

**#1 LegalRuleML and
#2 ParliamentXML
JudiciaryXML
LegalDocumentXML (?)**

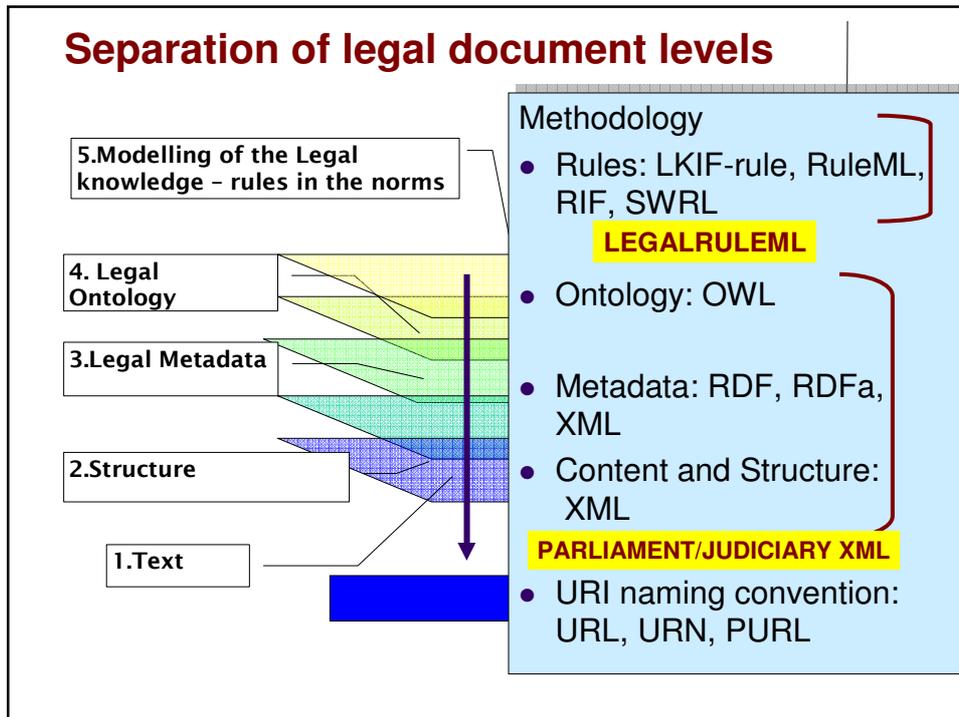
*Monica Palmirani
University of Bologna, CIRSFD
Law Faculty*



