset>

Enumerated value list: DOE

Definition: The Department of Energy classification codes.
Data type: string
Length: 200
Example: <keywordset keywordtype="DOE">
  <keyword>
    <keywordterm>laser radiation</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>separation process</keywordterm>
  </keyword>
</keywordset>
Enumerated value list: PACS

*Definition:* Stands for Physics and Astronomy Classification Scheme, which is an internationally adopted, hierarchical subject classification scheme, designed by the American Institute of Physics (AIP) to classify and categorize the literature of physics and astronomy.

*Data type:* string

*Length:* 200

*Example:* 

```
<keywordset keywordtype="PACS">
  <keyword>
    <keywordterm>8840mg</keywordterm>
  </keyword>
  <keyword>
    <keywordterm>8245Fk</keywordterm>
  </keyword>
</keywordset>
```

### 4.2.45 Article Mesh Heading List `<MeshHeadingList>`

*Definition:* List of information regarding mesh heading for the article.

#### 4.2.45.1 Article Mesh Heading `<MeshHeading>`

*Definition:* Data set pertaining to PubMed Mesh terms. 0 indicates no mesh terms associated and 1 indicates that mesh terms are associated.

*Attribute:* MeshFlag

*Data type:* integer

*Enumerated Value List:* 0, 1

*Example:* 

```
<MeshHeadingList MeshFlag="1">
  <MeshHeading>
    <DescriptorName>Equipment Design</DescriptorName>
  </MeshHeading>
  <MeshHeading>
    <DescriptorName>Microelectrodes</DescriptorName>
  </MeshHeading>
</MeshHeadingList>
```

#### 4.2.45.1.1 Article Descriptor Name `<DescriptorName>`

*Definition:* The actual mesh heading assigned by PubMed to an article.

*Data type:* string

*Length:* 500

*Example:* 

```
<MeshHeading>
  <DescriptorName>Equipment Design</DescriptorName>
</MeshHeading>
<MeshHeading>
  <DescriptorName>Microelectrodes</DescriptorName>
</MeshHeading>
```

### 4.2.46 Article Index Classification Set `<indexclassificationset>`

*Definition:* Information about the set of index classification code for the article.
4.2.46.1 Article Index Classification <indexclassification>

*Definition:* Information about the index classification for the author.

*Attribute:* classificationcode

*Definition:* Contains a list of Inspec indexing codes that specify where the article appears in the current Inspec Classification, and is where the article is cross referenced in Inspec Abstracts Journals if appropriate.

*Data type:* string

*Length:* 10

*Example:* 

```xml
<indexclassificationset>
  <indexclassification classificationcode="C6110B"/>
  <indexclassification classificationcode="C6170"/>
</indexclassificationset>
```

4.2.47 Article Treatment Code Set <treatmentcodeset>

*Definition:* Information about the set of Inspec treatment code for the article.

4.2.47.1 Article Treatment Code <treatmentcode>

*Definition:* This field if present may contain one to nine code letters indicating the type of treatment given by the document. This field may be repeated as often as needed for an individual record. However, no duplications are allowed.

*Data type:* string

*Length:* 100

*Enumerated value list:* Application, Bibliography, Economic, General or Review, New, Development, Practical, Product Review, Theoretical or Mathematical, Experimental

*Example:* 

```xml
<treatmentcodeset>
  <treatmentcode>Practical</treatmentcode>
</treatmentcodeset>
```

4.2.48 Article Numerical Index Set <numericalindexset>

*Definition:* Information about the set of Inspec numerical index.

*Attribute:* physicalquantity

*Definition:* The physical quantity of a numerical index term.

*Data type:* string

*Length:* 50

*Attribute:* numericvalue
**Definition**: The single value or start of a range of values for the index term. The two values (Value 1 & Value 2) are stored in ascending order. These are stored in the following floating-point format:

\[-N.NNNN...EIII\]

Where:

<table>
<thead>
<tr>
<th>N.NNNN</th>
<th>Decimal Number (&gt;=1 &amp; &lt; 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>III = Exponent (&gt;=-99 &amp; &lt;=+99) [except for the value 0.0E+00]</td>
</tr>
</tbody>
</table>

The number of significant figures is >=2 & <=12.

**Data type**: string

**Length**: 2000

**Attribute**: numericvalue

**Definition**: The optional end value of a range of values for the index term. The two values (Value 1 & Value 2) are stored in ascending order. These are stored in the following floating-point format:

\[-N.NNNN...EIII\]

Where:

<table>
<thead>
<tr>
<th>N.NNNN</th>
<th>Decimal Number (&gt;=1 &amp; &lt; 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>III = Exponent (&gt;=-99 &amp; &lt;=+99) [except for the value 0.0E+00]</td>
</tr>
</tbody>
</table>

The number of significant figures is >=2 & <=12.

