



Akoma Ntoso: an open standard for harmonising legal resources

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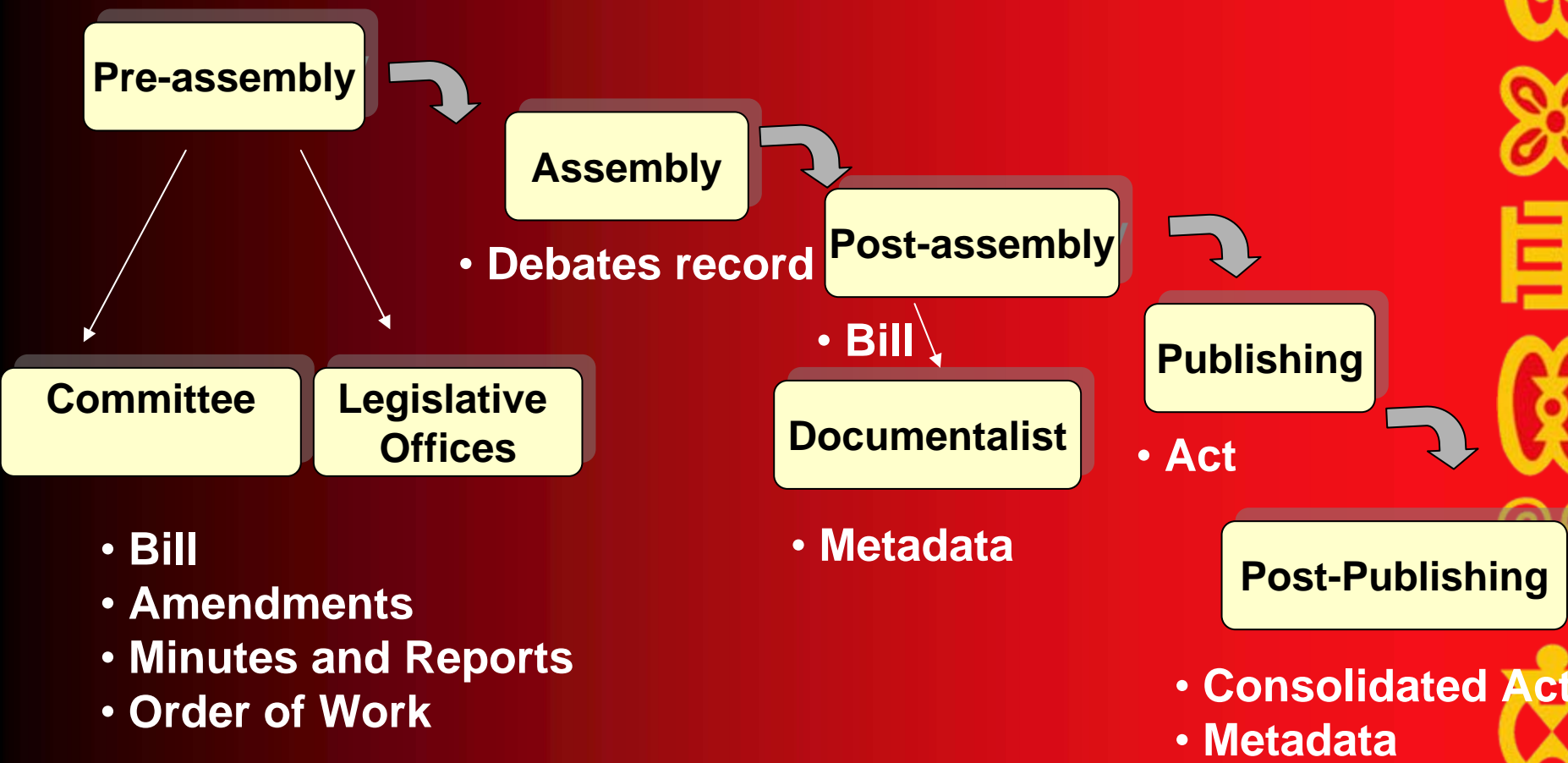
Outline

- Production of Parliament documents
- Advantages of Akoma Ntoso
- Characteristics of Akoma Ntoso
- Akoma Ntoso supports OO Tools
- Conclusions





Parliament Legislative process



• XML is ideal for representing parliamentary documents and for promoting the harmonisation between different data format





