3 IETP namespaces

3.1 General

XML namespaces are designed to resolve naming conflicts in XML instances that contain elements and attributes from different DTD. This is accomplished by associating namespaces, identified by URI references, with names of elements and attributes.

These names appear as qualified names, ie they contain a single colon which separates the name into a namespace prefix and a local part. The prefix, which is mapped to a URI reference, denotes a namespace. The combination of the globally managed URI namespace and the instance's own namespace allow the names of elements and attributes to be universally unique.

There is no default XML namespace. If elements or attributes are not specifically declared to belong to an XML namespace, then they are not in any namespace.

3.2 Declaration of namespaces

An XML namespace is declared by using an attribute named either `xmlns` or having `xmlns:` as a prefix followed by an XML name specifying the namespace in question. The first form of the attribute `xmlns` declares that the specified namespace is the default XML namespace, whereas the second form defines the namespace prefix to be used on elements and attributes in the XML instance.

The value of the attribute `xmlns` is the namespace name in the form of a URI reference.

An XML namespace can be declared on any element in an XML document. The namespace is in scope for that element (and its attributes) and all its descendants (and their attributes) unless it is overridden or undeclared. Namespace declaration attributes can also be provided as default attributes with fixed values in an XML DTD.

To override a namespace prefix, simply another XML namespace has to be declared with the same prefix. To override the current default XML namespace, another XML namespace has to be declared as the default. A namespace prefix cannot be "undeclared". It remains in scope until the end of the element on which it was declared unless it is overridden. To "undeclare" the current default XML namespace, a default namespace with an empty (zero-length) URI has to be declared.

Note

XML namespaces do not apply to entity names, notation names, or processing instruction targets. In consequence, these names must not contain colons for conformity reasons.
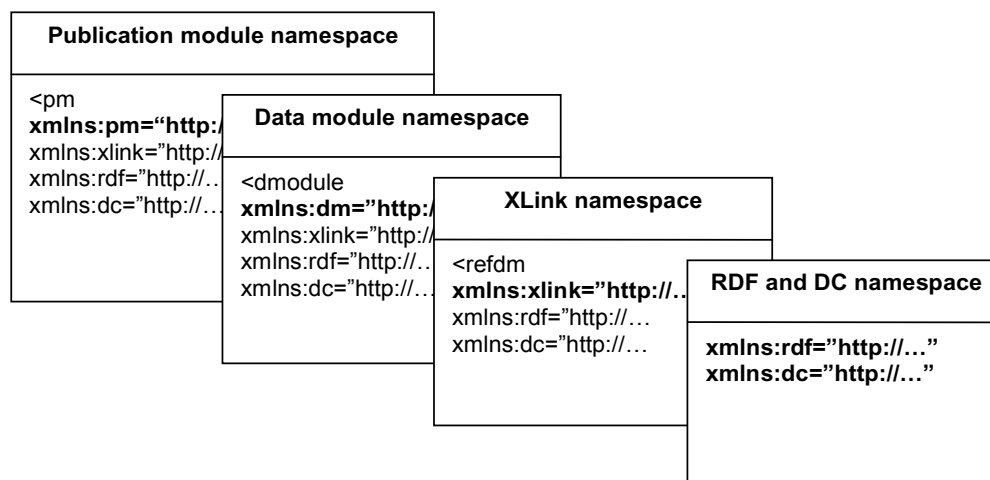
XML namespaces identified to be useful for IETP include:

− optional Resource Description Framework (RDF) (namespace prefix: `rdf`) and Dublin Core (DC) (namespace prefix: `dc`) namespaces for data module and publication module metadata
− XLink (namespace prefix: `xlink`) language namespace for XLink elements and attributes
− data module (namespace prefix: `dm`) and publication module (namespace prefix: `pm`) namespaces for corresponding elements and attributes

Note

The data module namespace is the default namespace for IETP.

Fig 2 gives an overview of these IETP XML namespaces and shows their relationships.

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Fig 2 IETP XML namespaces

The URI references used as the namespace names in an IETP environment are summarized in Table 1:

Table 1 IETP XML namespace definitions

Namespace prefix	URI reference
pm	http://www.s1000d.org/pm
dm	http://www.s1000d.org/dm
xlink	http:/www.w3.org/1999/xlink
rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#
dc	http://purl.org/dc/elements/1.1/

Applications wishing to make use of XML namespace-aware processing for instances conforming to this specification, must ensure that the namespace names are resolved to the above URI references.

4   XML building
4.1   Linking elements
S1000D linking elements, as discussed in this chapter, are restricted to outbound links, ie links that point from within a data module to or into remote resources or sub-resources. For consistency, all links within a data module, which can be expressed by SGML/XML ID/IDREF mechanisms, should also be transformed to XLink linking elements.