IEEE JATS References Tagging Guide

Version 1.0

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Introduction

This guide provides general information regarding tagging of references for processing by the IEEE Reference Validation and Management System. As with any XML submission, it is important that the XML is fully validated prior to delivery to IEEE. The reference format used conforms to *"IEEE JATS DTD version 1.51"*.

This guide is divided into 3 sections.

- The first is *"General Reference Rules"* (Section 1). This section outlines the major rules for tagging XML references.
- The second is "*Reference Tagging Structure"* (Section 2). This section outlines the overall structure of each article's references.
- The third is *"IEEE Guide to XML Reference Citation Tagging"* (Section 3). This section provides information about the most common tags and attributes used to tag individual references.
- The fourth is *"Packaging"* (Section 4). This section provides instructions for packaging the references.

In addition readers of this guide should refer to *"IEEE JATS XML Reference Samples"*. This document gives the **required order** of the tags and **how to punctuate** each type of reference. This document is provided as a PDF file with additional hints for tagging references. It is also provided as a sample XML file. This file should be used as the basis for creating actual references for submission to IEEE. As shown in the PDF's TOC an individual reference, such as a periodical, can have more or less information associated with it. Therefore it is important that the right initial reference is chosen as the starting point.

Section 1. General Reference Rules

1. Each major reference type (book, periodical, etc.) has its *own specific required element order within each reference*. This order is **independent** of the way the reference may appear in print or in the PDF file. This was done so that all of the elements and reference data are captured in a consistent order in the XML. Following this order will make future programming efforts (e.g., reuse) easier to implement. The "*IEEE JATS XML Reference Samples"* document highlights the **required order and punctuation of elements** for each type of reference. *Failure to follow this order may affect the display of the references in IEEE Xplore.*

2. Tagged references *should not use* bold, italics, etc., unless their omission changes the meaning of the cited material, such as a single word or character in a title. Due to the subject matter covered, we require the capture of superscripts and subscripts, math and chemical formulas, caps and small caps, etc.

3. Each <ref> element must have one "id" attribute (ref1, ref2, B23, B24, etc.). Whether references are cited in text or not, the "id" attribute is still required. The "id" needs to be *unique* in order to pass validation.

4. In some cases, such as standards, references are either bibliographic or normative. For bibliographic references the id should be:
   id="ref1", id="ref2", id="ref3", etc.

   For normative references the id should be:
   id="ref-norm1", id="ref-norm2", id="ref-norm3", etc.

For both types of references the numbering starts at 1 and ends with the total number of references of each type[1].