AKOMA NTOSO



- It is an open XML standard for all the legal documents inside of Parliament process and beyond (judgments)
- Promoted by UNITED NATIONS Department for Economics and Social Affairs (UN/DESA) in 2004
- It means “**Linked Hearts**” – a symbol used by the Akan people of West Africa to represent understanding and agreement – but also
- **Architecture for Knowledge-Oriented Management of African Normative Texts using Open Standards and Ontologies:**
 - ~ Describing structures for legal documents in XML
 - ~ Referencing documents across countries using URIs
 - ~ Adding systematic metadata to documents using ontologically sound approaches based on OWL, FRBR, etc.





AK support for parliamentary activities

- Support for generating documents
 - ~ Drafting activities, record keeping, translation into national languages, etc.
- Support for workflow
 - ~ Management of documents across lifecycle, storage, security, timely involvement of relevant individuals and offices
- Support for citizens' access to the legal global information
 - ~ Multi-channel publication (on paper and on the web), search, classification, identification
- Further activities
 - ~ Consolidation, comparison, language synchronization, etc.





AN support for quality harmonisation

- Support for best practices within processes
 - ~ Unique standard fosters the diffusion of best practices within African Parliaments and the reengineering of the drafting processes to improve effectiveness
- Support for quality of Law
 - ~ The XML standard fosters compliancy with many legal drafting guidelines, harmonising the quality of the law, and increasing cultural harmonisation about legal drafting guidelines
- Support for interoperability
 - ~ The harmonisation of legal document formats allows interoperability between African Parliaments, shared templates, distributed web sites
- Support for open source tools development
 - ~ As an open standard it encourages the open source software community





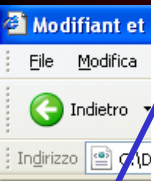
Akoma Ntoso design characteristics

- Neutral with respect to legal system, legal tradition, jurisdiction
- Independent of language
- Preserves the ontological and axiological structure of the legal document
- Represents the legal document using a descriptive approach





Francophone tradition



URI

`<article id="art1">`
`<clause id="art1-sub1">`
`<content>`
`<p>` Article premier : Les dispositions des `<mod id="mod1">`
`<ref id="ref2" href="/cm/act/1996-04-08/96/07/main">` articles 18 (1) B et 22 de la loi
 n° 96/07 du 8 avril 1996 `</ref>` portant protection du patrimoine routier national sont modifiées et
 complétées ainsi qu'il suit : "`<quotedStructure id="mod1-qtd1">`

`<article id="mod1-qtd1-art18">`
`<clause id="mod1-qtd1-art18-sub1">`
`<content>`
`<p>` Article 18

- surcharge inférieure à cinq (5) tonnes : vingt cinq mille (25 000) francs par tonne excédentaire ;
 - surcharge comprise entre cinq (5) et dix (10) tonnes : cinquante mille (50 000) francs par tonne excédentaire ;
 - surcharge supérieure à dix (10) tonnes : soixante quinze mille (75 000) francs par tonne excédentaire.

Nonobstant les dispositions précédentes, l'amende prévue ci-dessus est, suivant le cas, applicable à chacune des stations de pesage traversées en cas de progression du véhicule, pour quelque cause que ce soit.

(1) Il est créé par la présente loi, un Fonds routier destiné à assurer le financement, d'une part, des programmes de protection du patrimoine routier national, ceux de prévention et de sécurité routières, d'entretien du réseau routier et d'autre part, des opérations de réhabilitation et d'aménagement des routes, dans le cadre de deux guichets distincts et indépendants.

(2) Le Fonds routier est, au sens de l'article 1er de la [loi n° 99/016 du 22 décembre 1999](#) portant statut général des établissements publics et des entreprises du secteur public et





Anglophone tradition



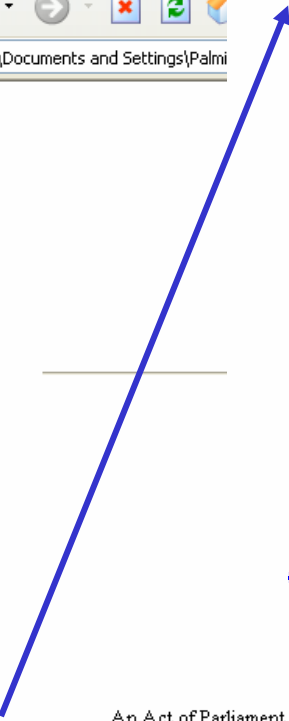
THE RETIREMENT BENEFITS (AMENDMENT) - Microsoft Internet Explorer