**Attribute**: standardunit

**Definition**: The standard unit for the index term.

**Data type**: string

**Length**: 2000

**Example**:

```xml
<chemicalindexset>
  <chemicalindex>
    <physicalquantity>wavelength</physicalquantity>
    <numericvalue>7.0E-07</numericvalue>
    <numericvalue>1.0E-06</numericvalue>
    <standardunit>m</standardunit>
  </chemicalindex>
</chemicalindexset>
```

4.2.49 **Article Chemical Index Set** `<chemicalindexset>`

**Definition**: Information about the set of Inspec chemical index.

4.2.49.1 **Article Chemical Index** `<chemicalindex>`

**Definition**: The substance or material system or the components of the substance or material system. Chemical elements are referred to by their standard one- or two-character symbols.

**Data type**: string
**Length**: 2000

**Attribute**: chemrole

*Definition*: The role that the chemical item plays in the complete substance or material system or to the type of system in the case of the entry for the complete system.

*Data type*: string

*Length*: 2000

*Enumerated value list*: see table below

<table>
<thead>
<tr>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>el</td>
<td>element</td>
</tr>
<tr>
<td>dop</td>
<td>dopant</td>
</tr>
<tr>
<td>bin</td>
<td>binary system</td>
</tr>
<tr>
<td>int</td>
<td>interface system</td>
</tr>
<tr>
<td>ss</td>
<td>system with 3 or more components</td>
</tr>
<tr>
<td>sur</td>
<td>surface or substrate</td>
</tr>
</tbody>
</table>

*Example*: `<chemicalindexset>`

  `<chemicalindex chemrole="el">Xe</chemicalindex>`

  `<chemicalindexset>`

### 4.2.50 Article Astronomical Index Set `<astronomicalindexset>`

*Definition*: Information about the set of Inspec astronomical index for the article.

#### 4.2.50.1 Article Astronomical Index `<astronomicalindex>`

*Definition*: Contains the controlled designations for astronomical objects discussed in the bibliographic item.

*Data type*: string

*Length*: 2000

### 4.2.51 Article Fundref Group `<fundrefgrp>`

*Definition*: Information about the groups of fundref for the article.

#### 4.2.51.1 Article Fundref `<fundref>`

*Definition*: Provides a standard way to report funding sources for published scholarly research.
4.2.51.1.1 Article Funder Name <funder_name>

Definition: The name of the funding organization or agency as it appears in the Fundref Registry. This is the authoritative name for the funding organization.

Data type: string
Length: 500

Example: <funder_name>National Science and Technology Major Projects</funder_name>

4.2.51.1.2 Article Funder Agency Name <agency_name>

Definition: The author’s version of the funding organization name. There may be a slight difference between the agency name and the official funder name.

Data type: string
Length: 500

Example: <agency_name>Canadian Research Council</agency_name>

4.2.51.1.3 Article Funder ID <funder_id>

Definition: The funding agency identifier in the form of a DOI. The fundref ID is derived from the Fundref Registry and cannot be created by the publisher.

Data type: string
Length: 50

Example: <funder_id>501100001868</funder_id>

4.2.51.1.4 Article Grant Number <grant_number>

Definition: The award number of the funder identifier. There may be multiple grant numbers for one funding organization.

Data type: string
Length: 1000

Example: <grant_number>101R89083</grant_number>

4.2.52 Article Linked Article Object ID <assocarticle>

Definition: One or more Documentum object identifiers for articles that are related to the current article in some way. This is stored in conjunction with the association type for the article.

Data type: string
Length: 20
**Attribute: assoctype**

*Definition:* Part of a record list of one or more articles that are related to the current article in some way. This is stored in conjunction with the object id for the related article.

*Data type:* string

*Length:* 30

*Enumerated value list:* PeerDependent, OtherPeer, ChildErratum, ChildVersion, ChildCorrected, Subcomponent

*Example:* `<assocarticle assoctype="Child Erratum">0b0000798000a0fa</assocarticle>`

**4.2.53 Article Journal Topic Set <articlejournaltopicset>**

*Definition:* Information about the set of topics for an article.

**4.2.53.1 Article Journal Topic <articlejournaltopic>**

*Definition:* The select topic for an article.

