WORLD INTELLECTUAL PROPERTY ORGANIZATION

SPECIAL UNION FOR THE INTERNATIONAL CLASSIFICATIONS OF GOODS AND SERVICES FOR THE PURPOSE OF THE REGISTRATION OF MARKS

(NICE UNION)

NCL Master Files Specification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
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# General Information

Each publication of the NCL classification is completely defined by

1. a set of master files which define the concerned version of NCL
2. additional files which are the result of master files processing.

These files are primarily used to update NCL Information Systems regardless of their infrastructure. All information needed to describe a new revision of the NCL classification in authentic languages is referenced in these master files. To ease downloading, the XML and related files (e.g. illustrations) are compressed in .zip format.

The purpose of this document is to specify the format and content of NCL Master Files.

## Release descriptors

* Edition: Integer number representing the edition of the classification.
* Version: Four digit year representing a version released in the current edition
* Date In Force: Date the edition-version goes into force
* Generation Date: Date the master file was generated

Edition and Version are NCL classification terms with specific meanings. Together they may be referred to as edition-version (e.g. 9-2010).

The “date in force” is the YYYYMMDD that a specific version goes into force (e.g. 20100101).

Generation date is an internal reference; master files may be updated several times for a given edition-version (e.g. 20100622).

## File Naming Conventions

The NCL master files include XML, CSV and image files (.jpg, .gif, .png). Image files must be zipped together.

XML and zip files should be named as:

ncl-<date\_in\_force>-<language\_code>-<name>-<generation\_date>.<ext>

* date\_in\_force is a ISO 8601 basic formatted date (YYYYMMDD)
* language\_code is a two letter language code following ISO 639-1 standard: en or fr for the authentic languages
* name is a short description of the file using underscores for spaces
* generation\_date is a ISO 8601 basic formatted date (YYYYMMDD)
* ext is the filename extension (either xml, csv or zip, depending on the file)

Not all filenames require a language code. See the specific file naming conventions in the inventory below.

## Element Naming Conventions

Element names are in CamelCase, with attribute names in lowerCamelCase, as recommended by WIPO ST.66.

# Overview of Files

## Composition

The NCL master files are composed of:

* One Language-independent Classification Top Structure XML file
* One Language-independent Hierarchy Groups Structure XML file
* One language-independent illustrations index XML file
* One language-independent zip file including illustration files
* Five sets of language-specific XML files (one for each authentic language)
* Two language-dependent fixed texts XML files (one for each authentic language)

These are released following the naming convention discussed in section 1.2. Each XML file is defined by a separate textual specification document and illustrated by XML Schema Definitions (XSD).

The text of this specification takes precedence over this XSD, either in case of contradiction or information not indicated in the XSD.

An XML Master File must never be empty.

Therefore, the root element must also never be empty even if its content model, as declared in associated XSD, allows for optional elements only. Such optional elements must also never be empty unless explicitly declared empty .i.e. where information is not available, the corresponding optional element is absent.

Elements that are explicitly declared empty in XSD must also specify at least one required attribute that takes no default value.

Root elements must also specify the following attributes:

* xmlns:xsi="http:**//**www.w3.org/2001/XMLSchema-instance"
* xmlns="http:**//**www.wipo.int/classifications/ncl"

Therefore, NCL namespace is the default one and there is no need to use a prefix to qualify any element from that namespace in NCL XML Master Files.

## Relation between Master Files and Master File Transformations

Classification texts  
- Headings  
- Explanatory notes  
- Indications

Fixed texts

General Remarks

**Classification   
top structure   
modifications**

**Classification texts modifications**

Classification Information files

Hierarchy  
Groups  
structure

Hierarchy Groups texts

Illustrations  
index

*One file  
per language*

*One language  
independent file*

*Updated per edition version*

*Interim updates*

**Hierarchy  
Groups structure modifications**

Unique ID / IDREF relation

File  
name

***Legend*:**

***Hierarchy Groups***

Hierarchy Groups   
Information files

**Hierarchy Groups texts  
modifications**

***Master File transformations***

Classification top structure  
groups

## Mandatory/Optional Master Files and Master File Transformations

To illustrate the number of combinations, file sets are considered below.

Mandatory file set must be complete i.e. all its files must be present.

On the contrary, incomplete file sets can be considered for loading optional files as long as files inter-dependencies indicated in previous chapter are respected.

