

Linkbase Role Registry 1.0

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Abstract

This document describes the XBRL International Link Role Registry and the XBRL International process by which it is updated. The Link Role Registry is an online listing of XLink role and arc role attribute values that appear in XBRL International acknowledged and approved taxonomies, along with structured information about their purpose, usage, and any intended impact on XBRL instance validation.

Status

This is an Public Working Draft whose circulation is unrestricted; it may change and is not appropriate to cite from other documents. Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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1 Goals

XBRL provides a set of standard roles and arc roles (hereinafter generally referred to as “roles”) that may appear in XBRL instances and linkbases. As XBRL applications emerge, it is leading to the proposal of new, non-standard roles having common and useful semantics. The goal of the XBRL Link Role Registry (hereinafter “LRR”) is to be a public, online data set that documents these non-standard roles and their usage. Additions and other changes to the LRR, like other XBRL International work products, will proceed through a series of steps whose goal is to maximise the utility and longevity of the new roles and the taxonomies that use them.

1.1 *Intended audience*

This document is intended for those familiar with XBRL linkbases.

1.2 *Document scope*

The scope of this document encompasses both the structure of the LRR and the processes by which additions, changes, and removals are made.

1.3 *Organisation of this document*

This document consists of the following sections in addition to this introduction:

- Data model of the online resource;
- Process model for changes to the LRR;
- Criteria for inclusion;
- Normative status of roles recorded in the online resource and its effect on software.

1.4 *Terminology and document conventions*

Terminology used in XBRL frequently overlaps with terminology from other fields.

Figure 1. Terminology

abstract element, bind, concept, concrete element, context, Discoverable Taxonomy Set (DTS), duplicate items, duplicate tuples, element, entity, equal, essence concept, fact, instance, item, least common ancestor, linkbase, period, taxonomy, tuple, unit, taxonomy schema, child, parent, sibling, grandparent, uncle, ancestor, XBRL instance, c-equal, p-equal, s-equal, u-equal, v-equal, x-equal, minimally conforming XBRL processor, fully conforming XBRL processor and any other terms not specifically defined elsewhere in this document but which are used and defined in the XBRL 2.1 specification.	As defined in XBRL
---	--------------------

MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, MAY, OPTIONAL	See http://www.ietf.org/rfc/rfc2119.txt for definitions of these and other terms. These include, in particular: <table border="0"> <tr> <td style="padding-right: 20px;">SHOULD</td> <td>Conforming documents and applications are encouraged to behave as described.</td> </tr> <tr> <td>MUST</td> <td>Conforming documents and consuming applications are required to behave as described; otherwise they are in error.</td> </tr> </table>	SHOULD	Conforming documents and applications are encouraged to behave as described.	MUST	Conforming documents and consuming applications are required to behave as described; otherwise they are in error.
SHOULD	Conforming documents and applications are encouraged to behave as described.				
MUST	Conforming documents and consuming applications are required to behave as described; otherwise they are in error.				
FRTA	Financial Reporting Taxonomy Architecture				
LRR	Link Role Registry				
XBRL	XBRL 2.1 recommendation [XBRL].				

The following highlighting is used for non-normative examples in this document:



Non-normative editorial comments to be removed from final recommendations are denoted as follows:

WH: This highlighting is used to indicate editorial comments about the current draft, prefixed by the editor's initials.

Italics are used for rhetorical emphasis only and do *not* convey any special normative meaning.

1.5 Language independence

All documentation supporting a role MUST be provided in English, and MAY be provided in additional languages. The official language of XBRL International is UK English.

2 Data Model

The data model of the LRR is merely a list of each role type and arc role type definitions augmented with additional indicators and information needed by developers and applications.

Figure 2. An LRR "role" entry

Field	Type	Explanation	Example
Role URI	URI	This is the role URI being defined.	http://www.xbrl.org/2003/role/restatedLabel
Role Type	{arcrole, role}	Defines whether arc role or role.	arcrole
Status	{PWD, CR, REC, NIE, IWD}	The XBRL International status of this role.	PWD PWD = Public Working Draft; CR = Candidate Recommendation; REC = Recommendation; NIE = Not in effect (for whatever reason such as being withdrawn, superseded, found to be invalid etc.); IWD = Internal Working Draft (only appears in internal working versions of the lrr).

