

LEOS

Document templates and elements configuration



Leos version: 3.0

Modified on: 08.04.2020

Version of the manual: 1.0

1. Document templates and elements configuration

Requirements in terms of which templates can be used for the document creation or which elements can be used inside a concrete document differs from one organization to another. LEOS offers some elements to allow organizations to define and configure all these things.

2. Prerequisites

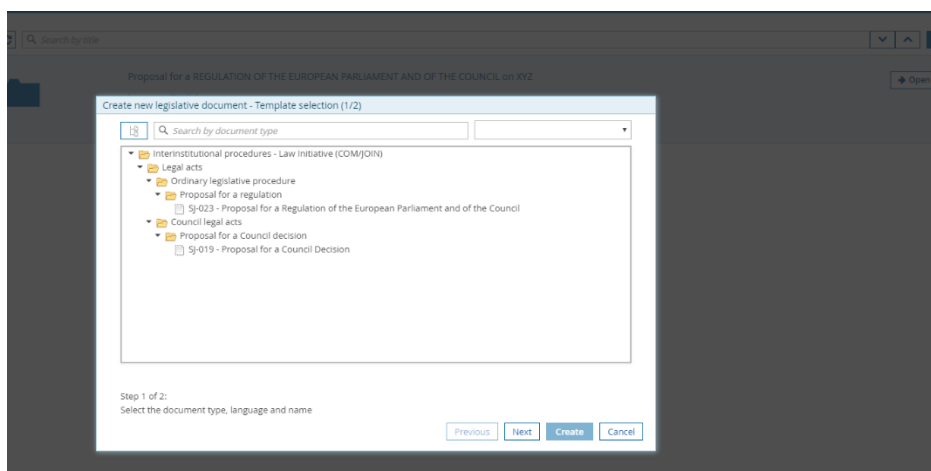
- An already running and configured CMIS installation and LEOS and User Repository applications.
- Local installation of [Apache Chemistry - CMIS Workbench](#) to access CMIS.
- LEOS source code to check all files involved.
-

3. Document templates

Document templates are in format Akoma Ntoso files stored in the CMIS repository and they are used for the creation of a proposal and all documents that belongs to it.

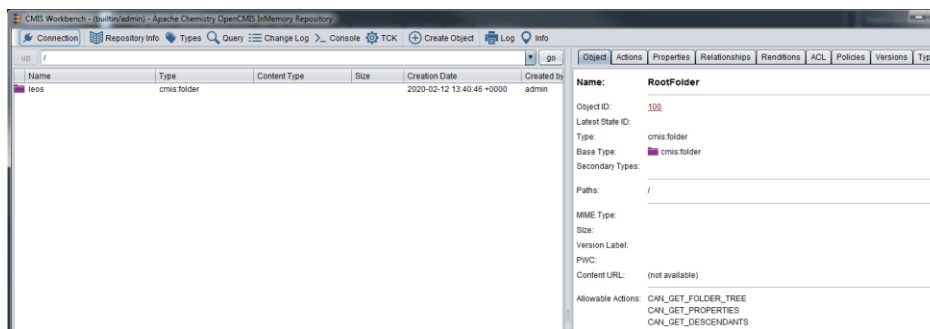
In LEOS application user can select the proposal to be created clicking in "Create proposal" button.

Following image shows that "Proposal for a regulation" and "Proposal for a Council decision" can be created. Each of them has associated a set of templates (documents).

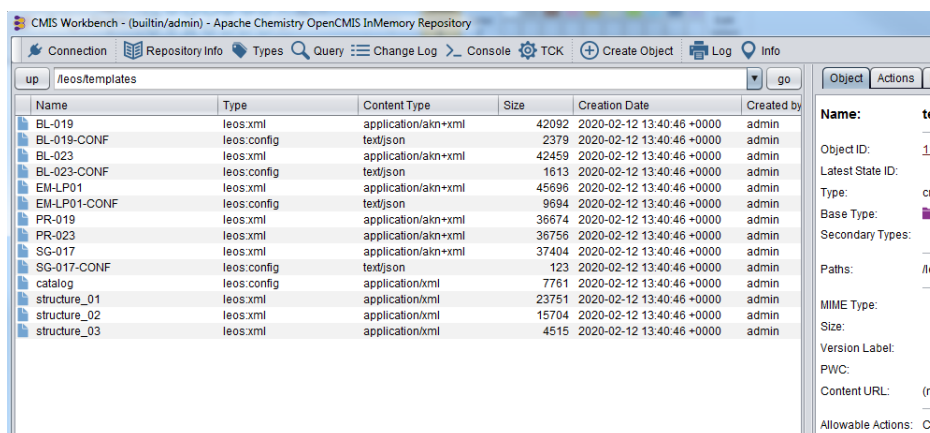


All the information needed to compose the template selection screen and the documents that belongs to each of the proposal are store in the CMIS XML file "catalog.xml".