*Data type:* string

*Length:* 500

*Example:* `<articlejournaltopicset>
<articlejournaltopic><![CDATA[Vehicular and wireless technologies]]></articlejournaltopic>
<articlejournaltopic><![CDATA[Intelligent transportation systems]]></articlejournaltopic>
</articlejournaltopicset>`

**4.2.54 Article Journal Section <joursec>**

*Definition:* Grouping of articles into sections within an issue.

*Data type:* string

*Length:* 2000

*Example:* `<joursec>Correspondence</joursec>`
APPENDIX: List of Content Types

Conference Content Types

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>advert</td>
<td>Advertisements</td>
</tr>
<tr>
<td>awards</td>
<td>Article &amp; people awards (includes the former list-award)</td>
</tr>
<tr>
<td>blank</td>
<td>Blank pages</td>
</tr>
<tr>
<td>breaker-page</td>
<td>Pages that contain continuation text, used most often between parts of a conference proceedings. Includes conference copyright page.</td>
</tr>
<tr>
<td>bylaws</td>
<td>Society bylaws. Bylaw listings, changes, etc.</td>
</tr>
<tr>
<td>commentary</td>
<td>Commentary (includes conference &quot;Keynote Address&quot; and Trans Professional Communication &quot;Interface&quot; articles)</td>
</tr>
<tr>
<td>content-announce</td>
<td>Information on future special issues, future articles, future TOCs of other publications, etc.</td>
</tr>
<tr>
<td>errata</td>
<td>Corrections to an article</td>
</tr>
<tr>
<td>front-cover</td>
<td>Front covers that do not contain TOCs and are not blank.</td>
</tr>
<tr>
<td>future-events</td>
<td>Information on future conference locations and topics.</td>
</tr>
<tr>
<td>game</td>
<td>Games. Non-technical Magazines content; includes contest information.</td>
</tr>
<tr>
<td>index-author</td>
<td>Author index</td>
</tr>
<tr>
<td>index-subject</td>
<td>Subject index</td>
</tr>
<tr>
<td>info-author</td>
<td>Information for authors</td>
</tr>
<tr>
<td>info-society</td>
<td>All Society related material, including society news, Board of Governors meeting minutes, lists of IEEE fellows, etc.</td>
</tr>
<tr>
<td>list-contrib</td>
<td>Contributor Listings</td>
</tr>
<tr>
<td>list-reviewer</td>
<td>Reviewer and referee listings</td>
</tr>
<tr>
<td>list-staff</td>
<td>Staff or Society listings</td>
</tr>
<tr>
<td>lit-survey</td>
<td>Survey of the literature</td>
</tr>
<tr>
<td>obit</td>
<td>Obituaries, memoriams, or dedications.</td>
</tr>
<tr>
<td>opinion</td>
<td>An opinion piece, as in an editorial, forward/opening remarks, or a letter to the editor. In some magazines this type may look like a Section, a Column or Department (e.g. in Spectrum called &quot;FORUM&quot; section).</td>
</tr>
<tr>
<td>orig-research</td>
<td>Articles containing original research, published at any point in time. Includes reprinted articles.</td>
</tr>
<tr>
<td>panel-discussion</td>
<td>An article containing report of an organized panel discussion.</td>
</tr>
<tr>
<td>review</td>
<td>Reviews of current or newly available literature, software,</td>
</tr>
<tr>
<td>Content Type</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>products, etc. Reviews of one or more of books, software, videos, CDs, DVDs, and other media. Includes reviews of current or newly available literature, software, products, etc.</td>
<td></td>
</tr>
<tr>
<td>teaser-abstract</td>
<td>The TEASER-ABSTRACT is the abstract of an article/paper that is presented elsewhere or in a different format (electronic versus paper). This type can used also be for items noted as 'Extended Abstracts' that do not fall under other categories.</td>
</tr>
<tr>
<td>tech-survey</td>
<td>Scanning the technology. Overview article describing an old or new technology.</td>
</tr>
<tr>
<td>toc</td>
<td>Table of contents</td>
</tr>
<tr>
<td>tutorial</td>
<td>Article aimed at teaching someone about a technical topic.</td>
</tr>
</tbody>
</table>

