Akoma Ntoso an open document standard for Parliaments

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Use of XML in Parliaments

From the World e-Parliament Report 2012:
- 43% countries stated to use XML in Parliament for bill
- 35% countries stated to have the intention to use it in future

Figure 5.3: Use of XML for bills by parliaments with a document management system for bills

(Source: Survey 2012, Section 3, Question 3; 70 respondents)
Old use of XML

Each body has a different standard

Data is locked
A new paradigm for open legal document and data
From legal open documents to legal open data
Legal XML standards in the world

- 1997: EnAct - Tasmania, Australia, New Zealand e Canada
- 1999: FORMEX data model - EUR-LEX
- 2001: NormeinRete – Italy
- 2002: MetaLex and SDU BWB - Netherland
- 2003: LexDania – Denmark
- 2003: eLaw - Austria
- 2004: CHLexML - Swiss
- 2006: AKOMA NTOSO – first release
  - Crown XML Schema for Legislation - United Kingdom
- 2008: Chile XML
- 2008: House of Representatives
- 2013: OASIS LegalXML
AKOMA NTOSO in OASIS

- An open XML standard for all the legal documents used in Parliamentary processes and judgments
- Started in 2005 in the project “Strengthening Parliaments’ Information Systems in Africa”, promoted by the UNITED NATIONS Department for Economics and Social Affairs (UNDESA)
- Akoma Ntoso means “Linked Hearts” and it is a symbol used by the Akan people of West Africa to represent understanding and agreement
Akoma Ntoso document types

BILL
Committee Report

ORDER of the Day
Motions Questions Petitions Speeches
Voting Reports Hansards

ACT

Official Gazette
Judgement
Jurisprudence Books Journals

AMENDMENTS
Parliament Legislative process

Pre-assembly

- Committees Stakeholders
- Legislative Offices
- External Institutions

Assembly

- Recording

Post-assembly

- Document Drafting
- Simulation
- Consolidation of documents
- Consolidation of amendments
- Ordering of amendments
- Debates record
- Printing in the official Internal Journal

Documentalists

- Final Drafting
- Formal Check
- Metadata

Official Publishing

- Metadata

Post-Publishing

- Consolidation
- Metadata
- Extraction
- Annotation
- Jurisprudence
**Akoma Ntoso for Transparency, Quality and Efficiency**

XML by itself is not a guaranty for transparency. Yet, Akoma Ntoso has explicit features that support it:

- Clear division of metadata from official content
- Explicit *lifecycle* of the document and tracking of workflow events
- Systematic connection of separate pieces of information to extract new legal knowledge
- Long-term *preservation* of legal validity (authentic document)
- Management of multiple linguistic expressions
- Data model for open government data
- Preservation of *privacy/liability* issues (e.g. in judiciary document)
AN support for parliamentary activities

- Support for the generation of new documents
  - Drafting activities, record keeping, translation into national languages, etc.

- Support for workflow and lifecycle of documents
  - 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.
Akoma Ntoso for transparency and authenticity

<akomantoso xmlns="http://www.akomantoso.org/1.0">
  <act>
    <meta>
      Metadata annotation by editors
      Ontology annotation by editors
      Workflow metadata by the system
      Analysis metadata of the scholar
    </meta>
    <preface>
      Authorial content by the author
    </preface>
    <preamble>
      Authorial content by the author
    </preamble>
    <body>
      Authorial content by the author
    </body>
    <signature>
      Authorial content by the author
    </signature>
    <attachments>
      Authorial content by the author
    </attachments>
  </act>
</akomantoso>
Akoma Ntoso open source tools

- Editors: Lime, Bungeni, AT4AM
- URI/IRI Resolvers
- Textual Parser
- XML Validator
- Converters
- Presentation
- Sub-schema extractor
- Parliament SW Platform
PROYECTO DE LEY

Artículo 1°

- Declararse, por vía interpretativa, a los efectos dispuestos por la Ley Nº 12.091, de 5 de enero de 1954 y por la Ley Nº 16.387, de 27 de abril de 1983, que las embarcaciones deportivas o de recreo, de bandera extranjera, con sus accesorios, que arriben al país navegando por sus propios medios, podrán entrar, permanecer y salir de aguas jurisdiccionales o de puertos o lugares de la República amparadas por su bandera y sin otro requisito que presentar el rol respectivo de la tripulación y la matrícula y sin cumplir con las exigencias aplicables a los buques mercantes, pudiendo ser sus propietarios y/o usuarios, personas físicas o jurídicas, nacionales o extranjeras, radicadas o no en el país.
Success stories of Akoma Ntoso