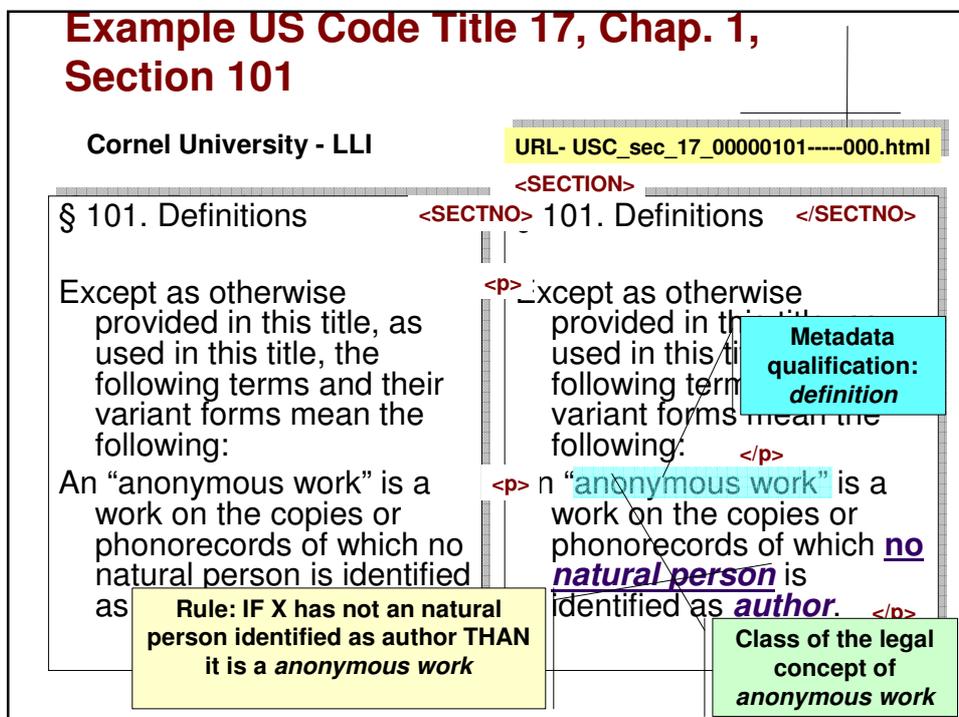
Common Approach

- Two candidates for the TCs: LegalRuleML and Akoma Ntoso
- Oriented to the **legal document** modelling and representation (vs. data base approach)
- Capture and guarantee the **legal knowledge** embedded in the legal document
- **Long-term preservation** of the legal validity of XML documents
- **Semantic Web** techniques based
- **Industrial applications** focused
- **Legal cultural** based

Separation of legal document levels



Example US Code Title 17, Chap. 1, Section 101



LegalRuleML



RuleML History



- RuleML started in 2002 as no-profit organization
- Goal: XML standard for modelling rules and permits reasoning using logic theory
- the outcomes inspired RIF – W3C
- RuleML is used by industry in USA and in Europe and it includes a very strong academic community (Research-Base, Industry-Focused)
- Supported by IBM, Vulcan Inc, Franz Inc., Oracle, EMC, etc.
- Annual conference in USA and in Europe since 2002
- Joint conference with Business Rules Forum
- RuleML2011@BRF - November 3rd-5th, 2011, Westin Diplomat, Ft. Lauderdale, Florida
- Special track with NIEM and LegalRuleML

Why LegalRuleML?

- More and more the legal documents are becoming an important resource of information (big unstructured data). They include processes, orders, instructions useful for information system
- Industries are interested to capture these legal knowledge and to formalize it in a *machine-readable* way for the Semantic Web applications:
 - Credit card policy and security rules (Credit Card Act of 2009, USA SEC.)
 - Cloud computing Contract and SLA
 - etc.

Example: Google SLA of Cloud Computing Contract

Clause 10, point 1, letter c)

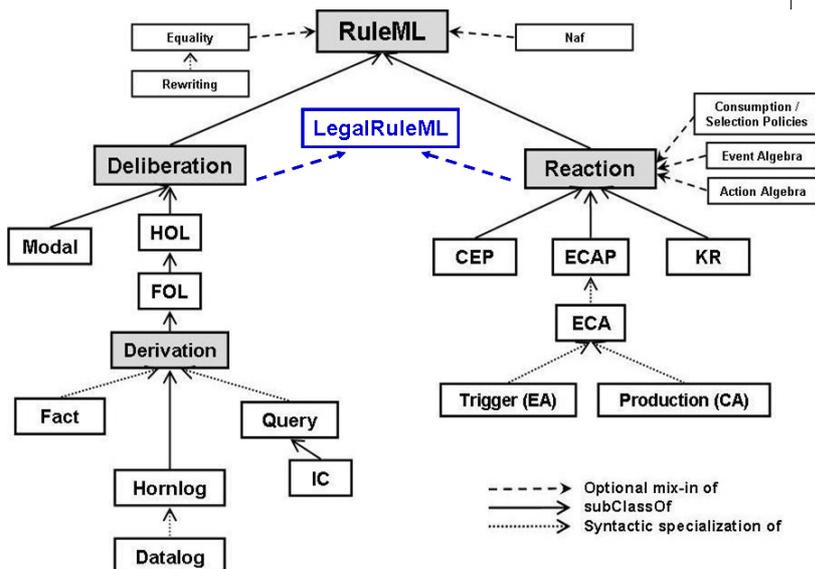
- *If Google does not meet the Google Apps SLA (clause 8), and if Customer meets its obligations under this Google Apps SLA (clause 5), Customer will be eligible to receive the Service Credits of X days.*