**Journals Content Types**

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>advert</td>
<td>Advertisements</td>
</tr>
<tr>
<td>awards</td>
<td>Article &amp; people awards (includes the former list-award)</td>
</tr>
<tr>
<td>blank</td>
<td>Blank pages</td>
</tr>
<tr>
<td>breaker-page</td>
<td>Pages that contain continuation text, used most often between parts of a conference proceedings. Includes conference copyright page.</td>
</tr>
<tr>
<td>call-for-papers</td>
<td>Call for papers. Used for a range of announcements: Calls for Papers; Calendars; Contributions; Misc. fillers.</td>
</tr>
<tr>
<td>commentary</td>
<td>Commentary (includes conference &quot;Keynote Address&quot; and Trans Professional Communication &quot;Interface&quot; articles)</td>
</tr>
<tr>
<td>comment-reply</td>
<td>Comments / Replies; Discussion/Closure TPWRD, TPWRS have comment-replies</td>
</tr>
<tr>
<td>content-announce</td>
<td>Information on future special issues, future articles, future TOCs of other publications, etc.</td>
</tr>
<tr>
<td>disting-lecturers</td>
<td>Distinguished lecturers listings.</td>
</tr>
<tr>
<td>errata</td>
<td>Corrections to an article</td>
</tr>
<tr>
<td>front-cover</td>
<td>Front covers that do not contain TOCs and are not blank.</td>
</tr>
<tr>
<td>future-events</td>
<td>Information on future conference locations and topics.</td>
</tr>
<tr>
<td>index-author</td>
<td>Author index</td>
</tr>
<tr>
<td>index-edics</td>
<td>EDICS (Editor's Information Classification Scheme). Areas of expertise with subcategorized topics.</td>
</tr>
</tbody>
</table>

*NOTE: Name changed to INDEX-EDICS for consistency with other index Content Types*
<table>
<thead>
<tr>
<th>Content Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>index-subject</td>
<td>Subject index</td>
</tr>
<tr>
<td>info-author</td>
<td>Information for authors</td>
</tr>
<tr>
<td>info-society</td>
<td>All Society related material, including society news, Board of Governors meeting minutes, lists of IEEE fellows, etc.</td>
</tr>
<tr>
<td>issue-survey</td>
<td>Survey of the articles in this issue. Includes &quot;scanning the issue,&quot; &quot;issue summaries,&quot; &quot;special issue/special section intros,&quot; and &quot;conference highlights&quot;</td>
</tr>
<tr>
<td>list-contrib</td>
<td>Contributor Listings</td>
</tr>
<tr>
<td>list-reviewer</td>
<td>Reviewer and referee listings</td>
</tr>
<tr>
<td>list-staff</td>
<td>Staff or Society listings</td>
</tr>
<tr>
<td>lit-survey</td>
<td>Survey of the literature</td>
</tr>
<tr>
<td>obit</td>
<td>Obituaries, memoriams, or dedications.</td>
</tr>
<tr>
<td>opinion</td>
<td>An opinion piece, as in an editorial, forward/opening remarks, or a letter to the editor. In some magazines this type may look like a Section, a Column or Department (e.g. in Spectrum called &quot;FORUM&quot; section).</td>
</tr>
<tr>
<td>orig-research</td>
<td>Articles containing original research, published at any point in time. Includes reprinted articles.</td>
</tr>
<tr>
<td>patent-abstract</td>
<td>Patent abstracts.</td>
</tr>
<tr>
<td>prolog</td>
<td>Used only for Proceedings of the IEEE. Introductory piece to an article within the issue. A prolog or summary introduction to a full document.</td>
</tr>
<tr>
<td>reader-survey</td>
<td>Reader surveys</td>
</tr>
<tr>
<td>review</td>
<td>Reviews of current or newly available literature, software, products, etc. Reviews of one or more of books, software, videos, CDs, DVDs, and other media. Includes reviews of current or newly available literature, software, products, etc.</td>
</tr>
<tr>
<td>summary-abstract</td>
<td>Summary of abstracts in the current issue</td>
</tr>
<tr>
<td>teaser-abstract</td>
<td>The TEASER-ABSTRACT is the abstract of an article/paper that is presented elsewhere or in a different format (electronic versus paper). This type can used also be for items noted as 'Extended Abstracts' that do not fall under other categories.</td>
</tr>
<tr>
<td>tech-survey</td>
<td>Scanning the technology. Overview article describing an old or new technology.</td>
</tr>
<tr>
<td>toc</td>
<td>Table of contents</td>
</tr>
<tr>
<td>tutorial</td>
<td>Article aimed at teaching someone about a technical topic.</td>
</tr>
</tbody>
</table>
# Magazine Content Types

