xmLegesEditor – Functional Specifications

xmLegesEditor is a visual XML editor developed by ITTIG-CNR (Institute of Legal Information Theory and Techniques of the Italian national Research Council, Florence (Italy)). It represents a complete environment to support legislative drafting activities.

The architecture of the xmLegesEditor is organized into two software layers:

1. xmLegesCore, which provides support to the management of generic XML documents based on both XMLSchema or DTD;
2. xmLegesNIR, which provides specific functionalities able to implement the URN and XML Italian legislative standards defined within the NormeInrete (NIR) project.

See **xmLegesEditor – Architecture** for details on the architecture.

xmLegesEditor is therefore able to provide support to three main activities related to the legislative workflow

- Legacy contents management
- Composition and organization of new texts
- Management of the Parliamentary iter of new bills

Legacy content management

This set of functionalities is able to transform legacy contents into NIR documents. They are:

- Automatic document conversion into XML from: doc, plain text, html, pdf formats;
- Automatic detection of specific metadata (document URNs, publication date, etc.);
- Integration and correction of automatic tagging (sections merging/splitting – section rank promoting/reducing, tables tagging);
- Automatic recognition of legal references and their conversion into hyperlinks;
- Notes and attachments insertion;
- Synchronized text visualization and document structure within different focused panels;.
- Metadata insertion;
- Document visualization/exportation into pdf/html/rtf formats;

Composition and organization of new texts

xmLegesEditor is able to give the following support to new legislative texts drafting:

- Specific document templates according to different type of acts;
- Insertion of new partitions
- Automatic numbering and re-numbering of the partition according to specific drafting rules;
- Support to text editing (cut/copy/paste/move) within the main drafting panel, as well as to structural elements moving within the structure panel;
- Implementation and automatic updating of internal references and related links;
- Implementation of external references and related links according to the URN-NIR standard;
- Tables, lists and notes, as well as text faces (bold, italic, underlined, justified) implementation;
- Text find/replace;

- Data types control (dates, etc.)

Management of the Parliamentary iter of new bills

The Parliamentary iter is characterized by the need of tracking changes within a new bill, as well as comparing different versions of such a bill. A set of functions are available in xmLegesEditor to manage such parliamentary procedures:

- Legislative text amending;
- Parallel view of different versions of a bill;
- Automatic production of the amending text based on the bill textual modifications.

A proposal for a legislative drafting environment for the European Parliament

The new legislative drafting environment for the European Parliament will be able to support the chosen XML Metalex standard for describing EP legislative documents and will be developed considering a best-of-breed solution of the current tools used in the Metalex working group. In particular the new environment will be based on the xmLegesCore software platform, which represents a reliable and extensible solution to manage generic XML document based on both XMLSchema and DTD standards.

Moreover it is able to provide an original solution to the management of the XML validity of a generic XML document, which is guaranteed during the drafting phase at least regarding the formal structure.

Basically XML validation is completely “transparent” to the user and does not require any additional effort or XML awareness than typical word processing operation. Such an approach can be indicated as an a priori validation approach: the basic idea is that the user is transparently constrained by the editor to perform only valid operations on the document so that, starting from a valid document template, only valid documents can be produced, without any need of a post-validation. This is guaranteed independently from the XMLSchema and DTD used, since the validity rules contained in XMLSchema or DTD are dynamically obtained from them and dynamically managed by the editor.

On top of xmLegesCore, a new software layer will be developed in order to cope with the implementation of the Metalex standards, specifically tailored for the EP needs.

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