Section 2. Reference Tagging Structure

Reference submission for an article must have the following overall structure, tags, and attribute values. In the example below, the indention is shown for readability.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ref-wrapper PUBLIC "-//IEEE//DTD IEEE References JATS-based
DTD v1.51//EN" "ref-jats1.dtd">
<ref-wrapper dtd-version="1.51"
xmlns:mml="http://www.w3.org/1998/Math/MathML"
xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <article-id pub-id-type="arnumber"></article-id>
      <article-id pub-id-type="doi"></article-id>
      <ref-list>
            <ref id="ref1">
            <!--Reference list goes here -->
            <!—Each individual reference is between pairs of <ref> and
            </ref> tags with the appropriate “id” value -->
            </ref>
      </ref-list>
</ref-wrapper>
```

In order for IEEE to process the references the following tags **must** be present in the XML:
<article-id pub-id-type="arnumber"></article-id>
<article-id pub-id-type="doi"></article-id>

If the DOI is known it should appear in the <article-id pub-id-type="doi"> tag.

NOTE: The shortcut form of <article-id pub-id-type="arnumber"/> **or** <article-id pub-id-type="doi"/> is **not permitted**.

The accompanying *“IEEE JATS XML Reference Samples”* shows how different kinds of references are tagged. In both versions of the sample *“IEEEEJATS XML Reference Samples”* <given-names> shows only initials. Both JATS and IEEE *permit spelling out the full given name and/or middle name if desired.* The tag <label> is *not displayed* in IEEE Xplore.

[1] Currently IEEE Xplore groups references as bibliographic or normative. It does not display the reference number.

Section 3. IEEE Guide to XML Reference Citation Tagging

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<ref>	One item in a bibliographic list, typically describing a referenced work.	Id	ref1, ref2, ref3,… B22,B23,B24 (typical style for Standards)		<refid="ref1">	... <refid="ref4"> <label>[4]</label> **<mixed-citation publication-type="periodical" publication-format="print">** <person-group> <string-name> <given-names>E.</given-names> <surname>Tentzeris</surname></string-name>, <string-name> <given-names>R.</given-names> <surname>Robertson</surname></string-name>, <string-name> <given-names>J.</given-names> <surname>Harvey</surname></string-name>,and <string-name> <given-names>L.</given-names> <surname>Katehi</surname </string-name> </person-group>,“<article-title>Stabilityanddispersion analysisofbattle-lemarie-basedMRTDschemes</article-title>,” <source>IEEETrans.Microw.TheoryTech.</source>,vol. <volume>47</volume>, no.<issue>7</issue>,pp.<fpage>1004</fpage>– <lpage>1013</lpage>, <month>Jul.</month><year>1999</year>.</mixed-citation> </ref> ...	
<label>	Number and/or prefix word placed at the beginning of display elements, In this case before<mixed-citation>.	None	None		<label>[4]</label> <label>[B22]</label>(typical for standards)		
<mixed-citation>	Bibliographic description of a work. Includes a combination of bibliographic reference elements and untagged text. Spacing and punctuation are preserved.	publication-type (required)	Periodical	References to magazines and journals are considered periodicals.	<mixed-citation publication-type="periodical" publication-format="print">		
			Report		<mixed-citation publication-type="report" publication-format="print">		
			Thesis		<mixed-citation publication-type="thesis" publication-format="print">		
			Standard		<mixed-citation publication-type="standard" publication-format="print">		
			Manual		<mixed-citation publication-type="manual" publication-format="print">		
			Confproc		<mixed-citation publication-type="confproc" publication-format="print">		
			Confpaper		<mixed-citation publication-type="confpaper" publication-format="print">		
			Patent		<mixed-citation publication-type="patent" publication-format="print">		
			Unpubd		<mixed-citation publication-type="unpubd" publication-format="other">		
			Software		<mixed-citation publication-type="software" publication-format="online">		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
			Other		<mixed-citation publication-type="other "publication-format="other">		**IEEE believes that in most cases, one of the publication-type attribute value should be able to be assigned to a reference, besides "other"." Other" should only be used when the publication-type clearly cannot be identified from the data provided in a reference. Sometimes, references have the data in wrong order, but the publication-type is still able to be defined. "other" should not be used in these cases. IEEE does not want "other" to be used as a generic catch-all for processing references quickly. Every effort should be made to identify the correct type of reference.**