1. Use the CMIS Workbench tool and connect to the repository. **"leos"** folder will appear.



2. Inside **"leos"** folder can be found **"templates"** folder. This folder contains all templates used for the document creation plus the catalog file. This file defines the structure of tree showed in the template selection screen and all document templates used for the creation of the proposal.



catalog.xml

(to be found in the following folder of the installation package:
LEOS-Pilot_X.Y.Z.zip\docs\Document-templates-and-configuration)

```

1  <?xml version="1.0" encoding="UTF-8" ?>
2  <catalog lang="EN">
3    <item type="CATEGORY" id="c1" enabled="true" key="LAW_INITIATIVE">
4      <names>
5        <name lang="EN">Interinstitutional procedures - Law Initiative (COM/JOIN)</name>
6        <name lang="FR">Procédure interinstitutionnelles - Droit d'initiative (COM/JOIN)</name>
7      </names>
8      <descriptions>
9        <description lang="EN">Interinstitutional procedures - Law Initiative (COM/JOIN)</description>
10       <description lang="FR">Procédure interinstitutionnelles - Droit d'initiative (COM/JOIN)</descrip
11     </descriptions>
12   <item type="CATEGORY" id="c1.1" enabled="true" key="LEGISLATIVE_ACTS">
13     <names>
14       <name lang="EN">Legal acts</name>
15       <name lang="FR">Actes législatifs</name>
16     </names>
17     <descriptions>
18       <description lang="EN">Legal acts</description>
19       <description lang="FR">Actes législatifs</description>
20     </descriptions>
21   <item type="CATEGORY" id="c1.1.1" enabled="true" key="ORDINARY_LEGISLATIVE_PROC">
22     <names>
23       <name lang="EN">Ordinary legislative procedure</name>
24       <name lang="FR">Procédure législative ordinaire</name>
25     </names>
26     <descriptions>
27       <description lang="EN">Ordinary legislative procedure</description>
28       <description lang="FR">Procédure législative ordinaire</description>
29     </descriptions>
30   <item type="CATEGORY" id="c1.1.1.1" enabled="true" key="REGULATION OF THE EUROPEAN PARLIAMEN
31     <names>
32       <name lang="EN">Proposal for a regulation</name>
33       <name lang="FR">Proposition de règlement</name>
34     </names>
35     <descriptions>
36       <description lang="EN">Regulation to be adopted by the European Parliament and the Co
37       <description lang="FR">Règlement à adopter conjointement par le Parlement Européen et
38     </descriptions>
39   <item type="TEMPLATE" id="PR-023;EM-LP01;BL-023" enabled="true" key="SJ-023">

```

For example proposal "SJ-023 - Proposal for a Regulation of the European Parliament and of the Council" is composed of documents "PR-023;EM-LP01;BL-023" and can contain annexes "SG-017".

```
<item type="TEMPLATE" id="PR-023;EM-LP01;BL-023" enabled="true" key="SJ-023">
  <names>
    <name lang="EN">SJ-023 - Proposal for a Regulation of the European Parliament and of the Council</name>
    <name lang="FR">SJ-023 - Proposition de règlement du Parlement européen et du Conseil</name>
  </names>
  <descriptions>
    <description lang="EN">Template 23 of the LS: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL</description>
    <description lang="FR">Template 23 du SJ: Proposition de RÈGLEMENT DU PARLEMENT EUROPÉEN ET DU CONSEIL</description>
  </descriptions>
  <languages>
    <language lang="EN">English</language>
    <!--<language lang="FR">Français</language>-->
  </languages>
  <item type="TEMPLATE" id="SG-017" enabled="true" key="SG-017">
    <names>
      <name lang="EN">SG-017 - Annex to a proposal / to another proposal</name>
    </names>
    <descriptions>
      <description lang="EN">Annex to a proposal / to another proposal (COM/JOIN)</description>
    </descriptions>
  </item>
  <item type="TEMPLATE" id="CP-036" enabled="false" key="CP-036">
    <names>
      <name lang="EN">CP-036 - Annex to a proposal / to another proposal</name>
    </names>
    <descriptions>
      <description lang="EN">Annex to a proposal / to another proposal (COM/JOIN)</description>
    </descriptions>
  </item>
</item>
```

These files PR-023, EMP-LP01, BL-023 and SG-017 are document templates in akn format and each of them can have associated a JSON configuration file. In these JSON files some configuration like guidances or the structure file to be used to define all the elements that the document can contain can be added.