Field	Type	Explanation	Example
Authoritative Href	URI	Location of the schema where the definition resides.	<code>http://www.xbrl.org/2004/role/restatedLabel.xsd</code> (absolute) or <code>role/restatedLabel-2004-11-07.xsd</code>
Version Date	Date	Effective date of this version of the role – all versions of the same role with earlier dates are effectively superseded	2004-08-27
Requirements	XHTML mixed	A statement of the requirements that gave rise to this role. Requirements in different languages are distinguished using the <code>xml:lang</code> attribute and an ISO 639 language code [ISO].	<code><p>The role <i>restatedLabel</i> is needed because of the frequent convention when formatting financial statements, for example:</p><table><tbody><tr><th></th></tr><tr><th>2003</th><tr><td>Expenses(restated)</td><td>2,000</td></tbody></table></code>
Definition	XHTML mixed	The meaning of the role described in the same way as if it were in the specification. Definitions in different languages are distinguished using the <code>xml:lang</code> attribute and an ISO 639 language code [ISO].	The label for a concept when one of the facts using that concept is presented to users as a restatement of a previous period result.
Elements	List of QNames	Identifies what elements may use this role.	'label', in namespace <code>'http://www.xbrl.org/2003/linkbase'</code>
Attributes	List of tokens	Lists any special attributes that are allowed or required.	'weight', for the summation-item arc in the calculation linkbase.
Cycles Allowed	{none, any, undirected}	For arc roles, the cycles that are allowed; otherwise empty.	
Abstract source	{optional, prohibited, required}	For arc roles, whether the "from" concept is abstract; otherwise empty.	prohibited for a calculation arc of any kind or essence-alias, optional in most other cases.
Abstract target	{optional, prohibited, required}	For arc roles, whether the "to" concept is abstract; otherwise empty.	prohibited for a calculation arc of any kind or essence-alias, optional in most other cases.
Version of XBRL	Token	The XBRL version for which this an extension. Note that a role could be "promoted" into a standard role in some future version of the specification.	2.1
Minimum Erratum Level	Nonnegative Integer	The XBRL erratum date and beyond for which this is an extension.	0

Field	Type	Explanation	Example
Instance Validation Impact	{optional, required}	Whether elements using this role impact XBRL instance validation. If so, then the role cannot appear in FRTA taxonomies [FRTA].	required (This value means that an instance could fail XBRL validation depending on whether the validator processes this role or not.)
Validation	XHTML mixed	A textual or pseudocode specification of the intended impact on XBRL validation of instances. If Instance Validation Impact is "optional" this is empty.	If an instance of the concept at the source of an arc with arcrole <code>requires-cEqual-element</code> occurs in an XBRL instance then an instance of the arc's target concept MUST also occur in the XBRL instance in a c-equal context. This requirement does not impose requirements on relative locations of the concept instances in tuples. Fully conformant XBRL processors MUST detect and signal instances in which this relationship is violated.
Conformance Suite	URI	A URI locating a <code>testcases</code> element containing testcase elements with relative URIs to files illustrating valid and invalid usage.	http://www.this.com/xbrl/LRR/test/requires-cEqual-element.xml (The URI need not have <code>www.xbrl.org</code> as its host part.)

3 Update Process

The process by which an entry is added to the LRR is depicted in Figure 3 below:

1. The submitter creates a working draft containing all of the information needed (as specified in Figure 2) and requests the Link Role Registry Approval Group (LRRAG) constituted of members from both the DWG and SWG to enter it into the LRR.
2. The DWG approve the requirements and then submit the request to the SWG for technical evaluation.
3. The Specification WG deliberates it in the form of an internal working draft.
4. LRRAG MAY suggest alternatives to the proposal and request to its editors that it be resubmitted as they see fit. In the event that there is more than one submission made for similar requirements the LRRAG may request the submitters to agree a common solution between themselves and resubmit a single joint request. If this is not acceptable to the submitters the ISC will be requested to arbitrate.
5. The Specification WG calls for two implementations if they do not already exist.
6. The Specification WG recommends to the Domain WG that it be published as a public working draft.
7. The Domain WG recommends to the ISC that it be published as a public working draft.
8. The Specification WG recommends to the ISC that it be published as a public working draft.
9. The ISC approves it as a public working draft.