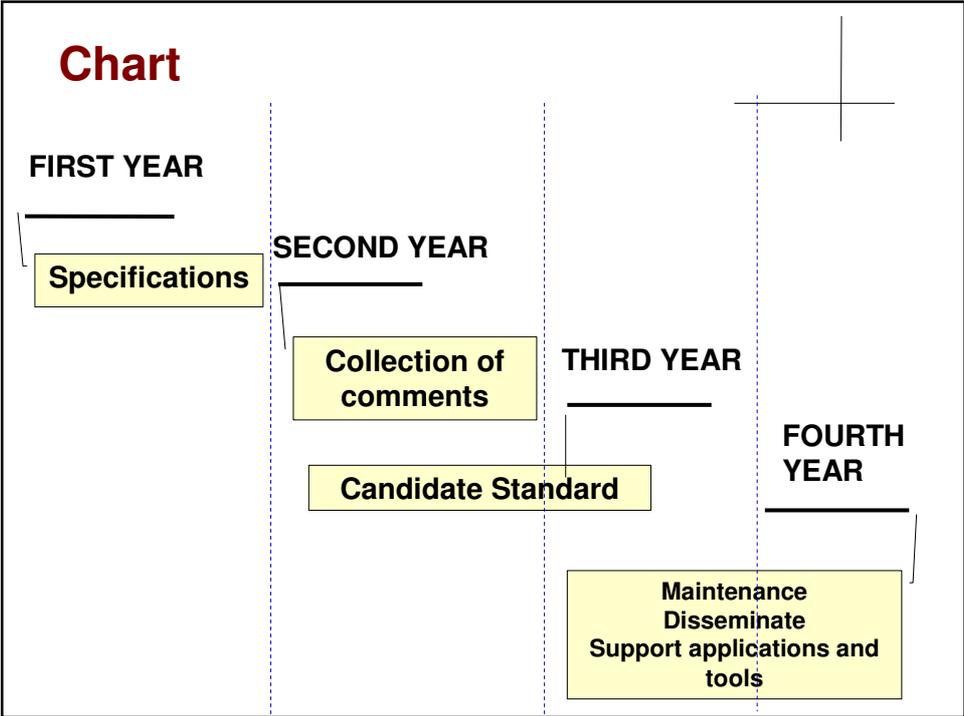
If **clause 8** and **clause 5**
then *serviceCredits*(customer, xDays)

Legal domain peculiarities

- Legal domain has specific peculiarities:
 - Non-monotonic reasoning (not true, not false, probably yes in some conditions)
 - Conditionals and Exceptions
 - Temporal arguments (e.g. retroactivity)
 - Deontic (permission, obligation, prohibition)
 - Different models of reasoning: Hypothetic, Abduction, Argumentation reasoning
 - Values and Behaviours (e.g. constitutional values, social behaviours)
 - Etc.

LegalRuleML





- ## Proponents
- Monica Palmirani, CIRSFID, University of Bologna, Italy
 - Antonino Rotolo, CIRSFID, University of Bologna, Italy, and RuleML director
 - Guido Governatori, NICTA, Queensland Laboratory, Australia, and RuleML director
 - Tom Gordon, Fraunhofer Institute for Open Communications Systems, Germany
 - Harold Boley, Faculty of Computer Science, University of New Brunswick, Institute for Information Technology, National Research Council, Canada, and RuleML co-chair
 - Said Tablet, EMC Corporation, USA, and RuleML co-chair
 - Adrian Paschke, Institute for Computer Science, University of Berlin, Germany, and RuleML director
 - John Hall, Model Systems, UK, and RuleML director
 - Nick Bassiliades, Aristotle University of Thessaloniki
 - Jong Hu, National Chengchi University

Harold Boley, NRC, Canada: one director of RuleML

Dear Prof. Dr. Monica Palmirani,

RuleML Inc. is strongly supporting the LegalRuleML group at OASIS. We have already helped with drafting relevant documents, including the Manifesto. More in-kind contributions will be provided to you when needed. Wishing you great success with this important group.