File Modifica Visualizza Preferiti Str
Indietro

```

<section id="sec1">
  <num>1.</num>
  <heading>Short title.</heading>
  <subsection id="sec1-sub1">
    <content>
      <p>This Act may be cited as the Retirement Benefit
    </content>
  </subsection>
</section>

```



Date of Assent: 10th December, 2003

Date of Commencement: 19th December, 2003

An Act of Parliament to amend the Retirement Benefits Act, 1997

ENACTED by the Parliament of Kenya, as follows: -

Short title.

1. This Act may be cited as the Retirement Benefits (Amendment) Act, 2003.

Amendment of section 2 of No3 of 1997

2. The Retirement Benefits Act, 1997, in this Act referred to as the principal Act, is amended -

(a) by deleting the definition of "financial year" and

Operazione completata My Computer

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Akoma Ntoso technical characteristics

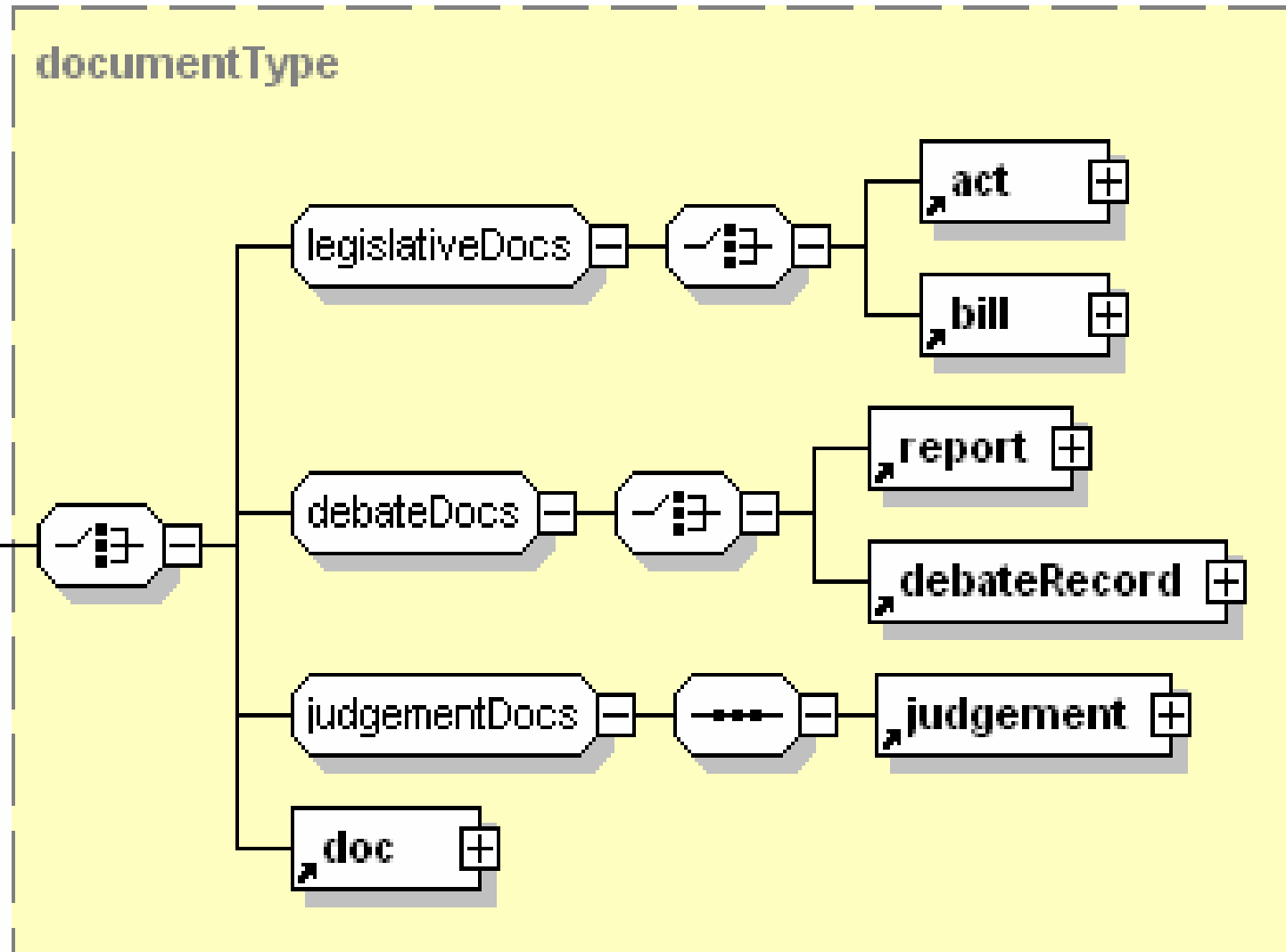


- Object oriented and Pattern approach
- Unique XML-schema clean and compact for modeling different types of documents
- Division between content, metadata, semantics (apply digital signature)
- URI mechanism to identify all the legal resources in a distributed model
- Extensible and Customizable
- Compliant with  MetaLex/CEN