10. The LRRAG enters it into the LRR with its status set to PWD. A notice of its addition is made to XBRL-INT and XBRL-public and feedback requested.
11. A minimum of forty-five days of public review follow.
12. The Specification WG verifies that the conformance suite tests are valid and that there are two separate implementations that pass them,
13. The Specification WG makes any necessary amendments pursuant to the PWD feedback and, unless it determines that a new PWD is necessary, the SWG and the DWG recommend to the ISC that it be published (as amended if appropriate) as a candidate recommendation.
14. The ISC approves the candidate recommendation. The ISC may choose to delegate this authority as it sees fit.
15. Two weeks pass during which only minor editorial changes MAY be made. Such changes MUST be approved by the Specification WG and the Domain WG. Substantive changes require a new CR (return to step 13). The SWG and the DWG recommend to the ISC that it be published as a recommendation
16. ISC approves the recommendation.

The process by which an entry may be *updated* in the LRR is analogous. If errata are discovered in any roles then a new version of the role will be entered into the registry following the same process as that used for errata corrections to the specification itself. The effective date of the errata corrected version will be later than that of the original and will thus supersede it.

One of the ways that a new entry may be added is when a new version of XBRL is issued. Individual roles might no longer be “extensions” in that newer version. Hence, only those extensions that are carried over as extensions to the new version will need a new entry that is identical other than the “XBRL Version” datum.

4 Hosting on the XBRL.org website

The latest version of the LRR will be placed at a fixed location on the [xbrl.org](http://www.xbrl.org) website and will be the file that is displayed when a user types <http://www.xbrl.org/lrr/>. The actual file name will contain the date on which it became effective (e.g. <http://www.xbrl.org/lrr/lrr-2004-08-26.xml>). This is analogous to the archival mechanism for specification schemas.

5 Criteria

A role MUST meet these criteria to be approved by the LRRAG:

- Semantically distinct from existing standard and LRR roles;
- Of sufficient generality to be of likely use in multiple taxonomies;
- Sufficiently well documented so as to encourage correct usage.

In the case of a role that impacts validation, the criteria are much like that of extensions to the specification:

- Demonstration of two interoperable implementations via a conformance suite.