Best regards,
Harold Boley

Dr. Harold Boley
Co-Chair RuleML Inc.
Adjunct Professor at UNB, Faculty of Computer Science
Leader, Semantic Web Laboratory
Institute for Information Technology
National Research Council Canada
46 Dineen Drive
Fredericton, NB, E3B 9W4
Canada
Phone: +1-506-444-0385
Fax: +1-506-444-6114
Email: harold.bolely at nrc.gc.ca
URL: <http://www.cs.unb.ca/~bolely>

#2ParliamentXML
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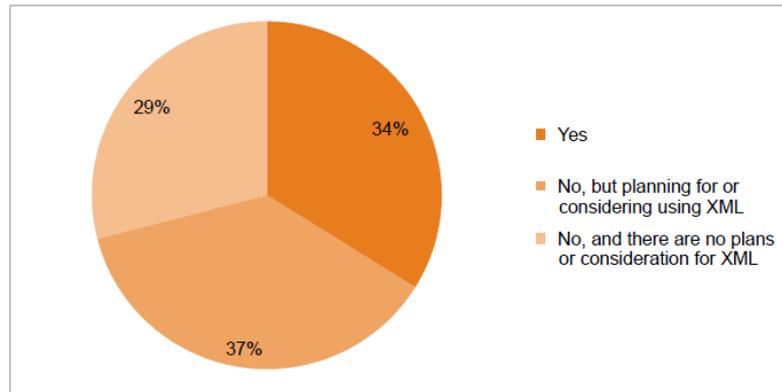


Use of XML in the Parliament



- Form the World e-Parliament Report 2010
- 34% declared to use XML in Parliament for bill and

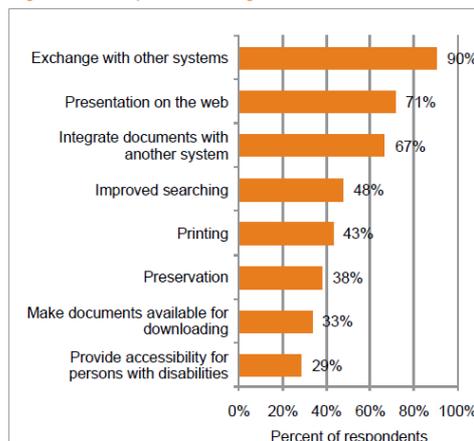
Figure 5.9: Use of XML for bills



Why use XML in Parliament

- There are different scenarios for using XML in Parliament
- The most urgent is for interoperability and integration between institutions
- And Access to the documents on the web

Figure 5.13: Purposes for using XML



(Source: Survey 2009, Section 3, Question 4; 21 respondents – 16% responding "yes" to Question 3)

Forum of the Official European Gazette

- All the EU member states provide the Official Gazette on-line in different format: PDF, HTML, XML
- 21 out of 28 states, including the European Union, provide the information access for free
- **16 provide a consolidated version of the law in force updated daily**
- **14 provide on-line authentic publication binding for law**

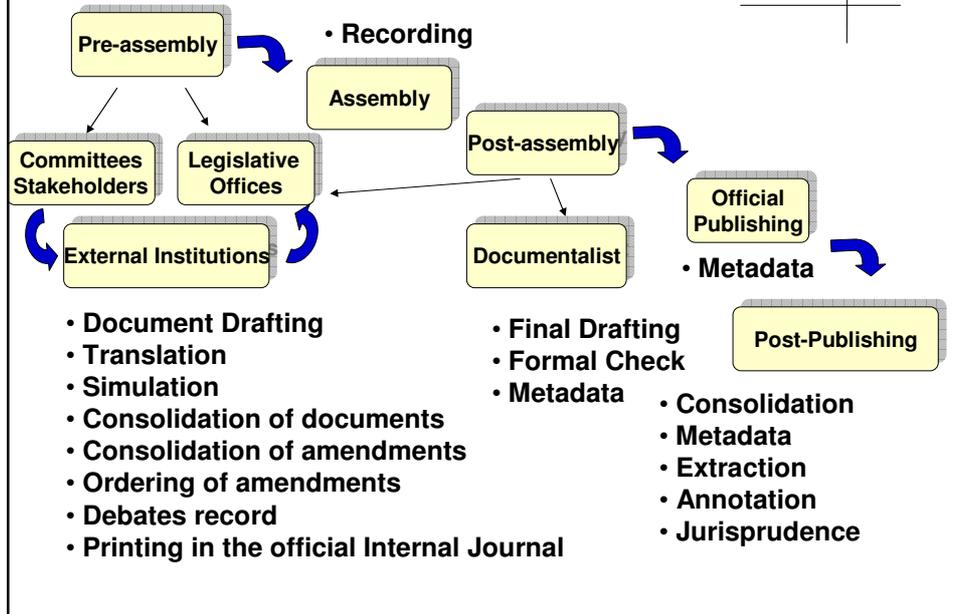
*[Access to legislation in Europe, 2009, OPCE
European Commission, ISBN 978-92-78-40510-6]*