Types of documents





Akoma Ntoso document architecture

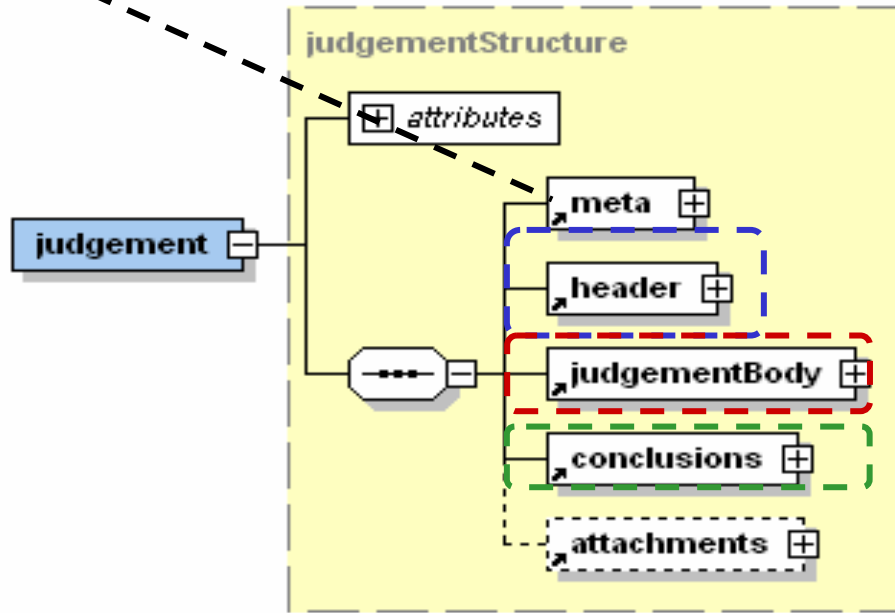