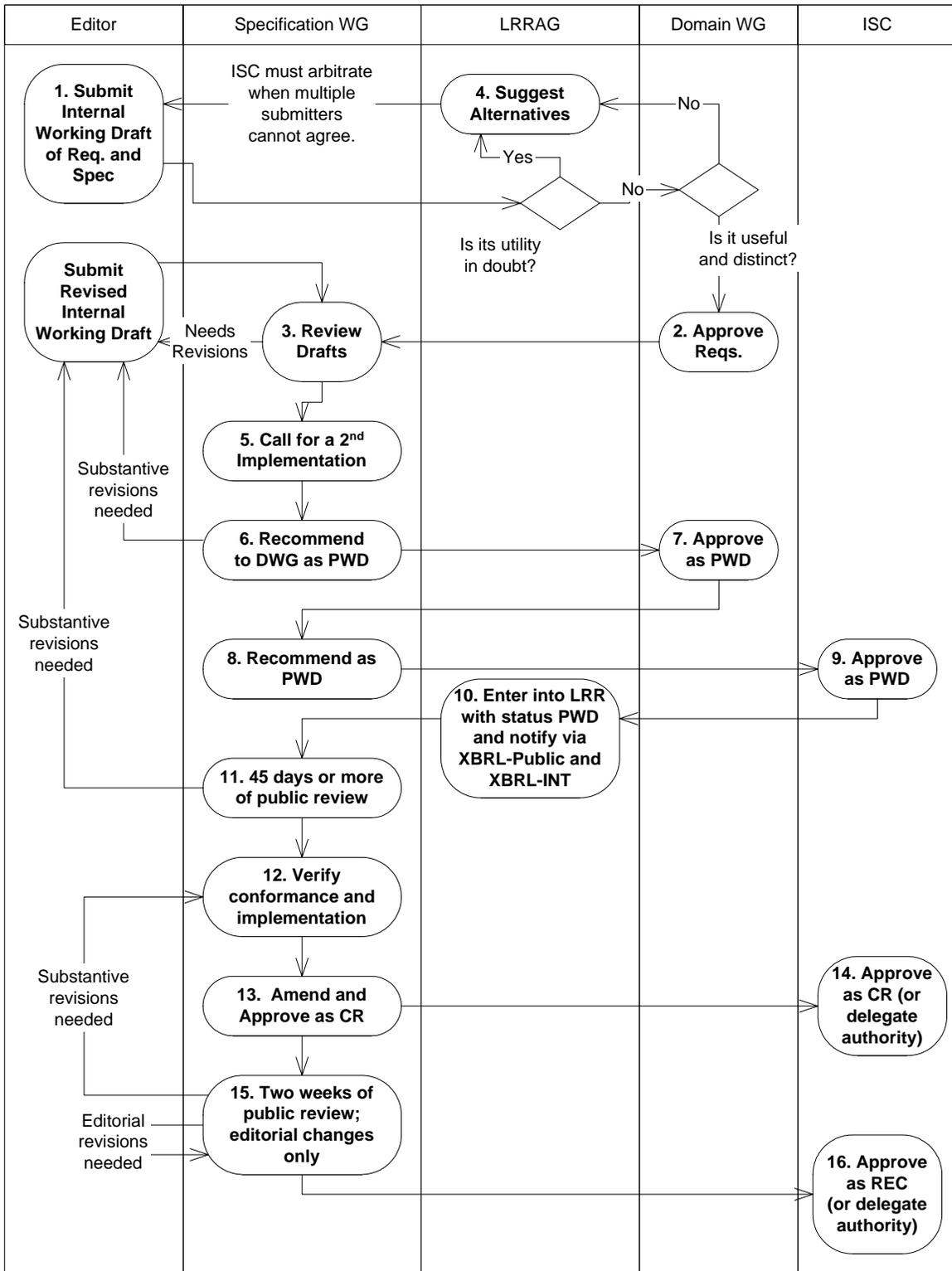
6 Normative Status of Roles in the LRR and Software

Once a role has the status of REC in the LRR it shall have the same normative status as any role documented in the version of the specification that it is extending.

Software vendors are NOT obliged to implement support for any REC role in order to continue to claim that they support the base specification.

It is expected that software vendors will make claims regarding which additional roles they support. They MUST point to successful exercising of the relevant conformance suite tests in order to substantiate such claims.

Figure 3. Approval process for LRR entries



A Schema

The following is the XML schema corresponding to the data model of section 2 above. It is normative. Non-normative versions (which should be identical to these except for appropriate comments indicating their non-normative status) are also provided as separate files for convenience of users of the specification. Following the schema maintenance policy of XBRL International, it is the intent (but is not guaranteed) that the location of non-normative versions of these schemas on the web will be as follows:

- 1) While any schema is the most current RECOMMENDED version and until it is superseded by any additional errata corrections a non-normative version will reside on the web in the directory:

<http://www.xbrl.org/2004/>

- 2) A non-normative version of each schema as corrected by this update to the RECOMMENDATION will be archived in perpetuity on the web in the directory:

<http://www.xbrl.org/2004/2004-11-14/>

A.1 Irr-2004-11-07.xsd (normative)