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>advert</td>
<td>Advertisements</td>
</tr>
<tr>
<td>awards</td>
<td>Article &amp; people awards (includes the former list-award)</td>
</tr>
<tr>
<td>blank</td>
<td>Blank pages</td>
</tr>
<tr>
<td>breaker-page</td>
<td>Pages that contain continuation text, used most often between parts of a conference proceedings. Includes conference copyright page.</td>
</tr>
<tr>
<td>bylaws</td>
<td>Society bylaws. Bylaw listings, changes, etc.</td>
</tr>
<tr>
<td>call-for-papers</td>
<td>Call for papers. Used for a range of announcements: Calls for Papers; Calendars; Contributions; Misc. fillers.</td>
</tr>
<tr>
<td>cartoon</td>
<td>Cartoons. Non-technical diverting Magazines content.</td>
</tr>
<tr>
<td>commentary</td>
<td>Commentary (includes conference &quot;Keynote Address&quot; and Trans Professional Communication &quot;Interface&quot; articles)</td>
</tr>
<tr>
<td>comment-reply</td>
<td>Comments / Replies; Discussion/Closure TPWRD, TPWRS have comment-replies</td>
</tr>
<tr>
<td>content-announce</td>
<td>Information on future special issues, future articles, future TOCs of other publications, etc.</td>
</tr>
<tr>
<td>disting-lecturers</td>
<td>Distinguished lecturers listings.</td>
</tr>
<tr>
<td>errata</td>
<td>Corrections to an article</td>
</tr>
<tr>
<td>front-cover</td>
<td>Front covers that do not contain TOCs and are not blank.</td>
</tr>
<tr>
<td>future-events</td>
<td>Information on future conference locations and topics.</td>
</tr>
<tr>
<td>game</td>
<td>Games. Non-technical Magazines content; includes contest information.</td>
</tr>
<tr>
<td>index-author</td>
<td>Author index</td>
</tr>
<tr>
<td>index-subject</td>
<td>Subject index</td>
</tr>
<tr>
<td>info-author</td>
<td>Information for authors</td>
</tr>
<tr>
<td>info-society</td>
<td>All Society related material, including society news, Board of Governors meeting minutes, lists of IEEE fellows, etc.</td>
</tr>
<tr>
<td>issue-survey</td>
<td>Survey of the articles in this issue. Includes &quot;scanning the issue,&quot; &quot;issue summaries,&quot; &quot;special issue/special section intros,&quot; and &quot;conference highlights&quot;</td>
</tr>
<tr>
<td>list-contrib</td>
<td>Contributor Listings</td>
</tr>
<tr>
<td>list-dissertation</td>
<td>List of Ph.D. dissertations</td>
</tr>
<tr>
<td>list-reviewer</td>
<td>Reviewer and referee listings</td>
</tr>
<tr>
<td>list-staff</td>
<td>Staff or Society listings</td>
</tr>
<tr>
<td>lit-survey</td>
<td>Survey of the literature</td>
</tr>
<tr>
<td>obit</td>
<td>Obituaries, memoriams, or dedications.</td>
</tr>
<tr>
<td>opinion</td>
<td>An opinion piece, as in an editorial, forward/opening</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>remarks</td>
<td>Remarks, or a letter to the editor. In some magazines this type may look like a Section, a Column or Department (e.g. in Spectrum called &quot;FORUM&quot; section).</td>
</tr>
<tr>
<td>orig-research</td>
<td>Articles containing original research, published at any point in time. Includes reprinted articles.</td>
</tr>
<tr>
<td>panel-discussion</td>
<td>An article containing report of an organized panel discussion.</td>
</tr>
<tr>
<td>puzzle</td>
<td>Puzzles. Non-technical diverting Magazines content; includes 'brain teasers' and 'crossword puzzles.&quot;</td>
</tr>
<tr>
<td>reader-survey</td>
<td>Reader surveys</td>
</tr>
<tr>
<td>review</td>
<td>Reviews of one or more of books, software, videos, CDs, DVDs, and other media. Includes reviews of current or newly available literature, software, products, etc.</td>
</tr>
<tr>
<td>summary-abstract</td>
<td>Summary of abstracts in the current issue</td>
</tr>
<tr>
<td>teaser-abstract</td>
<td>The TEASER-ABSTRACT is the abstract of an article/paper that is presented elsewhere or in a different format (electronic versus paper). This type can be used also for items noted as 'Extended Abstracts&quot; that do not fall under other categories.</td>
</tr>
<tr>
<td>tech-survey</td>
<td>Scanning the technology. Overview article describing an old or new technology.</td>
</tr>
<tr>
<td>toc</td>
<td>Table of contents</td>
</tr>
<tr>
<td>topical-info</td>
<td>Non-engineering topical information. Includes articles analyzing, for example, 401K laws and options, etc.</td>
</tr>
<tr>
<td>tutorial</td>
<td>Article aimed at teaching someone about a technical topic.</td>
</tr>
</tbody>
</table>