The following table shows which file set is optional or mandatory: the mandatory set A may be completed by any optional files of file set B or C or both.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Files set** |  | **Master Files (MF) and *Transformations (MFT)*** | **Mandatory** | **Optional** |
| A |  | Classification top structure MF | X |  |
| Classification texts MF |
| Fixed texts MF |
| General Remarks MF |
| B | B1 | Classification Information files MF |  | X |
| B2 | Illustrations index MF |
| B3 | *Classification top structure modifications MFT* |
| *Classification texts modifications MFT* |
| C | C1 | Hierarchy Groups structure MF |  | X |
| Hierarchy Groups texts MF |
| C2 | Hierarchy Groups Information files MF |
| C3 | *Hierarchy Groups structure modifications MFT* |
| *Hierarchy Groups texts modifications MFT* |

# Language-independent files

## NCL Classification top structure

### Filename

* ncl-YYYYMMDD-classification\_top\_structure-YYYYMMDD.xml

### Brief description of XML file contents

* Structured tree elements: classes and children goods or services
* Class numbers and IDs, basic numbers and IDs of goods and services

### Specification

* NCL\_classification\_top\_structure\_specification\_V3-21doc
* NCL\_classification\_top\_structure\_V3-21.xsd

## NCL Hierarchy Groups structure

### Filename

* ncl-YYYYMMDD-hierarchy\_groups\_structure-YYYYMMDD.xml

### Brief description of XML file contents

* Structured tree elements: hierarchy groups, related parents, goods or services
* Group numbers and IDs and references to goods and services IDs in each hierarchy group

### Specification

* NCL\_hierarchy\_groups\_structure\_specification\_V3-21.doc
* NCL\_hierarchy\_groups\_structure\_V3-21.xsd

## NCL Illustration Files

### Zip Filename

* ncl-YYYYMMDD-illustrations-YYYYMMDD.zip

### Zip Contents

* Illustrations files in various formats.
* ncl-YYYYMMDD-illustrations\_index-YYYYMMDD.xml

### Brief description of XML file contents

Flat list of illustration files used in the concerned NCL edition-version.

### Specification

* NCL\_illustrations\_index\_specification\_V3-21.doc
* NCL\_illustrations\_index\_V3-21.xsd

# Language-dependent files

## NCL General Remarks

### Filenames

* ncl-YYYYMMDD-en-general\_remarks-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-general\_remarks-YYYYMMDD.xml

### Brief description of XML file contents

* Introductory comments for the general remarks and for goods and services

Itemized remarks for classifying goods or services

### Specification

* NCL\_general\_remarks\_specification\_V3-21.doc
* NCL\_general\_remarks\_V3-21.xsd

## NCL Classification texts

### Filenames

* ncl-YYYYMMDD-en-classification\_texts-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-classification\_texts-YYYYMMDD.xml

### Brief description of XML file contents

* Single paragraph elements for each class heading
* Explanatory note headings
* Included or excluded goods or services in explanatory notes
* A master indication in the given language with sort expressions
* Optional synonym indications in the given language

### Specification

* NCL\_classification\_texts\_V3-21.doc
* NCL\_classification\_texts\_V3-21.xsd

## NCL Hierarchy Groups Texts

### Filenames

* ncl-YYYYMMDD-en-hierarchy\_groups\_texts-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-hierarchy\_groups\_texts-YYYYMMDD.xml

### Brief description of XML file contents

* A flat list of all the hierarchy groups
* Titles of each group in the given language

### Specification

* NCL\_hierarchy\_groups\_texts\_specification\_V3-21.doc
* NCL\_hierarchy\_groups\_texts\_V3-21.xsd

## NCL Classification Information Files

### Filenames

* ncl-YYYYMMDD-en-classification\_information\_files-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-classification\_information\_files-YYYYMMDD.xml

### Brief description of XML file contents

* Structured paragraph class analyses with formatting and links to classes
* Structured paragraph definitions of individual goods and services
* References to illustrations of specific goods and services
* Related goods or services in the same or other classes

### Specification

* NCL\_classification\_information\_files\_specification\_V3-21.doc
* NCL\_classification\_information\_files\_V3-21.xsd

## NCL Hierarchy Groups Information Files

### Filenames

* ncl-YYYYMMDD-en-hierarchy\_groups\_information\_files-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-hierarchy\_groups\_information\_files-YYYYMMDD.xml