AKOMA NTOSO

- Akoma Ntoso is a set of **simple, technology-neutral XML machine-readable descriptions of parliamentary, legislative and judiciary documents** that enables the addition of descriptive structures (markup) to the content of parliamentary and legislative documents.
- Started in 2004-2005 within 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

Legislative workflow

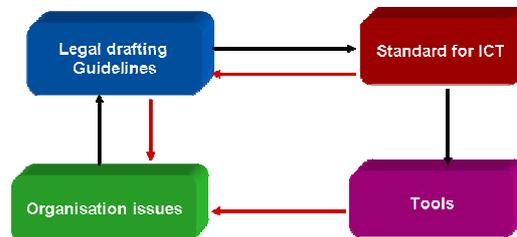


Usage of Akoma Ntoso

- Senate of Brazil customized Akoma Ntoso in Portuguese
- European Parliament adopted Akoma Ntoso for the bill and amendments lifecycle
- South Africa Parliament adopted Akoma Ntoso
- **Kenya Law Report – also for judgments**
- Senate of Uruguay is going to start a project of XML-isation of all the legislative process in Akoma Ntoso
- State of California legislative editor is now able to convert in Akoma Ntoso
- Senate of Italy is experiment it in a pilot case
- Federal Chancellery of Switzerland is analyzing a feasibility study

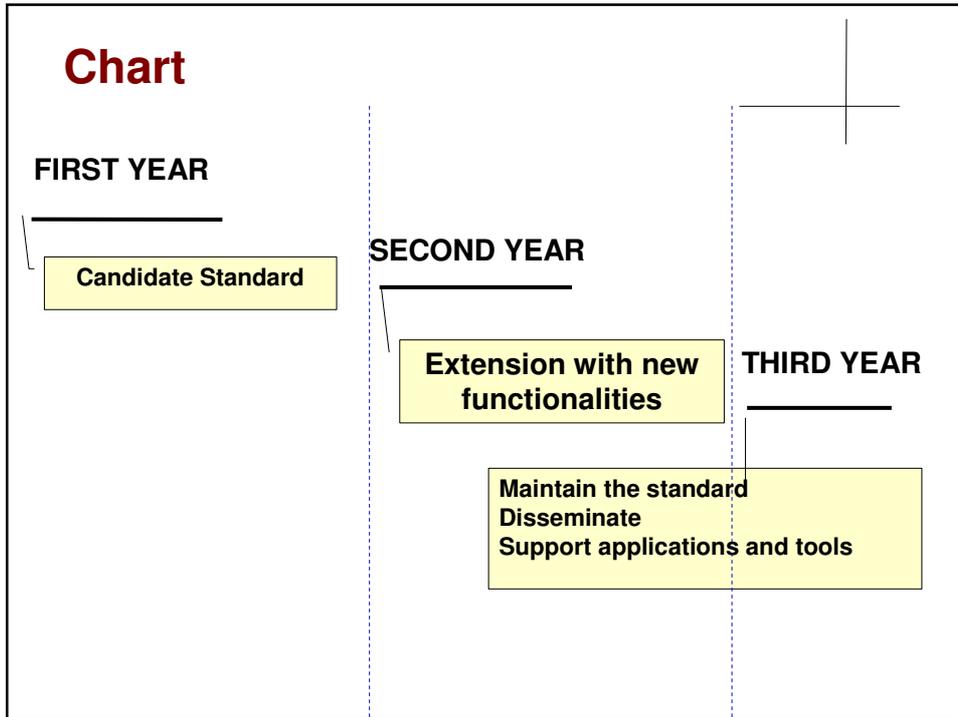
Why Akoma Ntoso in LegalXML?