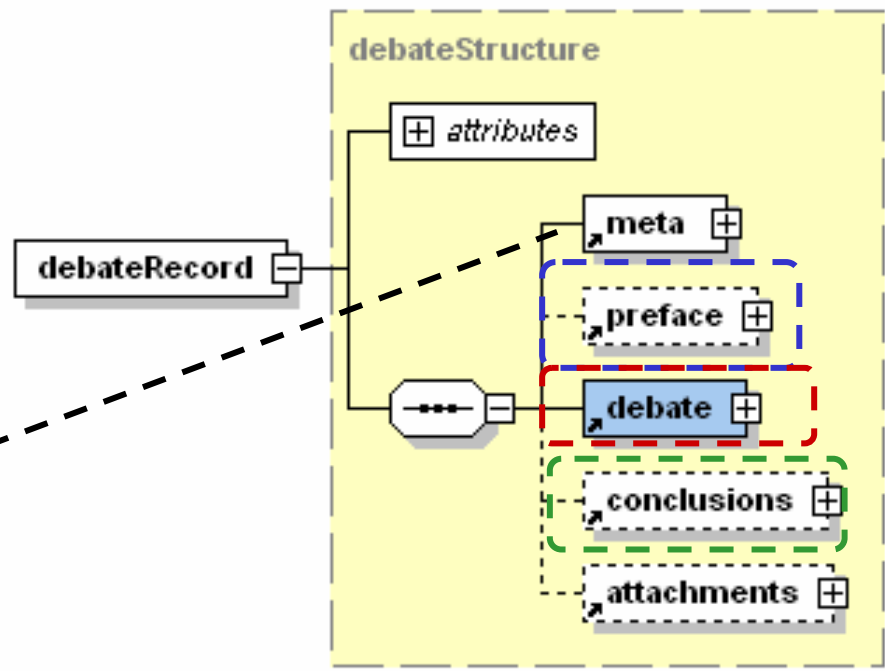
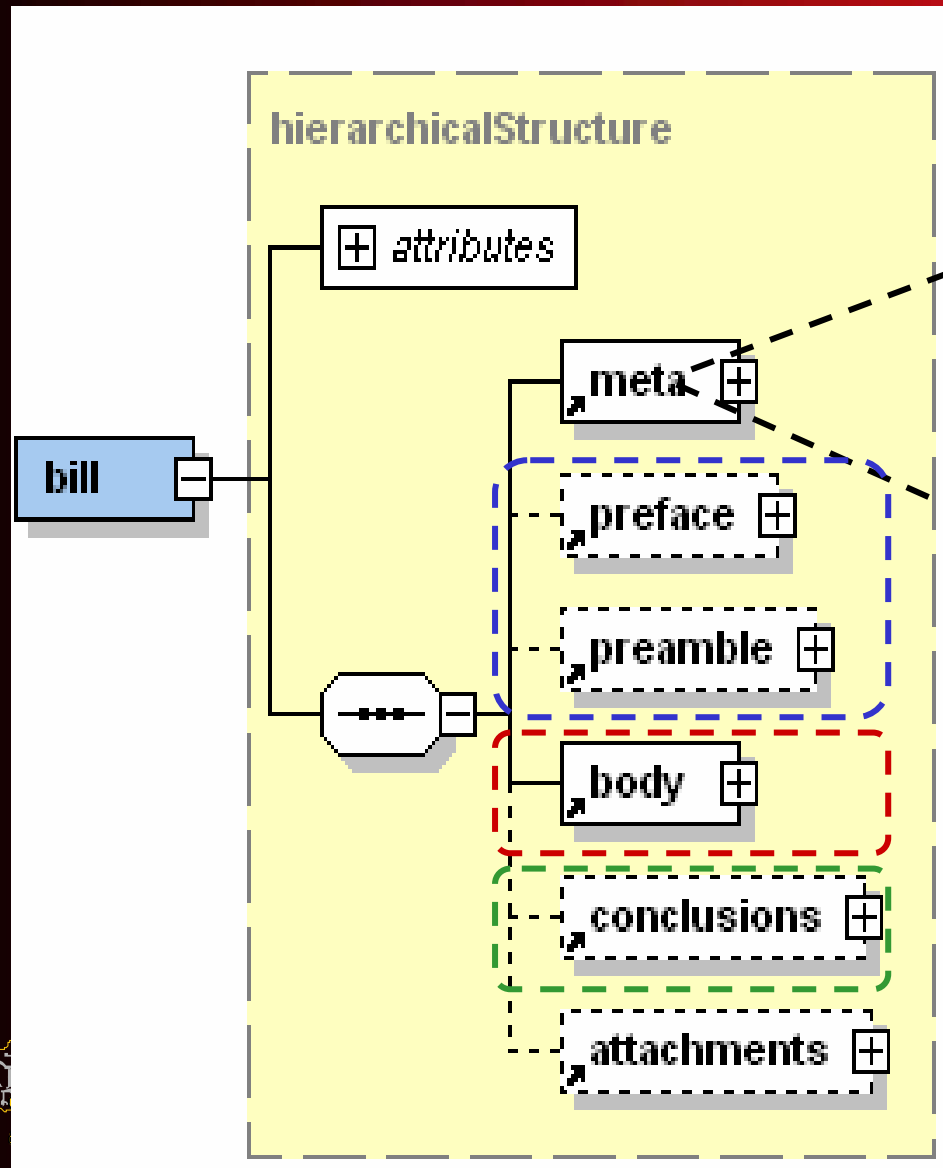