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- (c) XBRL International. See www.xbrl.org/legal -->
<xs:schema xmlns:lrr="http://www.xbrl.org/2004/lrr" xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.xbrl.org/2004/lrr" elementFormDefault="qualified"
attributeFormDefault="unqualified">
  <xs:simpleType name="useType">
    <xs:annotation>
      <xs:documentation>Three possible values of use</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:NMTOKEN">
      <xs:enumeration value="optional"/>
      <xs:enumeration value="required"/>
      <xs:enumeration value="prohibited"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="cycleType">
    <xs:annotation>
      <xs:documentation>Three possible values of cycle</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:NMTOKEN">
      <xs:enumeration value="any"/>
      <xs:enumeration value="undirected"/>
      <xs:enumeration value="none"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="DocumentationType" mixed="true">
    <xs:annotation>
      <xs:documentation>Definition of a type to contain mixed text and XHTML
markup</xs:documentation>
    </xs:annotation>
    <xs:complexContent mixed="true">
      <xs:restriction base="xs:anyType">
        <xs:sequence minOccurs="0" maxOccurs="unbounded">
          <!-- xs:any namespace="http://www.w3.org/1999/xhtml" processContents="lax" / -->
          <xs:any namespace="##any" processContents="lax"/>
        </xs:sequence>
        <xs:anyAttribute namespace="http://www.w3.org/XML/1998/namespace"
processContents="lax"/>
      </xs:restriction>
    </xs:complexContent>
  </xs:complexType>
```

```

<xs:element name="lrr">
  <xs:annotation>
    <xs:documentation>Comment describing your root element</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="roles">
        <xs:complexType>
          <xs:sequence minOccurs="0" maxOccurs="unbounded">
            <xs:element name="role">
              <xs:complexType>
                <xs:sequence>
                  <xs:element ref="lrr:roleURI"/>
                  <xs:element ref="lrr:status"/>
                  <xs:element ref="lrr:versionDate"/>
                  <xs:element ref="lrr:authoritativeHref"/>
                  <xs:element ref="lrr:requirement" maxOccurs="unbounded"/>
                  <xs:element ref="lrr:definition" maxOccurs="unbounded"/>
                  <xs:element ref="lrr:elements"/>
                  <xs:element ref="lrr:attributes"/>
                  <xs:element ref="lrr:versionOfXBRL"/>
                  <xs:element ref="lrr:minimumErratumLevel"/>
                  <xs:element ref="lrr:instanceValidationImpact"/>
                  <xs:element ref="lrr:validation" maxOccurs="unbounded"/>
                  <xs:element ref="lrr:conformanceSuiteURI"/>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="arcroles">
        <xs:complexType>
          <xs:sequence minOccurs="0" maxOccurs="unbounded">
            <xs:element name="arcrole">
              <xs:complexType>
                <xs:sequence>
                  <xs:element ref="lrr:roleURI"/>
                  <xs:element ref="lrr:status"/>
                  <xs:element ref="lrr:versionDate"/>
                  <xs:element ref="lrr:authoritativeHref"/>
                  <xs:element ref="lrr:requirement" maxOccurs="unbounded"/>
                  <xs:element ref="lrr:definition" maxOccurs="unbounded"/>
                  <xs:element ref="lrr:elements"/>
                  <xs:element ref="lrr:attributes"/>
                  <xs:element name="cyclesAllowed" type="lrr:cycleType" default="any">
                    <xs:annotation>
                      <xs:documentation>For arc roles, the cycles that are allowed; otherwise
empty.</xs:documentation>
                    </xs:annotation>
                  </xs:element>
                  <xs:element name="sourceAbstract" type="lrr:useType">
                    <xs:annotation>
                      <xs:documentation>For arc roles, whether the "from" concept is
abstract; otherwise empty.</xs:documentation>
                    </xs:annotation>
                  </xs:element>
                  <xs:element name="targetAbstract" type="lrr:useType">
                    <xs:annotation>
                      <xs:documentation>For arc roles, whether the "to" concept is abstract;
otherwise empty. </xs:documentation>
                    </xs:annotation>
                  </xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        <xs:element ref="lrr:versionOfXBRL"/>
        <xs:element ref="lrr:minimumErratumLevel"/>
        <xs:element ref="lrr:instanceValidationImpact"/>
        <xs:element ref="lrr:validation"/>
        <xs:element ref="lrr:conformanceSuiteURI"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
<xs:attribute name="version" type="xs:token" use="optional" fixed="1.0"/>
</xs:complexType>
</xs:element>
<xs:element name="roleURI">
    <xs:annotation>
        <xs:documentation>This is the role URI being defined.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:anyURI">
            <xs:whiteSpace value="collapse"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="status">
    <xs:annotation>
        <xs:documentation>The XBRL International status of this role. PWD, CR, REC, IWD or
NIE.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
        <xs:restriction base="xs:token">
            <xs:enumeration value="PWD"/>
            <xs:enumeration value="CR"/>
            <xs:enumeration value="REC"/>
            <xs:enumeration value="NIE"/>
            <xs:enumeration value="IWD"/>
        </xs:restriction>
    </xs:simpleType>
</xs:element>
<xs:element name="versionDate" type="xs:date">
    <xs:annotation>
        <xs:documentation>Effective date of this version of the role - all versions of the same
role with earlier dates are effectively superseded</xs:documentation>
    </xs:annotation>
</xs:element>
<xs:element name="elements">
    <xs:annotation>
        <xs:documentation>Identifies what elements may use this role.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
        <xs:sequence maxOccurs="unbounded">
            <xs:element name="element">
                <xs:complexType>
                    <xs:simpleContent>
                        <xs:extension base="xs:NCName">
                            <xs:attribute name="namespaceURI" type="xs:anyURI" use="optional"
default="http://www.xbrl.org/2003/linkbase"/>
                        </xs:extension>
                    </xs:simpleContent>
                </xs:complexType>
            </xs:element>
        </xs:sequence>

```