Example for BL-023 / BL-023-CONF.



BL-023.xml



BL-023-CONF.json

(to be found in the following folder of the installation package:
LEOS-Pilot_X.Y.Z.zip\docs\Document-templates-and-configuration)

BL-023.xml

[Collapse source](#)

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <?xml-stylesheet type="text/css" href="renditions/html/css/bill.css"?>
3 <akomaNtoso xmlns="http://docs.oasis-open.org/legaldocml/ns/akn/3.0" xmlns:leos="urn:eu:europa:ec:leos" xmlns
4   <bill name="REG">
5     <meta>
6       <identification source="~COM">
7         <FRBRWork>
8           <FRBRthis value=""/>
9           <FRBRuri value=""/>
10          <FRBRdate date="9999-01-01" name=""/>
11          <FRBRauthor href=""/>
12          <FRBRcountry value="EU"/>
13          <FRBRprescriptive value="true"/>
14        </FRBRWork>
15        <FRBRExpression>
16          <FRBRthis value=""/>
17          <FRBRuri value=""/>
18          <FRBRdate date="9999-01-01" name=""/>
19          <FRBRauthor href=""/>
20          <FRBRlanguage language="eng"/>
21        </FRBRExpression>
22        <FRBRManifestation>
23          <FRBRthis value=""/>
24          <FRBRuri value=""/>
25          <FRBRdate date="9999-01-01" name=""/>
26          <FRBRauthor href=""/>
27        </FRBRManifestation>
28      </identification>

```

BL-023-CONF.xml

[Collapse source](#)

```

1 {
2   "guidance": [
3     {
4       "targets": [
5         {
6           "destinationId": "cit_4",
7           "position": "AFTER-WRAPPER"
8         }
9       ],
10      "content": "<guidance id=\"guidance-cit-4\" class=\"guidance-green-block\"><span id=\"cit-4-guidance\">[
11    ],
12    {
13      "targets": [
14        {
15          "destinationId": "cit_5",
16          "position": "AFTER-WRAPPER"
17        }
18      ],
19      "content": "<guidance id=\"guidance-cit-5\" class=\"guidance-green-block\"><span id=\"cit-5-guidance\">[
20    ],
21    {
22      "targets": [
23        {
24          "destinationId": "clause_1",
25          "position": "AFTER-WRAPPER"

```

3.1. Adding a new proposal

If some organization needed to add a new proposal and new set document templates for it please follow next steps.

1. Use the CMIS Workbench tool and connect to the repository in order to download the catalog XML file from the templates folder.
2. Edit catalog XML file and add a new "TEMPLATE" item type structure like below.