### Brief description of XML file contents

* Structured paragraph hierarchy group analyses with formatting and links

### Specification

* NCL\_hierarchy\_groups\_information\_files\_specification\_V3-21.doc
* NCL\_hierarchy\_groups\_information\_files\_V3-21.xsd

## NCL fixed texts Files

### Filenames

* ncl-YYYYMMDD-en-fixed\_texts-YYYYMMDD.xml
* ncl-YYYYMMDD-fr-fixed\_texts-YYYYMMDD.xml

### Specification

* NCL\_fixed\_texts\_specification\_V3-21.doc
* NCL\_fixed\_texts\_V3-21.xsd

# Common elements and Attributes

Several of the master files share types of elements that have a specific structure or set of attributes. These common elements are described in this section.

## Version and Language Attributes

The root element on all files has 4 mandatory attributes: “dateInForce”, “dateOfGeneration”, “edition” and “version”. “dateInForce” and “dateOfGeneration” take date values in ISO 8601 extended format (i.e. YYYY-MM-DD). The "dateInForce" attribute is the date the given edition-version goes into force, while the "dateOfGeneration" is the date the XML file was generated. Both attributes must match their respective dates in the filename. The “edition” attribute is a number (e.g. 10). The “version” attribute is a year (e.g. 2015).

All files that are in a specific target language (i.e. all XML files except illustrations index, taxonomy and taxonomy modifications) also require a "language" attribute; a two letter language code (en or fr in the authentic version of the master files). This attribute must match the language code used in the filename.

## Classification Links

Some of the master files can contain pointers to classes, specific goods or services, General Remarks, or hierarchy groups. These are represented respectively by a <ClassLink>, <GoodOrServiceLink>, <GeneralRemarkLink> and <HierarchyGroupLink> element, which has one attribute "idRef". The "idRef" attribute is required for <ClassLink>, <GoodOrServiceLink>, <GeneralRemarkLink> and <HierarchyGroupLink> and its value is the id of the target Class, Good, Service, General Remark or Hierarchy Group.

The <ClassLink>, <GoodOrServiceLink>, and <HierarchyGroupLink> elements have a mandatory attribute "targetKind". This attribute is used to define the kind of data which has to be used. Possible values for this attribute are:

* "text"
* "number"
* "numberAndText"

Other links elements can take optional content for the text of the link.

## External Links

It is also possible to link to external resources using the <ExternalLink> element. This element takes a single attribute "linkURI", which should be a valid URI for the linked resource. Normally, this will be a web URL, but other resources can also be linked. The content of the <ExternalLink> element is the text of the link.

## Ordered Lists

Certain structures inside the classification are recorded as ordered lists of text objects. These are recorded as an <OrderedList> element, which contains an optional <Introduction> element and a series of <ListItem> elements. Each <ListItem> can contain text and <ClassLink>, <GoodOrServiceLink>, <GeneralRemarkLink> and <HierarchyGroupLink> interspersed. The Introduction element is just text.

## Paragraph Structure

Certain elements, mostly in the information files are described as having a paragraph structure. This means the element can contain semi-structured freeform text elements. Each paragraph is marked up with <P> elements.

The <P> element has one required attribute "id" (see paragraph 3.7 below).

Inside individual paragraph elements, freeform mixed content text can be used. The mixed content can contain <ClassLink>, <GoodOrServiceLink>, <GeneralRemarkLink>, <HierarchyGroupLink> and <ExternalLink> described above. It can also contain an <Emphasis> element to mark certain freeform text as important.

## Illustration References

Illustrations can be referenced in both the definition and related examples part of the goods and services definition in the information files. In both cases, the element used is named <IllustrationRef>. It has two required attributes "id" (see paragraph 5.7 below), and "idRef" which value is the id of the related illustration as defined in NCL Illustrations Master File specification. This element content is the legend describing the image in question in the language of the current file, and must be supplied in all cases so that the illustrations can be described via accessible technologies.

## Unique identifiers and references

Instances of elements for which a required attribute "id" is specified are uniquely identified by the value of this attribute.

This attribute take an xs:ID type of value (a character string made of numerals, letters, hyphens and/or colons which must start with a letter or a hyphen). A given “id” value must be unique among all identified elements in all XML Master Files in all NCL versions.

Uniquely identified element instance can be then referenced by another element in the same NCL version for which an attribute of type xs:IDREF (referenced instance is in the same master file) or xs:NCName (referenced instance is in another master file) is specified.

End of document