			Online		<mixed-citation publication-type="online" publication-format="online">		
			Book		<mixed-citation publication-type="book" publication-format="print">		
			Dataset		<mixed-citation publication-type="dataset" publication-format="online">		
		publication-format (required)	Print		<mixed-citation publication-type="periodical" publication-format="print">		
			Online		<mixed-citation publication-type="periodical" publication-format="online">		Every reference should have the @publication-format set to one of the three values: "print", "online", or "other". Also, every reference should have the @publication-type set to one of the values supplied in this guide. Here are the general rules for determining and applying these attribute values:
			Other		<mixed-citation publication-type="periodical" publication-format="other">		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
			Allauthors	**Never use this value.**			**A.** If a reference clearly only has a URL, with no information that would clearly identify it as one of the IEEE reference publication-types, then the publication-type cannot be determined. In this case, set the @publication-type attribute to "other". Also set the @publication-format attribute to "online." **B1.** If a reference has a URL, but also has volume/issue/page number data, then set the @publication-type attribute to "periodical". In this case, then set the @publication-format attribute to "print." **B2.** If a reference has a URL, but **does not** have volume/issue/page number data, then set the @publication-format attribute to "online". If it is impossible to tell if the publication-type is one of the IEEE types, then set the @publication-type to "other". **C.** If a reference does not have a URL, nor a clear reference to a CD or other electronic media, then set the @publication-format attribute to "print." **D.** If a reference has specific information about a CD, DVD or other media, then set the @publication-format attribute to "other." This is a rare case. The vast majority of IEEE references will be either "print" or "online".
		publisher-type	Government	This is only used for government publications.	<label>[31]</label><mixed-citation publication-format="online" publication-type="manual" publisher-type=”government”><source>FCC Codes of Regulation, Part 15</source>.<gov>FCC-2016.P15</gov>.[Online].Available:<uri>http://www.access.gpo.gov/nara/cfr/waisidx03/</uri></mixed-citation></ref>		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
		xml:lang	3-character ISO language code	Use xml:lang only when referencing a non-English language publication.	<mixed-citationpublication-format="print"publication-type="book"xml:lang="jpn">		
<person-group>	Container element for one or more contributors in a bibliographic reference.	person-group-type	Assignee	Persons to whom a patent is transferred	<person-group person-group-type="assignee">	<refid="ref1"><label>[1]</label><mixed-citationpublication-type="periodical"publication-format="print">**<person-group person-group-type="author">**<string-name><given-names>E.</given-names><surname>Tentzeris</surname></string-name>,<string-name><given-names>R.</given-names><surname>Robertson</surname></string-name>,<string-name><given-names>J.</given-names><surname>Harvey</surname></string-name>, and <string-name><given-names>L.</given-names><surname>Katehi</surname></string-name></person-group>,“<article-title>Stability and dispersion analysis of battle-lemarie-based MRTD schemes</article-title>,”<sourcespecific-use="IEEE">IEEE Trans. Microw. Theory Tech.</source>,vol.<volume>47</volume>,no.<issue>7</issue>,pp.<fpage>1004</fpage>–<lpage>1013</lpage>,<month>Jul.</month><year>1999</year>.</mixed-citation></ref>	If the citation content obviously indicates what the attribute value should be, please apply the appropriate value. If no value is apparent, please omit this attribute.
			Author	Content creators ***frequently used value**	<person-group person-group-type="author">		
			Compiler	Persons who put together a composite work from multiple sources	<person-group person-group-type="compiler">		
			Director	Director	<person-group person-group-type="director">		
			Editor	Content editors	<person-group person-group-type="editor">		
			guest-editor	Content editors who have been invited to edit all or part of a work	<person-group person-group-type="guest-editor">		
			inventor	Idea, software, or machine creators	<person-group person-group-type="inventor">		