```
<item type="TEMPLATE" id="PR-023;EM-LP01;BL-023" enabled="true" key="SJ-023">
  <names>
    <name lang="EN">SJ-023 - Proposal for a Regulation of the European Parliament and of the Council</name>
    <name lang="FR">SJ-023 - Proposition de règlement du Parlement européen et du Conseil</name>
  </names>
  <descriptions>
    <description lang="EN">Template 23 of the LS: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL</description>
    <description lang="FR">Template 23 du SJ: Proposition de RÈGLEMENT DU PARLEMENT EUROPÉEN ET DU CONSEIL</description>
  </descriptions>
  <languages>
    <language lang="EN">English</language>
    <!--<language lang="FR">Français</language>-->
  </languages>
  <item type="TEMPLATE" id="SG-017" enabled="true" key="SG-017">
    <names>
      <name lang="EN">SG-017 - Annex to a proposal / to another proposal</name>
    </names>
    <descriptions>
      <description lang="EN">Annex to a proposal / to another proposal (COM/JOIN)</description>
    </descriptions>
  </item>
  <item type="TEMPLATE" id="CP-036" enabled="false" key="CP-036">
    <names>
      <name lang="EN">CP-036 - Annex to a proposal / to another proposal</name>
    </names>
    <descriptions>
      <description lang="EN">Annex to a proposal / to another proposal (COM/JOIN)</description>
    </descriptions>
  </item>
</item>
```

- The "id" attribute of the item contains a list of the templates to be used when proposal is created.
 - Proposal document template PR-023.
 - Memorandum document template EM-LP01.
Memorandum document template can be removed and then no memorandum will be created.
 - Legal Text document template BL-023.
- There are some tags related with the text that appears in the template selection screen like names, descriptions and depending of the language selected some text or other will be shown.

Create new legislative document - Template selection (1/2)

Search by document type

English

- Interinstitutional procedures - Law Initiative (COM/JOIN)
 - Legal acts
 - Ordinary legislative procedure
 - Proposal for a regulation
 - SJ-023 - Proposal for a Regulation of the European Parliament and of the Council**
 - Council legal acts
 - Proposal for a Council decision
 - SJ-019 - Proposal for a Council Decision

Template 23 of the LS: Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

Step 1 of 2:
Select the document type, language and name

Previous Next Create Cancel

- For creating annexes templates SG-017 and CP-036 can be used. **Note that template CP-036 is disabled.**

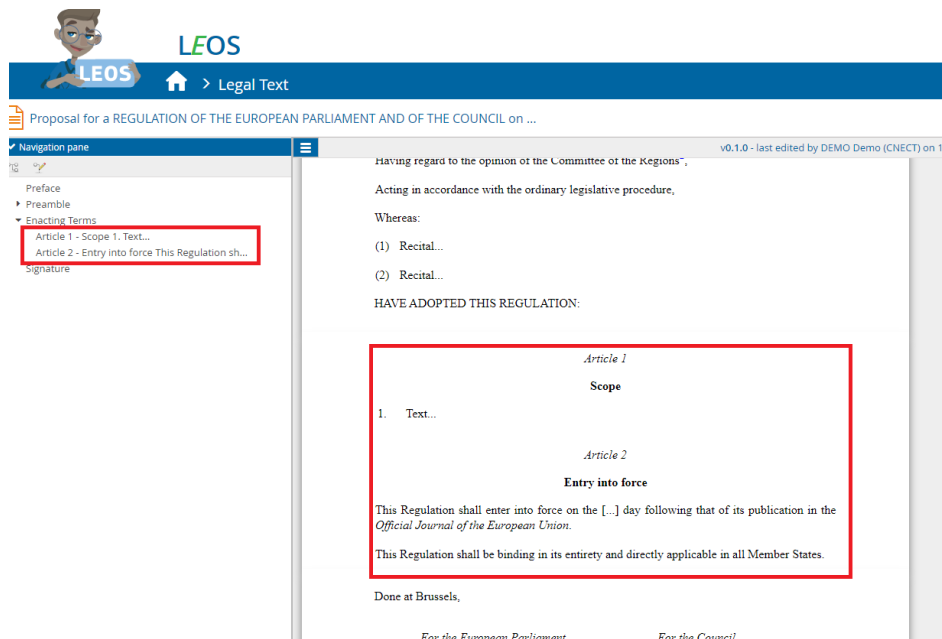
3. Upload again the catalog XML file to CMIS using the CMIS Workbench tool.

4. LEOS application and CMIS repository have to be restarted to refresh the catalog.

4. Elements configuration

As described in the last section the document templates are used to create a proposal and all documents that belongs to it. All these documents are akn format based and the express a hierarchy of elements. These elements can be edited, deleted and added by the user through the document view or through the table of content.

In the following image article element is shown. Element appears in the table of content and in the document view.



4.1. Structure definition schema

All elements and the configuration that can be used to build the structure configuration files are defined through a XML schema inside domain module in the LEOS source code.



structure_1.xsd

(to be found in the following folder of the installation package:
LEOS-Pilot_X.Y.Z.zip\docs\Document-templates-and-configuration)