- Senate of Brazil (act, bill, consolidation, point-in-time)
- European Parliament (bill and amendments)
- Library of Congress of Chile (bill and debates)
- Senate of Italy (bill publication in open data)
- Parliament of Uruguay (bill workflow)
- US Code Consolidation service (code management)
- State of California (xml standard for document management)
- Hong Kong City State (xml standard for document management)
- Federal Chancellery of Switzerland (publication in gazette)
- High Court of Cassation of Italy (xml standard for document management)
- several private companies are using Akoma Ntoso for document management systems
Motivation to move to a standard body

- Parliaments, Congresses, courts and tribunals need to invest in a robust, persistent, non-volatile XML standard for legal documents.
- Akoma Ntoso committee wants:
  - to widen the community and increase the number of pilot cases
  - to move Akoma Ntoso to the status of *International Standard*
  - to generate a robust governance
- For these reason in 2012 we started a TC in OASIS
OASIS: international standardization body

- Not-for-profit consortium founded in 1993
- Open to all: companies, government agencies, academic and research institutions, individuals
- International community
  - 5,000+ participants including: 600+ organizations in 100+ countries
    - 33% in Europe  13% in Asia
- Technical agenda set by members
- Board and Committee chairs elected by members
- About 65 Technical Committees active in many domains
- Legal, court, business, academic, and technology professionals.
- Collaboration on non-proprietary standards for the legal community.

OASIS LegalXML Member Section – March 2002.

Electronic Court Filing → LegalXML

LegalRuleML
(about norms formalization)

LegalCiteM
(about legal citations)

LegalDocML
(about Legal Markup, i.e., Akoma Ntoso)
LegalDocML/Akoma Ntoso

- Open the call for participation: 28 Feb. 2012
- First TC meeting: 29 March 2012
- Co-chairs: Monica Palmirani, Fabio Vitali
- Secretaries:
  - Tom Bruce, Cornell Law School, Legal Information Institute
  - Ashok Hariharan, Africa i-Parliaments Action Plan (UN/DESA)
  - Claudio Fabiani, European Parliament
  - Sylvia Tosar Piaggio, Parlamento del Uruguay
- Document quality manager:
  - LexisNexis, a Division of Reed Elsevier
- TC representative in LegalXML:
  - Shifrin, Laurel, LexisNexis, a Division of Reed Elsevier
LegalDocML TC members

- 43 members in the TC

Akoma Ntoso improvement

- New requirements from a wide number of pilot cases:
  - documentCollection including codes
  - jurisdiction metadata (e.g. individual UK kingdoms)
  - linguistic metadata (e.g. corresponding structure between different languages)
  - legal drafting metadata (e.g. renumbering)
- Naming convention for permanent identifiers of whole document (URI/IRI) and fragments (ids)
- Testing with a large number of different legal systems and pilot cases
- Varying levels of compliance
Akoma Ntoso compliance levels

- Level 1: structure of the document
- Level 2: structure and naming convention
- Level 3: structure, naming convention, basic metadata (e.g. normative references)
- Level 4: structure, naming convention, basic metadata, advanced metadata (e.g. events, modifications)
- Level 5: structure, naming convention, basic and advanced metadata, enriched semantic elements (e.g. references, location, quantity, term, person, etc.)
OASIS TC Workflow

**FIRST STEP**
- Working Draft
  - Committee Specification
    - Full Majority Vote

**SECOND STEP**
- Public Review
  - Committee Specification
    - Full Majority Vote
    - Open for 30 days
    - Special Majority Vote.

**THIRD STEP**
- Statements of Use
  - Three use cases
  - Candidate standard
  - Open for 60 days

**FOURTH STEP**
- Balloting
  - 15% of the OASIS
  - OASIS Standard
Conclusions

- Akoma Ntoso is a robust Legal XML standard for legal open document in parliament
- It is fitted for open government data and semantic web
- Akoma Ntoso is extendable and customizable
- Each organization can use only the needed part
- Open source tools are now available
- Several pilot cases and end-user projects produce substantial proof-of-concepts that it is applicable to a variety of legal systems and scenarios
- OASIS standard process makes Akoma Ntoso an international standard stable with a good governance
Thank you for your attention

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References

Akoma Ntoso official website
- http://www.akomantoso.org/

Akoma Ntoso Open Source Tools
- AT4AM for all: http://www.at4am.org/
- LIME UNIBO Web Editor: http://lime.cirsfid.unibo.it/
- AKResolver: http://akresolver.cs.unibo.it/
- Akoma Ntoso subschema extractor: http://akn.web.cs.unibo.it/aknssg/aknssg.html
- Validator: http://legixinfo.wordpress.com/2013/08/22/free-akoma-ntoso-validator/

Akoma Ntoso other tools
- Xcential Web Editor: http://legisproweb.com/

OASIS LegalXML-TC
- Akoma Ntoso and LegalDocML TC-OASIS
- LegalRuleML TC –OASIS
- LegalciteM -OASIS