```

</xs:complexType>
</xs:element>
<xs:element name="attributes">
  <xs:annotation>
    <xs:documentation>Lists any special attributes that are allowed or
required.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence minOccurs="0" maxOccurs="unbounded">
      <xs:element name="attribute">
        <xs:complexType>
          <xs:simpleContent>
            <xs:extension base="xs:QName">
              <xs:attribute name="use" type="lrr:useType"/>
            </xs:extension>
          </xs:simpleContent>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="versionOfXBRL" type="xs:token">
  <xs:annotation>
    <xs:documentation>The XBRL version for which this an extension. This is an integer and
refers to the erratum number, not the date a set of errata were published. Note that a role
could be "promoted" into a standard role in some future version of the
specification.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="minimumErratumLevel" type="xs:nonNegativeInteger">
  <xs:annotation>
    <xs:documentation>The XBRL erratum date and beyond for which this is an extension.
</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="instanceValidationImpact">
  <xs:annotation>
    <xs:documentation>Whether elements using this role impact XBRL instance validation. If
so, then the role cannot appear in FRTA taxonomies [FRTA].</xs:documentation>
  </xs:annotation>
  <xs:simpleType>
    <xs:restriction base="xs:NMTOKEN">
      <xs:enumeration value="optional"/>
      <xs:enumeration value="required"/>
    </xs:restriction>
  </xs:simpleType>
</xs:element>
<xs:element name="validation" type="lrr:DocumentationType">
  <xs:annotation>
    <xs:documentation>A textual or pseudocode specification of the intended impact on XBRL
validation of instances. If Instance Validation Impact is "optional" this is
empty.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="conformanceSuiteURI" type="xs:anyURI">
  <xs:annotation>
    <xs:documentation>A URI locating a testcases element containing testcase elements with
relative URIs to files illustrating valid and invalid usage.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="requirement" type="lrr:DocumentationType">
  <xs:annotation>

```

```

<xs:documentation>A statement of the requirements that gave rise to this role.
Requirements in different languages are distinguished using the xml:lang
attribute.</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="definition" type="lrr:DocumentationType">
  <xs:annotation>
    <xs:documentation>The meaning of the role described in the same way as if it were in the
Specification. Definitions in different languages are distinguished using the xml:lang
attribute.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="authoritativeHref" type="xs:anyURI">
  <xs:annotation>
    <xs:documentation>The URI where the schema defition of the role or arc role is
found.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:schema>

```

B Sample lrr document (non-normative)

The following is an example of an lrr (as defined by the schema in appendix A above). It contains only a single entry each to illustrate the definition of a role and an arcrole.