			Transed	Editors of a translated version of a work	<person-group person-group-type="transed">		
			Translator	Persons who translated the cited work from one language into another	<person-group person-group-type="translator">		
<etal>	Indicator of the presence of unnamed contributors. Typically indicated in print with the text “etal.” Or with an ellipsis.				<string-name><prefix>Dr.</prefix><given-names>Paul M.</given-names><surname>Starbuck</surname><suffix>Jr.</suffix></string-name>	<person-group person-group-type="author"><string-name><given-names>A.</given-names><surname>Furuskar</surname></string-name></person-group><etal></etal>,	Please place the<etal> tag within<person-group>as this represents unnamed people. If there are 6 or more authors, after the first author, use <etal> and remove all other author names.

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<string-name>	Container element for personal names captured with mixed-content where the order of the name components is not enforced.	name-style	western eastern given-only islensk	"western" is the default value. "eastern" Is used for native, non-Latin, Asian names, in Asian characters. "given-only" is used when the language origin is unknown "islensk" is not used.			
<given-name>	All given names of a person, such as the first name, middle names, maiden name if used as part of the married name, etc.	none					
<surname>	Surname of a person.	none					Compound surnames such as del, de, von, etc. should be part of the<surname>, not <given-names>. Compound Asian surnames are very rare.
<article-title>	Full title of an article.	none	IEEE	Use the value "IEEE" only for references to IEEE publications.	<article-title>Stability and dispersion analysis of battle-lemarie-based MRTD schemes</article-title>		
<source>	Title of a document (for example, journal, book, conference proceedings) that contains (is the source of) the material being cited in a bibliographic reference or product.	specific-use			1)An IEEE source: <source specific-use="IEEE">IEEE Trans. Microw. Theory Tech.</source> 2)A non-IEEE source: <source>MIT Technology</source>		
<edition>	The full edition statement or number for a cited or referenced publication.				vol. <volume>3</volume>, <edition>2</edition>nd ed., <publisher-loc>Norwood, MA</publisher-loc>: <publisher-name>Artech House</publisher-name>, <year>1996</year>.		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<series>	Series information about a journal or book in a bibliographic reference or product. Remarks	content-type	series-title series-number volume-title	These attribute values are the most common. Please contact IEEE if any other types are encountered.		<refid="ref35"> <label>[35]</label> <mixed-citationpublication-format="print"publication-type="book"><person-groupperson-group-type="author"><string-name><given-names>A.</given-names><surname>Taflove</surname></string-name></person-group>,<sourcecontent-type="volume-title">Computational Electrodynamics: The Finite-Difference Time-Domain Method</source>.in**<series content-type="series-title">Computational Electrodynamics</series>,<series content-type="series-number">II</series>**, vol.<volume>3</volume>, <edition>2</edition>nd ed., <publisher-loc>Norwood, MA</publisher-loc>: <publisher-name>Artech House</publisher-name>, <year>1996</year>.</mixed-citation> </ref>	
<volume>	Number of a journal (or other document) within a series.	none					To tag "volume-title" please refer to the sample used in<source>. The "volume-title" refers to the special title given to a single volume of a series.
<issue>	Issue number of a journal, or in rare instances, a book.	none				<refid="ref1"><label>[1]</label><mixed-citation publication-format="print" publication-type="periodical"><person-group person-group-type="author"><string-name><given-names>E.</given-names><surname>Tentzeris</surname></string-name>,<string-name><given-names>R.</given-names><surname>Robertson</surname></string-name>,<string-name><given-names>J.</given-names><surname>Harvey</surname></string-name>,and <string-name><given-names>L.</given-names><surname>Katehi</surname></string-name></person-group>,“<article-title>Stability and dispersion analysis of battle-lemarie-based MRTD schemes</article-title>,”<source specific-use="IEEE">IEEE	
<fpage>	Page number on which a document starts.	none					The <fpage> and <lpage> values are tagged exactly as it appears in the PDF or source XML, even if it appears as a number, a letter or a combination of numbers and letters.