- Content
 - ~ What exactly was written in the document
- Structure
 - ~ How the content is organized
- Metadata
 - ~ Any consideration or comment or additional information that can be expressed on the content and on the document.
- Ontology
 - ~ A representation of the conceptual model that shapes all metadata associated to a document





AK schema





Debates example of the three layers



ORAL ANSWERS TO QUESTIONS
BANDITRY MENACE IN GALOLE

Mr. Kofa

Mr. Kofa asked the Minister of State, Office of the President

- whether he is aware that Councillor Abdi Sole of Asako Location was seriously injured and two homeguards were shot dead and their guns stolen while pursuing bandits on 20th May, 1995;

CONTENT

```
<heading>ORAL ANSWERS TO QUESTIONS</heading>
<subdivision name="question" id="qaal-que1">
  <heading>BANDITRY MENACE IN GALOLE</heading>
  <question by="Kofa" to="MS">
    <from>Mr. Kofa</from>
    <p>Mr. Kofa asked the Minister of State, Office of the President</p>
    <ul id="qaal-que1-ul1">
      <li>whether he is aware that Councillor Abdi Sole of Asako Location was
    </ul>
  </question>
```

METADATA

Link to the ONTOLOGY

```
<TLCPerson href="/ontology/person/ken/MP/ken.John.Kofa" id="Kofa" showAs="Mr. Kofa" />
<TLCRole href="/ontology/role/political/MS" id="MS" showAs="Minister of State, Office of the President" />
```




Open software Tools

Editor

- legal drafting
- consolidation
- simulation
- legislative process

Converter

- Converts documents coming from legacy systems or different standards using  MetaLex/CEN

Name resolver

- Gives access to the physical storage of documents

Post-editing tools

- Reference parser
- Validators, metadata annotation, etc.
- Database, Repository, native XML CMS (*eXistrella*)
- Search engine





Tools: from the text to the Web



Copyright Act

File Modifica Visualizza Preferiti Strumenti ?

Indietro


Cerca Preferiti

Indirizzo C:\Documents and Settings\pippo\Documenti\Norma\Markup\nga\1990\law\act\nga_act_1990_10_68_eng\nga_act_1990_10_68_eng.xml

```

<?xml version="1.0" encoding="
<!-- ?xml-stylesheet type="
<!-- Akoma Ntoso document
- <akomantoso xmlns="http://w
  xmlns:xsi="http://www.w3.
  xsi:schemaLocation="http://
  http://www.cirsfid.unibo.it
- <act contains="OriginalVers
- <meta>
  - <identification source="#
  - <Work>
    <uri href="nga/act/1
    <date date="2007-0
    <author id="au1" hre
  </Work>
  - <Expression>
    <uri href="nga/act/1
    <date date="2007-0
    <author id="au2" hre
  - <components>
    <component id="ce
  </components>
  </Expression>
  - <Manifestation>
    <uri href="nga/act/1
    <date date="2007-0
    <author href="#au2"
  - <components>
    <component id="cn
  </components>
  </Manifestation>
  </identification>
  <publication name="" dat
  - <lifecycle source="#au1

```



REPUBLIC OF KENYA

Copyright Act
Chapter 68
Laws of the Federation of Nigeria 1990

[Arrangement of Sections](#)

[Part I](#)

[Copyright](#)

- 1 Works eligible for copyright.
- 2 Copyright by virtue of nationality or domicile.
- 3 Copyright by reference to country of origin.
- 4 Copyright in works of government, State Authorities and international bodies.
- 5 General nature of copyright.
6. Nature of copyright in sound recording.
7. Nature of copyright in broadcast.
8. Duration of copyright in sound recordings, cinematograph films,

file:///C:/Documents%20and%20Settings/pippo/Documenti/Norma/Markup/nga/1990/law/act/nga_act_1990_10_68_eng/nga_act_1990_10_68_e

Risorse del computer

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Risorse del computer

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Conclusions

Akoma Ntoso fosters the cohesion and harmonisation of the legal systems of different countries through

- ~ Legal drafting best practices and culture
 - legal drafting practices
 - legislative quality
- ~ Simplification of legislative processes
- ~ Unique document format
 - Homogeneous structure representation
 - Common document ontology layer
 - Minimization of training
- ~ Open software tools specifications





**Thank you
for your attention**

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