```

<?xml version="1.0" encoding="UTF-8"?>
<lrr:lrr xmlns:lrr="http://www.xbrl.org/2004/lrr" version="1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.xbrl.org/2004/lrr http://www.xbrl.org/2004/lrr-2004-11-07.xsd">
  <lrr:roles>
    <lrr:role>
      <lrr:roleURI>http://www.xbrl.org/2004/role/restatedLabel</lrr:roleURI>
      <lrr:status>IWD</lrr:status>
      <lrr:versionDate>2004-09-15</lrr:versionDate>
      <lrr:authoritativeHref>role/restatedLabel-2004-11-07.xsd</lrr:authoritativeHref>
      <lrr:requirement xml:lang="en">At times an entity may restate certain account balances for
financial reporting purposes. This may only occur according to specific reporting rules. For
example, an entity may restate an equity account balance, say "Reserves", due to an accounting
change or fundamental error under International Financial Reporting Standards (IFRS). A
separate label role is provided for such reporting of restated balances, should they occur.
The restated balance within a financial statement might provide a label such as "Reserves,
Restated Balance" to which this label role would be assigned to identify this type of label.
Taxonomy creators would use this label role and provide a label which could be used on concepts
that could be restated. Typically, these would be used on equity accounts.
      </lrr:requirement>
      <lrr:definition xml:lang="en">The label for a concept when presenting values that have
been restated from their value as originally reported.</lrr:definition>
      <lrr:elements>
        <lrr:element namespaceURI="http://www.xbrl.org/2003/linkbase">label</lrr:element>
      </lrr:elements>
      <lrr:attributes/>
      <lrr:versionOfXBRL>2.1</lrr:versionOfXBRL>
      <lrr:minimumErratumLevel>0</lrr:minimumErratumLevel>
      <lrr:instanceValidationImpact>optional</lrr:instanceValidationImpact>
      <lrr:validation/>
      <lrr:conformanceSuiteURI>http://www.xbrl.org/2004/lrr/restated.htm</lrr:conformanceSuiteURI>
    </lrr:role>
  </lrr:roles>
  <lrr:arcroles>
    <lrr:arcrole>
      <lrr:roleURI>http://www.xbrl.org/2004/arcrole/fact-content</lrr:roleURI>
      <lrr:status>IWD</lrr:status>
      <lrr:versionDate>2004-09-15</lrr:versionDate>
    </lrr:arcrole>
  </lrr:arcroles>

```