```
structure_1.xsd ▼ Collapse source
1  <?xml version="1.0" encoding="UTF-8"?>
2  <xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
3    xmlns:xs="http://www.w3.org/2001/XMLSchema"
4    targetNamespace="http://eu.europa.ec.digit.leos.pilot/schema/"
5    xmlns="http://eu.europa.ec.digit.leos.pilot/schema/"
6
7    <xs:element name="structure">
8      <xs:complexType>
9        <xs:sequence>
10         <xs:element name="name" type="xs:string"/>
11         <xs:element name="description" type="xs:string"/>
12         <xs:element name="version" type="xs:string"/>
13         <xs:element name="tocItems" type="tocItems"/>
14         <xs:element name="numberingConfigs" type="numberingConfigs"/>
15         <xs:element name="tocRules" type="tocRules" minOccurs="0"/>
16       </xs:sequence>
17     </xs:complexType>
18   </xs:element>
19
20   <xs:complexType name="tocItems">
21     <xs:sequence minOccurs="0" maxOccurs="unbounded">
22       <xs:element name="tocItem" type="tocItem"/>
23     </xs:sequence>
24   </xs:complexType>
25
```

This schema is used to validate the structure files that configure all elements that can be used inside a document and that it is linked to a document template through template JSON configuration files. Some comments about this schema has to be done:

- If a new element has to be added to a document then this new element has to be added to `aknTag` simpletype.
- If a new numbering type has to be added then it has to be added as a new `numberingType`.

4.2. Structure XML configuration file

Definition of all elements and their configuration are stored inside structure XML format based file. This file mainly contains:

- List of elements that can be used.
- List of different elements numbering configuration.
- Definition of which elements can contain a particular element.



structure_01.xml

(to be found in the following folder of the installation package:
LEOS-Pilot_X.Y.Z.zip\docs\Document-templates-and-configuration)

```
structure_01.xml ▼ Collapse source

1  <?xml version="1.0" encoding="UTF-8"?>
2  <structure xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3          xmlns="http://eu.europa.ec.digit.leos.pilot/schema/"
4          xsi:schemaLocation="http://eu.europa.ec.digit.leos.pilot/schema/ structure.xsd">
5
6      <name>structure_01.xml</name>
7      <description>Structure used for EC Bill</description>
8      <version>1</version>
9
10     <tocItems>
11         <tocItem>
12             <aknTag>preface</aknTag>
13             <root>true</root>
14             <draggable>true</draggable>
15             <childrenAllowed>false</childrenAllowed>
16             <display>true</display>
17             <itemNumber>none</itemNumber>
18             <itemHeading>none</itemHeading>
19             <itemDescription>true</itemDescription>
20             <numberEditable>false</numberEditable>
21             <contentDisplayed>false</contentDisplayed>
22             <deletable>false</deletable>
23             <numWithType>false</numWithType>
24             <expandedByDefault>true</expandedByDefault>
25             <sameParentAsChild>false</sameParentAsChild>
26             <numberingType>NONE</numberingType>
```

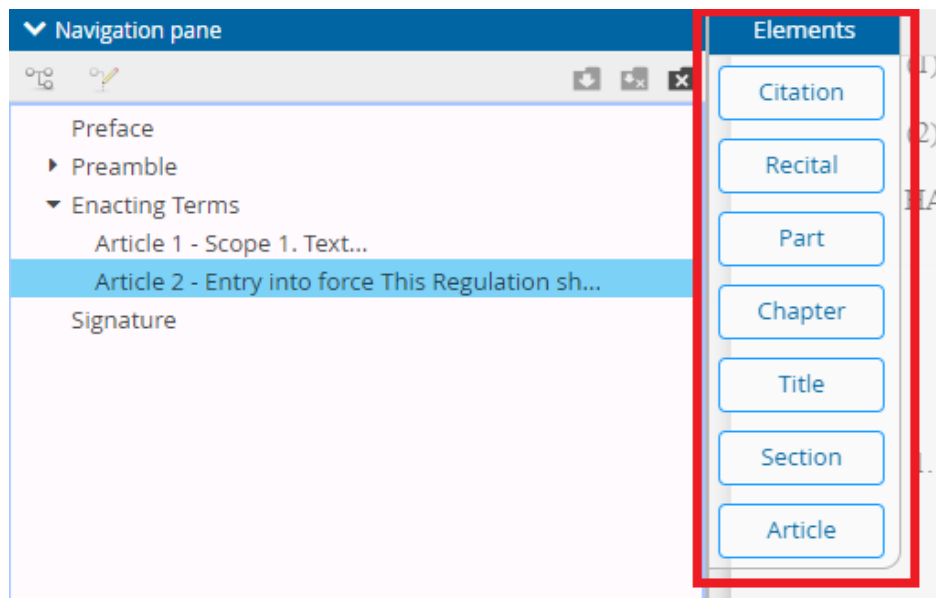
4.2.1. List of elements - TOC items list

Allows to define and configure a set of elements that can be used in the document. For each element there's a set of properties to define it's behavior.