- The **legal culture**, the legislative traditions, the political procedures, the legal principles have to be taken in consideration as the pillars in this domain
- Parliament ICT team and legislative offices are **stakeholders** and decision makers in this process. A **bottom-up methodology** to design an XML schema using a **consensus-building approach**, rather than building a pure technical XML schema as a data format or as a protocol for communication, is fundamental
- An **interdisciplinary virtuous circle** is essential, yet often neglected



Benefits

- Parliaments need to invest in a robust, persistent, non-volatile standard for representing legal, legislative and judiciary documents (**ROI**)
- Several Parliaments have an urgent need to use a standardized format inside a well-controlled workflow, endorsed by a strong management procedure, within an accredited standard organization like OASIS (**Interoperability**)
- This process of accreditation will allow adopters and users of Akoma Ntoso to develop and produce an environment of software tools specifically for Akoma Ntoso (**tools**)
- It will also increase the interest of the tech-industry sector and permit Parliaments to make long-term investment plans on the standard with a reasonable return of benefits (**industry**)



<p>SENADO FEDERAL Tercera Comissão de Constituição, Processos Legislativos e Direitos da Cidadania - CASPP3</p> <p>PRODESEN</p> <p>PRODESEN</p> <p>RS 664, 15.064, Nova Friburgo, Rio de Janeiro RJ, 16.171-900 (RJ, Brasil) www.prodesen.gov.br</p> <p>Letter of Interest</p> <p>To: The Honorable SENADO FEDERAL, REPRESENTAÇÃO DO SENADO DO BRASIL, BRASÍLIA, DISTRITO FEDERAL, BRASIL</p> <p>From: MISALETTA PELLEGRINI, SENADO FEDERAL, BRASIL</p> <p>On behalf of the above Commission</p> <p>My institution is particularly represented as the voice overseeing</p> <p>Our role in reference to the initiative is</p> <p>On behalf of the European Parliament mentioned Akoma Noso initiative and LegaNLM, member section.</p> <p>My institution is active in the field</p> <p>Our role in the initiative will be to</p> <p>Bruxelles, 31/09/2011</p>	<p>NATIONAL COUNCIL FOR LAW REPORTING Akoma Noso Corporate Ltd. (Kenya) Millennium Commercial Centre (Ground Floor), 4th Floor, 100 Corner, Ngara Rd. PO Box 42400 Nairobi Kenya Phone: +254 20 270 1797 (Fax: +254 20 270 1796) Email: info@ncrlr.org/kenya</p> <p>Letter of Interest</p> <p>To: LegaNLM-OASIS Steering Committee</p> <p>The National Council for Law Reporting is a state corporation in the Judiciary of Kenya. Its mandate is to produce the official reports of the judicial opinions of the courts of Kenya, to provide, coordinate and publish the Law of Africa and to compile such other related publications. The Council's website - www.ncrlr.org/kenya - is one of the Africa's leading public legal information portals.</p> <p>On behalf of the National Council for Law Reporting (Kenya), I herewith confirm our interest to participate in the above mentioned LegaNLM initiative and in particular to open a specific Technical Committee inside of the LegaNLM member section.</p> <p>The National Council for Law Reporting is active in the field and in the Akoma Noso community since 2007, as a partner of the United Nations Department for Economic and Social Affairs under the Africa-Parliament Action Plan in the implementation of Akoma Noso and its tools in managing and displaying parliamentary, legal and judicial information in Kenya.</p> <p>Our role in the initiative will be to apply and promote the use of Akoma Noso and its tools in managing and providing access to public legal information in Kenya.</p> <p>Sincerely, <i>M.M. Mwangi</i> M.M. Mwangi CEO/SECRETARY</p> <p>www.ncrlr.org/kenya</p>	<p>xcential</p> <p>841 Second Street Emeryville, CA 94604 Voice: 760-630-1400 Fax: 760-632-1404</p> <p>September 28, 2011</p> <p>To: LegaNLM OASIS Steering Committee</p> <p>Letter of Interest</p> <p>To whom it may concern,</p> <p>On behalf of the Xcential Group LLC, we herewith confirm our interest to participate in the Akoma Noso initiative and in particular to open a specific Technical Committee for a legislative schema inside of the LegaNLM member section.