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<lpage>	Page number on which a document ends.	none				Trans. Microw. Theory Tech.</source>,vol. <volume>47</volume>, no.<issue>7</issue>, pp.<fpage>1004</fpage>–<lpage>1013</lpage>, <month>Jul.</month><year>1999</year>.</mixed-citation></ref>	
<month>	Names one of the months of the year.	none					Please capture the month and year from the source reference as the author provided. The ISO-8601-date attribute, while required in article metadata, should not be used in references.
<year>	Numerical, 4-digit year.	none					
<day>	Numeric, two-digit value of the day of the month.	none			<day>26</day>		
<publisher-name>	Name of the person, company, or other entity that published a work.	none				<refid="ref4"><label>[4]</label><mixed-citation publication-type="book" publication-format="print"><person-group person-group-type="author"><string-name><given-names>A.</given-names> <surname>Taflove</surname></string-name></person-group>,<source>Computational Electrodynamics: TheFinite-Difference Time-Domain Method</source>. <publisher-loc>Norwood, MA</publisher-loc>: <publisher-name>Artech House</publisher-name>,<year>1996</year>.</mixed-citation>	
<conf-name>	Full name of a conference, including any qualifiers (for example, “43rdAnnual”).	none			<conf-name>32nd ESA Antenna Workshop</conf-name>	refid="ref24"> <label>[24]</label> <mixed-citation publication-type="confpaper" publication-format="print"> <person-group person-group-type="author"> <string-name> <given-names>D.</given-names> <surname>Caratelli</surname> </string-name>, <string-name> <given-names>M.C.</given-names> <surname>Viganó</surname>	
<conf-loc>	Physical location(s) of a conference (for example, city, country, campus, organization location).	none			<conf-loc>Noordwijk, The Netherlands</conf-loc>		In <conf-loc>, in references only, do not use the available sub-elements, such as <city>, <state>, <country>. Please continue to tag conference locations as shown in the example in the Example column.

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<conf-date>	As part of a bibliographic reference (<mixed-citation>), the date(s) on which a conference was held.	none	Please refer to the ISO3166-12-upper-case letter alphabetic country code list.		<conf-date>Oct. 5–8,2010</conf-date>	</string-name>,<string-name> <given-names>G.</given-names> <surname>Toso</surname></string-name>,and<string-name> <given-names>P.</given-names> <surname>Angeletti</surname> </string-name> </person-group>,”<article-title>Analytical placement technique for sparse arrays</article-title>,” presented at the<conf-name> 32nd ESA Antenna Workshop</conf-name>,<conf-loc>Noordwijk, The Netherlands</conf-loc>,<conf-date>Oct. 5–8,2010</conf-date>.</mixed-citation> </ref>	The iso-8601-date attribute is not used within the<conf-date>if it is within<mixed-citation>.
<patent>	Identification information for a patent in a bibliographic reference or product.	country			<patent country="usa">U.S.Patent3594806</patent>	<refid="ref25"><label>[25]</label><mixed-citation publication-type="patent" publication-format="print"><person-group person-group-type="inventor"><string-name><given-names>W.W.</given-names><surname>Black</surname></string-name>and<string-name><given-names>A.</given-names><surname>Clavin</surname></string-name></person-group>,“<article-title>Dipole Augmented Slot Radiating Element</article-title>,”<patent country="usa">U.S. Patent 3594806</patent>,<month>Jul.</month><year>1971</year>.</mixed-citation></ref>	For country codes please refer to the ISO3166-1, alpha-3(three-letter country codes)

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<pub-id>	Identifier of a publication cited in a bibliographic reference or as part of information about a related article or reviewed product.	pub-type	Note: The first 3 values on this list are the most commonly used. The other values are only rarely used. **arnumber** **doi** **std-designation** art-access-id articleid artid arxiv csfilenumber coden doaj inspec isbn issid lccn manuscript medline other paper-number pii pmcid pmid pub-id publisher-id sici	**arnumber**: Article number from a particular Society (for example, an LMAG article number) **doi**: DOI(Digital Object Identifier) **paper-number**: An article identification number from an entity other than IEEE Publishing Operations, used to identify another article or another version of an article. The paper number will be printed on the last line in an abstract. (Within<related-article>, IEEE will use <pub-id pub-id-type="paper-number"> to identify the article ID from the conference in which an article originally appeared.). **std-designation**: Number of a national, international, or industry standard.		