```

<lr:authoritativeHref>arcrole/fact-content-2004-11-07.xsd</lr:authoritativeHref>
<lr:requirement xml:lang="en">
  <p>Sometimes a financial report or other content to be represented in an XBRL instance
has information in a fact that would lose its meaning or substance if it were represented
without presentational formatting (as for example, a table).</p>
  <p>If furthermore that content is not (or cannot) be further decomposed into more
granular facts using concepts from the DTS of that instance, it is appropriate to use XHTML as
the content of the fact.</p>
  <p>Since XBRL only allows XHTML to appear in "footnote" elements, the <i>fact-
content</i> arc serves as a way of connecting a fact (with either nillable="true" or empty
content) to one or more sequences of mixed HTML content.</p>
  </lr:requirement>   <lr:elements>
    <lr:element namespaceURI="http://www.xbrl.org/2003/linkbase"
>footnoteLink</lr:element>
  </lr:elements>
  <lr:attributes/>
  <lr:cyclesAllowed>undirected</lr:cyclesAllowed>
  <lr:sourceAbstract>prohibited</lr:sourceAbstract>
  <lr:targetAbstract>prohibited</lr:targetAbstract>
  <lr:versionOfXBRL>2.1</lr:versionOfXBRL>
  <lr:minimumErratumLevel>0</lr:minimumErratumLevel>
  <lr:instanceValidationImpact>optional</lr:instanceValidationImpact>
  <lr:validation xml:lang="en">The fact-content arc role SHOULD NOT connect a fact with
non-empty content to a footnote with content. Therefore, concepts that are not nillable, or
cannot otherwise have empty content, cannot use the content of a footnote resource as a
substitute for the content of the fact.</lr:validation>
    <lr:conformanceSuiteURI>conf/arcrole/301-fact-content.xml</lr:conformanceSuiteURI>
  </lr:arcrole>
</lr:arcroles>
</lr:lr>

```

C References (non-normative)

- [CONF] Walter Hamscher, editor.
XBRL 2.1 Conformance Suite 1.0, Public Working Draft of 2004-12-31
<http://www.xbrl.org/Specifications/>
- [FRTA] Walter Hamscher (editor).
Financial Reporting Taxonomies Architecture 1.0 Candidate Recommendation 4 dated
2004-11-14.
<http://www.xbrl.org/TechnicalGuidance/>
- [ISO] International Standards Organisation.
ISO 4217 Currency codes, ISO 639 Language codes, ISO 3166 Country codes, ISO
8601 international standard numeric date and time representations.
<http://www.iso.ch/>
- [RFC2119] Scott Bradner
Key words for use in RFCs to Indicate Requirement Levels, March 1997
<http://www.ietf.org/rfc/rfc2119.txt>
- [XBRL] Phillip Engel, Walter Hamscher, Geoff Shuetrim, David vun Kannon, Hugh Wallis.
Extensible Business Reporting Language (XBRL) 2.1 Recommendation with corrected
errata to 2004-11-14
<http://www.xbrl.org/SpecRecommendations/>

G Intellectual Property Status (non-normative)

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H Acknowledgements (non-normative)

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I Document History (non-normative)

Date	Editor	Summary
2004-03-01	Hamscher	First draft of document prepared.
2004-03-02	Wallis	Various updates, changes and comments added, including the definition of the normative status of roles in the LRR.
2004-03-16	Hamscher	Incorporated comments; added the Language, Minimum Erratum Level, Validation Impact and Conformance Suite fields while removing Ignorable and Instances. Added reference to Conformance Suite Public Working Draft.
2004-07-22	Hamscher	Added fields indicating whether Abstract elements may be at the head and tail of an arc.
2004-07-25	Hamscher	Edited the text to avoid remarks about grammar.
2004-08-27	Wallis	Updated with input from the DWG F2F meeting in London
2004-09-03	Hamscher	Updated figure and made formatting changes.
2004-09-11	Hamscher	Updated figure and process to defer the requirement for two implementations until the CR phase, and to allow for multiple CRs.
2004-11-06	Hamscher	Reformatted to conform to current pagination conventions. Edited table. Created a Schema and example <code>lrr</code> database. Removed the <code>language</code> element and embedded with the <code>xml:lang</code> attribute.

2004-11-07	Hamscher	Added href, so that the role definition has an authoritative location; added conformance tests to the sample files.
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J Errata corrections incorporated in this document

This appendix contains a list of the errata that have been incorporated into this document. This represents all those errata corrections that have been approved by the XBRL International Domain Working Group (DWG) up to and including 2004-11-14. Hyperlinks to relevant e-mail threads may only be followed by those who have access to the relevant mailing lists. Access to internal XBRL mailing lists is restricted to members of XBRL International Inc.

Erratum number	Brief description and link(s) to relevant discussion thread(s)	Affected section(s)	Date Correction Approved by the DWG
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There are no errata at this time for this Public Working Draft.

K Approval process (non-normative)

This section will be removed from the final recommendation. SWG = Specification Working Group; ISC = International Steering Committee.

	Stage (* - Current)	Party responsible for decision	Next step	Revisions needed	Target date for stage completion
1	Internal WD	SWG	Recommend for Stage 2	Stay in Stage 1	2004-11-08
2	Internal WD pending publication	ISC	Approve for Stage 3	Return to Stage 1	2004-11-14
3*	Public WD under 45 day review	WD Editors	Minor revisions – to Stage 4	Major revisions, Restart Stage 1	2004-12-31
4	Draft Recommendation	SWG	Recommend for Stage 5	Restart Stage 3	
5	Recommendation pending publication	ISC	Approve for Stage 6	Restart Stage 4	
6	Recommendation	Done			