</p> <p>Our business has been active in the field of legal information since 2002. In particular, our mission is to provide legislative solutions based on XML and publishing technologies. We developed the XML schema on use by the State of California as well as their bill drafting and publishing solutions. Our products have been in production for the California Office of the Legislative Counsel since 2004. In addition, we developed a second XML schema for our public facing bill tracking application for processing and displaying California bills by the public at large.</p> <p>We have been working with Akoma Noso since 2010 and have integrated Akoma Noso into a technology prototype at www.xcential.com. This site publishes all available California bills and Statutes in Akoma Noso.</p> <p>Our role in the initiative will be technical, contributing to the discussion of Akoma Noso standardization.</p> <p>Bradley Chang & Grant Vagstad Owners, Xcential Group, LLC</p>
<p>UNITED NATIONS NATIONS UNIES</p> <p>Department of Economic and Social Affairs</p> <p>AFRICA-PARLIAMENTS ACTION PLAN</p> <p>3rd October 2011</p> <p>To: LegaNLM-OASIS Steering Committee</p> <p>Subject: Akoma Noso TC Proposal</p> <p>Africa-Parliament Action Plan, a project of the United Nations Department of Economic and Social Affairs, has been funding the development of Akoma Noso since 2006.</p> <p>We very much welcome the opportunity to setup a Technical Committee within the OASIS LegaNLM initiative where we could bring together the experiences gained so far. We also build upon the ones of the other stakeholders.</p> <p>We intend to keep supporting the development and maintenance of Akoma Noso and focusing our work for the creation, storage and dissemination of Akoma Noso XML documents as well as on capacity building and training activities.</p> <p>Regards, <i>Fawzi Zen</i> Fawzi Zen Chief Technical Advisor</p> <p>Fawzi Zen, fawzi.zen@un.org Africa-Parliament Action Plan - UNDESA Nairobi - Kenya Mobile: +254-733-639-280 Telephone: +254-20-271-9922 Fax: +254-20-271-9924</p> <p>UNDESA, 66 Rue de la Charbonnière, 1202, Genève, Suisse, Suisse tel: +41-22-917-9922 fax: +41-22-917-9924 e-mail: uninfo@un.org</p>	<p>CRISTO CENTRO INTERDISCIPLINAR DE PESQUISA EM DIREITO DELEGADO FUNDADAÇÃO SOCIEDADE DE PESQUISA TECNOLÓGICA CRISTO S.A. - GATOS</p> <p>To: LegaNLM Steering Committee</p> <p>Letter of Interest</p> <p>On behalf of the CRISTO/UNIVERSITY of Itaipava, I herewith confirm our interest to participate in the above mentioned Akoma Noso initiative and in particular to open a specific Technical Committee inside of the LegaNLM member section.</p> <p>My institution is active in the field of the above mentioned Akoma Noso community since 2006. MISALETTA PELLEGRINI is a technical member of Akoma Noso Technical Committee and the in legal drafter of the standard with Fabio Vital, professor of the Computer Science of the same Itaipava University and member of the CRISTO/UNIVERSITY board.</p> <p>CRISTO has been involved since the beginning to the creation of Akoma Noso standard in general area (e.g. Normas Internacionais Reguladoras) building guidelines compliant with Akoma Noso, developed teaching documentation, proof of concept of the usage of Akoma Noso.</p> <p>CRISTO/UNIVERSITY, with the help of a network of expertise (customers/colleagues/professors), every year, since 2007, the Summer School (LAW, especially XML) for promoting and disseminating Akoma Noso into the academia and public administration bodies.</p> <p>MISALETTA PELLEGRINI <i>Misaletta Pellegrini</i> Itaipava, 29 September, 2011</p> <p>University of Itaipava member of the LegaNLM Director of Copyright research works</p>	



Thank you for you attention
monica.palmirani@unibo.it