<refid="ref29"><label>[29]</label><mixed-citation publication-format="print"publication-type="periodical"><person-group person-group-type="author"><string-name><given-names>E.</given-names><surname>Tentzeris</surname></string-name>,<string-name><given-names>R.</given-names><surname>Robertson</surname></string-name>,<string-name><given-names>J.</given-names><surname>Harvey</surname></string-name>,and<string-name><given-names>L.</given-names><surname>Katehi</surname></string-name></person-group>,“<article-title>Mutual Coupling Effects for Radar Cross Section (RCS) of a Seriesfed Dipole Antenna Array,</article-title>”<source>International Journal of Antennas and Propagation</source>,ArticleID**<pub-id pub-id-type="arnumber">601532</pub-id>**,pp.<fpage>20</fpage>–<lpage>30</lpage>,<month>August</month><year>2012</year>.</mixed-citation></ref>	When a reference includes a DOI, please use<pub-id> to capture it. Do not use<object-id>.The IEEE Tag Library does show an example where<object-id>is used, but this will be corrected in the future.
		specific-use	Repno	Use specific-use="repno" only when referencing a report number.	<pub-id specific-use="repno">UCID-18834</pub-id>		
<institution>	Name of an institution or organization (for example, a university or corporation) that an author is affiliated with. This elemental so exists in the context of funding source, see <funding-source> below.	content-type	institution division department		See the example for "Report" or "Thesis" in the IEEE Coded XML Reference Samples.		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<uri>	This identifies a Uniform Resource Indicator (such as a URL) that may be used as a live link, typically naming a website, such as: <uri>http://www.ieee.org</uri>).				<uri>http://www.access.gpo.gov/nara/cfr/waisidx03/</uri>		If <uri> is the final element in </mixed-citation> **do not** include a single period before </mixed-citation>.
<std>	Identification information (typically the standard number, organization name, and title of the standard) for a cited standard, where standard is defined as a document produced by a recognized standards body such as NISO, IEEE, ISO, OASIS, ANSI, etc.				<std> <source>NERC Reliability Standard</source> <pub-id pub-id-type="std-designation">BAL-003-0.1b</pub-id>—Frequency Response and Bias</std>.		
<std-organization>	The name of the standards body that creates or that promulgates a standard, such as NISO, ISO, ANSI, or industry standards organizations.				<std-organization>ASTM</std-organization>		
<publisher-loc>	Place of publication, usually a city, such as New York or London.				<publisher-loc>New York</publisher-loc>		
<chapter-title>	Title of a cited book chapter.				<chapter-title>Electronic government and surveillance-oriented society</chapter-title>		
<citation-alternatives>	This element will hold alternative versions of a single citation, for example, the same citation in multiple languages.				Please see the Book Translated example in the IEEE Coded XML Reference Samples.		
<collab>	Group of contributors credited under a single name; includes an organization credited as a contributor.				<collab>Microsoft</collab>		

Element	Element Description	Attribute	Attribute values	Attribute Comments	Example	CODINGSAMPLE(in context)	IEEENOTES
<date-in-citation>	Non-publication date used within a bibliographic reference.				Accessed:<date-in-citation> <month>Nov.</month> <year>2010</year> </date-in-citation>		
<gov>	Container element for the identification information (typically the title and/or an identification number) for a cited governmental report or other government publication.				<gov>NASA Technical Memorandum 85033</gov>		

Section 4. Packaging

Two types of reference deliveries can be made.

- The first is **references only**. In this case the references should be packaged as described in "Reference Only Delivery" below.
- The second is as **part of a "Content Delivery XML"** submission. In this case the references should be packaged as described in "Content Delivery XML" below.

Reference Only Delivery

The requirements for packaging are:

- The references for a single article are contained in one XML file that conforms to "IEEEE JATS DTD version 1.51".
- All the references being delivered at one time are stored in a single zip file.

Content Delivery XML

The requirements for packaging references that are part of a "Content Delivery XML" submission are found in "Specifications for Delivering Content to IEEE Xplore, Version 4.13" in Sections 13.2 and 13.3.1. This document is available at http://www.ieee.org/web/publications/pubservices/services_resources.html