```
<tocItem>
  <aknTag>citation</aknTag>
  <root>>false</root>
  <draggable>true</draggable>
  <childrenAllowed>>false</childrenAllowed>
  <display>true</display>
  <itemNumber>none</itemNumber>
  <itemHeading>none</itemHeading>
  <itemDescription>false</itemDescription>
  <numberEditable>false</numberEditable>
  <contentDisplayed>true</contentDisplayed>
  <deletable>true</deletable>
  <numWithType>false</numWithType>
  <expandedByDefault>true</expandedByDefault>
  <sameParentAsChild>false</sameParentAsChild>
  <numberingType>NONE</numberingType>
  <profile>inlineAknCitation</profile>
  <editable>true</editable>
  <template><CDATA[<citation refersTo="--legalBasis" xml:id="$id" leos:editable="true"><p>${default.content.text}</p></citation>]]></template>
</tocItem>
```

And these properties are:

- **aknTag:** Element name. It should be added or should exists in the structure schema too (structure_1.xsd inside domain module).
- **root:** If element it is a root element or not. In LEOS code there's some actions that can not be done over root elements.
- **draggable:** If element is draggable it will appears in the elements pane. User can drag and drop element in the table of content tree.



- **childrenAllowed:** Element can contain other elements.
- **display:** Element is showed in the table of content tree.
- **itemNumber:** Element contains <num> tag.

- **itemHeading:** Element contains <heading> tag.

The following images show the item number and heading.

HAVE ADOPTED THIS REGULATION:

	Article 1
	Scope
1.	Text...
	Article 2
	Entry into force
This Regulation shall enter into force on the [...] day following that of its publication in the	

- **itemDescription:** Element text (ex. Article) is shown in the table of content tree.
- **numberEditable:** Number is editable by the user.
- **contentDisplayed:** Content inside the element is showed in the TOC.
- **deletable:** Element can be deleted.
- **numWithType:** Inside the num tag the element name (ex. Article) is with the number.
- **expandedByDefault:** Element is showed expanded in the TOC.
- **sameParentAsChild:** Element can contain same elements.
- **numberingType:** Numbering type used for numbering the element.
- **editable:** Element is editable.
- **template:** XML structure used when element is created in the document. By default current template is used if no template is configured.

```

<element_akntag xml:id="${id}">
  <num>${num}</num> -----> If item is itemNumber this tag is included
  <heading>${heading}</heading> -----> If item is itemHeading this tag is included
  <content> -----> Default content text took from message.properties file:
    <p>${default.content.text}</p> toc.item.template.default.content.text=Text...
  </content>
</element_akntag>

```

For the example proposed (citation element) following template is used.

```
<citation refersTo="~legalBasis" xml:id="{id}" leos:editable="true">
  <p>${default.content.text}</p>
</citation>
```

4.2.2. *List of numbering configurations*

Through the numberingConfigs list a set of different numbering configuration can be defined. A concrete number configuration is applied to an element using the <numberingType> tag inside the tocItem.

For example ARABIC numbering type.

```
<numberingConfig>
  <type>ARABIC</type>
  <prefix></prefix>
  <suffix></suffix>
  <sequence>1</sequence>
  <description>1, 2, etc</description>
  <regex>\d+$|##</regex>
  <msgValidationError>arabic.num.config.validation.error.message</msgValidationError>
</numberingConfig>
```

- **type:** Numbering configuration name. It should be added or should exists in the structure schema too (structure_1.xsd inside domain module).
- **prefix:** If numbering should include some prefix.
- **suffix:** If numbering should include some suffix.
- **sequence:** Numbering sequence (1 by 1 in this example).
- **description:** Just a description.
- **regex:** Regular expression used to validate number introduced by the user.
- **msgValidationError:** Error validation message showed defined inside application message.properties file.

4.2.3. *List of table of content rules*

Allows to define which kind of elements can contain a particular element. For example body element:

```
<entry>
  <tocItem>body</tocItem>
  <list>
    <tocItem>part</tocItem>
    <tocItem>title</tocItem>
    <tocItem>chapter</tocItem>
    <tocItem>section</tocItem>
    <tocItem>article</tocItem>
  </list>
</entry>
```

Body element can contain part, title, chapter, section and article elements.