IPTC XML Schema Style Book – WORK DOCUMENT rev 3

Document history				[Document URN: urn:iptc:workdoc:sta:0503:3]
Revision	Issue Date	Pages	Author (revised by)	Remark
1	2004-11-12	3	Michael Steidl	Initial work document, based on postings to the Yahoo group.
2	2004-12-10	3	Michael Steidl	Update reflecting the discussion - changes to: 1.1, 3.3 - added: 3.5, 5.2
3	2005-02-01	3	Michael Steidl	Dokument ID changed sta:0408:2 → sta:0503:3 Wrap up of group discussion for submission to the IPTC Spring Meeting 2005

The "XML Schema Style" Working Group of the Standards Committee aims to define a common style for the development and maintenance of IPTC governed W3C XML Schemas. The work comprised style regarding documentation, versioning and the notation, further guidelines for IPTC specific XML element types and about building specifications from modules.

Comment on this WORK DOCUMENT:
- This document is intended to reflect the ongoing discussion of XML Schema style issues at the IPTC. After having achieved agreement at the level of this ad-hoc working groups as represented by the members of the "iptc-xmlschema-style" Yahoo group this document will be forwarded as draft to the IPTC Standards Committee seeking final endorsement.
- Outline/structure:
  As this document is intended as reference for discussions all items are numbered – even currently "empty" items. This allows referring to these items in comments.
- Typographical conventions:
  Comments of the editor of this document relating to the discussion of specific styles are in orange.
  Latest changes in blue.

1   Documentation in the specification file

1.1 Documentation notation

Documentation will be added by using xs:annotation and xs:documentation elements of the XML Schema specification.
External programs will be employed to collate a standalone reference document and to create a browseable linked (web) documents. These programs have to be able to process these standard annotation elements for XML Schemas. Requirements to add special mark up for these programs will be considered later.

Annotation/documentation should be added:
- to the XML Schema as a whole, see also section 4
- to each specified data type or group
- to each specified element
- to each specified attribute
- to all "modules" or "sections"
- to all "import" or "include" statements

2   Versioning of specification particles

Versioning information is added to each XML element specified in an XML Schema. This versioning information comprises:

- Number of the version of the related IPTC standard this element was introduced first
- Number of the version of the related IPTC standard this element was changed (introduction has to be considered as a change)
- Number of the version of the related IPTC standard this element was deprecated.
- a comment on the reason for the change or deprecation
- an optional "by-line"

This set of information takes this XML format:

```
<iptcxss:versioninfo firstversion="1" changedversion="2"
deprecatedversion="0" by="Johan Lindgren" comment="Changed the type"/>
```

IPTC XML Schema Support Namespace URI:

"iptcxss" = urn:iptc:std:iptcxmlschemasupport:1:xmlns

OPEN: consider modules that can be included by several IPTC standards: break down version numbering to modules? Refers to IPTC standardisation process: approval of modules?

3   Notation style of XML elements and attributes

"To CamelBack or not to camelback." (This time not Shakespeare)

3.1 XML namespace prefixes

Style rule 1: should be short, not exceeding 12 characters
Style rule 2: all lowercase, no camel back.
Examples, nsml, iptc4xmpcore

3.2 XML element names

Style rule 1: may be built from concatenated words/terms
Style rule 2: lower camel case, uppercase for the first characters of words inside a string.
Examples: status, myElement, firstCreatedDateTime

3.3 XML attribute names and attribute groups

Style rule 1: may be built from concatenated words/terms
~~Style rule 2: upper camel case, uppercase for the first characters of words~~ (r2)
Style rule 2: all lower case
Examples: myattribute, formalname

3.4 Common styles

Subsections of names:
No punctuation characters like "-" or "."
The only helper for improving readability of element names is using lower camel case, as described in 3.2

3.5 Namespace prefixes for XML Schema elements

a)   IPTC uses namespace prefix for XML Schema elements
b)   IPTC uses the "xs" namespace prefix for XML Schema elements

4   IPTC XML Schema file

Beyond the declarations required to produce valid XML Schema notation these comments (see 1.1 for details) have to be included:
- copyright notice for the IPTC: "© {YEAR} IPTC, all rights reserved"
- current contact information for the IPTC
- name and version of the standard, or module
- a document URN for this XML Schema file
- license notice
- trademark notice, depending on standard
- a notice regarding the requirement implementers of this standard have to comply with this specification

5   Specific XML element types

This section provides guidelines for adopting certain element types for IPTC XML Schemas.

5.1 Dates and Times

The standard approach of the IPTC is to use the standard XML Schema types provided for that purpose: dateTime, date, time and duration.
Don't expect validation of values at the XML Schema level for W3 XML Schema version 1.0, but expect validation conforming to "Value spaces" in XML Schema 1.1.

All date and time value elements which should not conform to the standard XML Schema type for a certain reason have to be defined as a "Common Component" or "Special Component" by the IPTC standardisation track. This addresses issues with the format of dates and times chosen for NewsML 1.

5.2 ~~Dates (only)~~

~~The date of a day without a time section.~~
~~(Format issues are the same as in 5.1)~~ (Rev 3)

6   Modules

This section provides guidelines on modules for IPTC XML Schemas and how to build a full IPTC standard's spec XML Schema from modules.

6.1 Concepts

Modules are portions of XML Schema declarations that can be included into a comprehensive standard specification by the XML Schema statements "import" and "include".

Modules can be defined
- to specify XML elements not only pertaining to a single IPTC standards
- to specify value constraints to certain XML elements and thus can be considered as externally updateable controlled vocabulary to an element.

Details to be defined later.
The current work on a strawman XML Schema for the IPTC News Architecture will shed light on this issue.

7   Controlled vocabularies

This section provides guidelines how to express controlled vocabularies in XML Schema.

To be defined later.

=== END of document ===