

Akoma Ntoso e NIR

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Outline

- Casi di successo di AKN
 - scenari possibili
- Comparazione fra NIR e AKN
 - Tools demo
- URN:NIR e AKN naming convention
- Il processo di standardizzazione in OASIS
 - LegalDocML OASIS TC process



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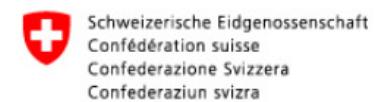
Success stories di Akoma Ntoso

- 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) 
- Kenya Law Report (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
- UK The National Archives

AT4AM for All



EUROPEAN PARLIAMENT



CORTE SUPREMA DI CASSAZIONE



Akoma Ntoso open source tools

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



Tool disponibili in ambito italiano

- NIR2AKN <http://sinatra.cirsfid.unibo.it/nir2akn/>
- TXT2AKN <http://sinatra.cirsfid.unibo.it/txt2akn/>
- LIME (Cassazione) <http://sinatra.cirsfid.unibo.it/lime-cassazione/>

- AKN2RDF <http://sinatra.cirsfid.unibo.it/akn2rdf/>
- Risolutore di URI

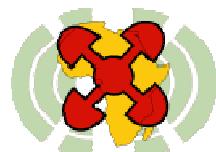
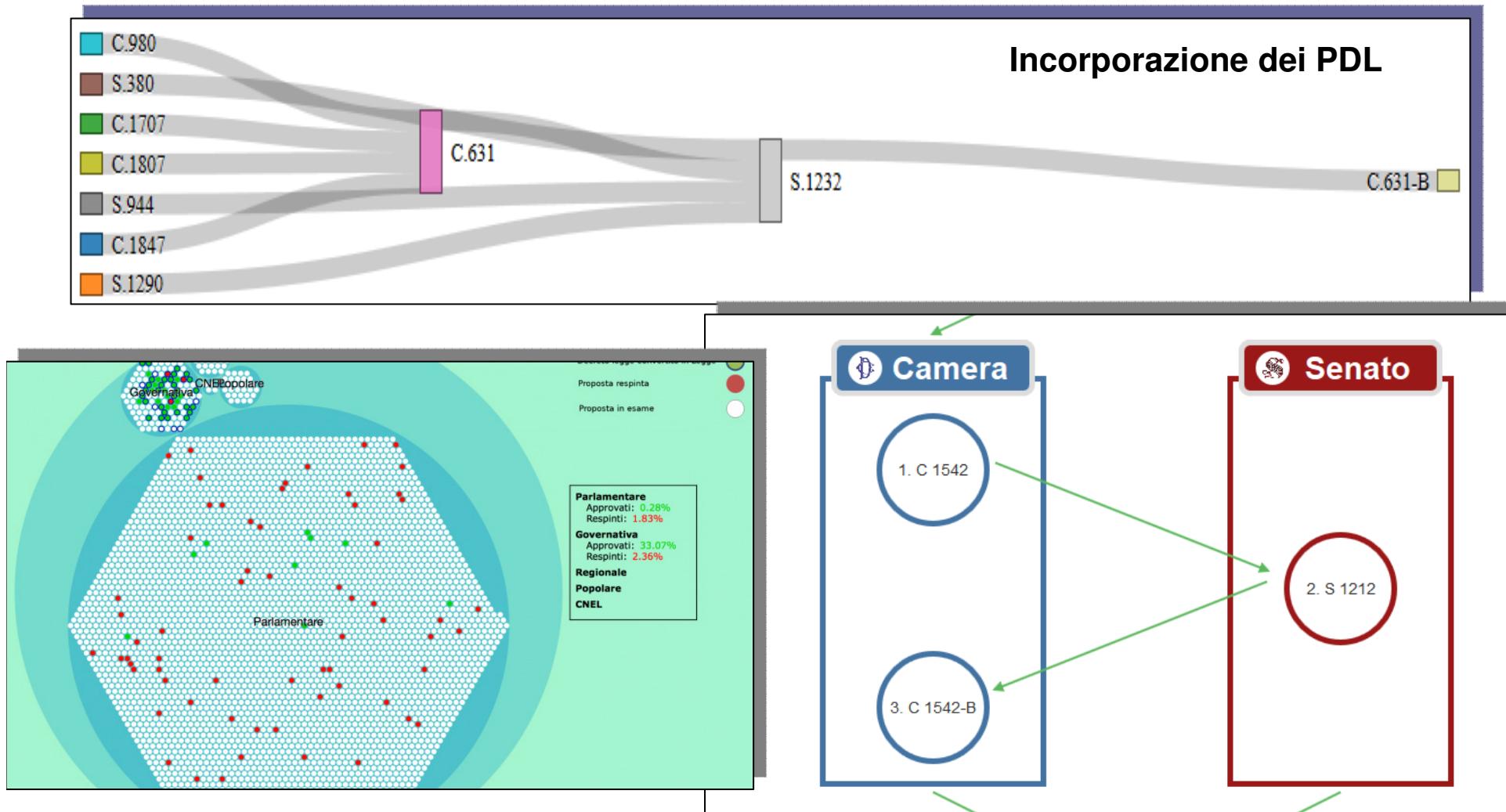
- Parser per le sentenze (UniTO) e Anonimizzazione
<http://sinatra.cirsfid.unibo.it/portale-anonimizzazione/>



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Code4Italy Hackathon <http://code4italy.cirspid.unibo.it/>



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Scenari possibili

- Uruguay – gestione dei disegni di legge
- Cassazione – marcatura documenti e consolidamento (e.g., Codice Penale)
- Svizzera – conversione da word annotato
- FAO – annotazione cooperativa dei documenti per la creazione di emendamenti
- South Africa – legislative drafting
- Senato – publishing in multi-channels
- Parlamento EU - multilinguismo
- UK – open data

<http://www.legislation.gov.uk/ukpga/1998/29/data.ackn>



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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.)



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Comparazione NIR AKN

Comparazione NIR e AKN

NIR 2.2 – release 2010
prevede 10 xsd:

- nirstrict.xsd
- nirloose.xsd
- norme.xsd
- meta.xsd
- globali.xsd
- dsp.xsd
- testo.xsd
- h.xsd
- tipi.xsd
- proprietario.xsd

- Akoma Ntoso uno solo per molti tipi di documenti
- per molti sistemi normativi
- per molti paesi diversi
- per molte lingue



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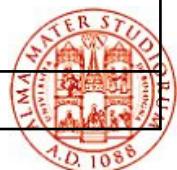
Comparazione NIR e AKN: il mapping

- Armonizzazione dell'informazione senza perdita di semantica utilizzando altri elementi o attributi
- ESEMPIO:
`<act name="decretoLegislativo">`
- Conversione di ARIANNA in AKN
- Conversione di Cassazione in AKN
- Conversione del Regolamento del Senato

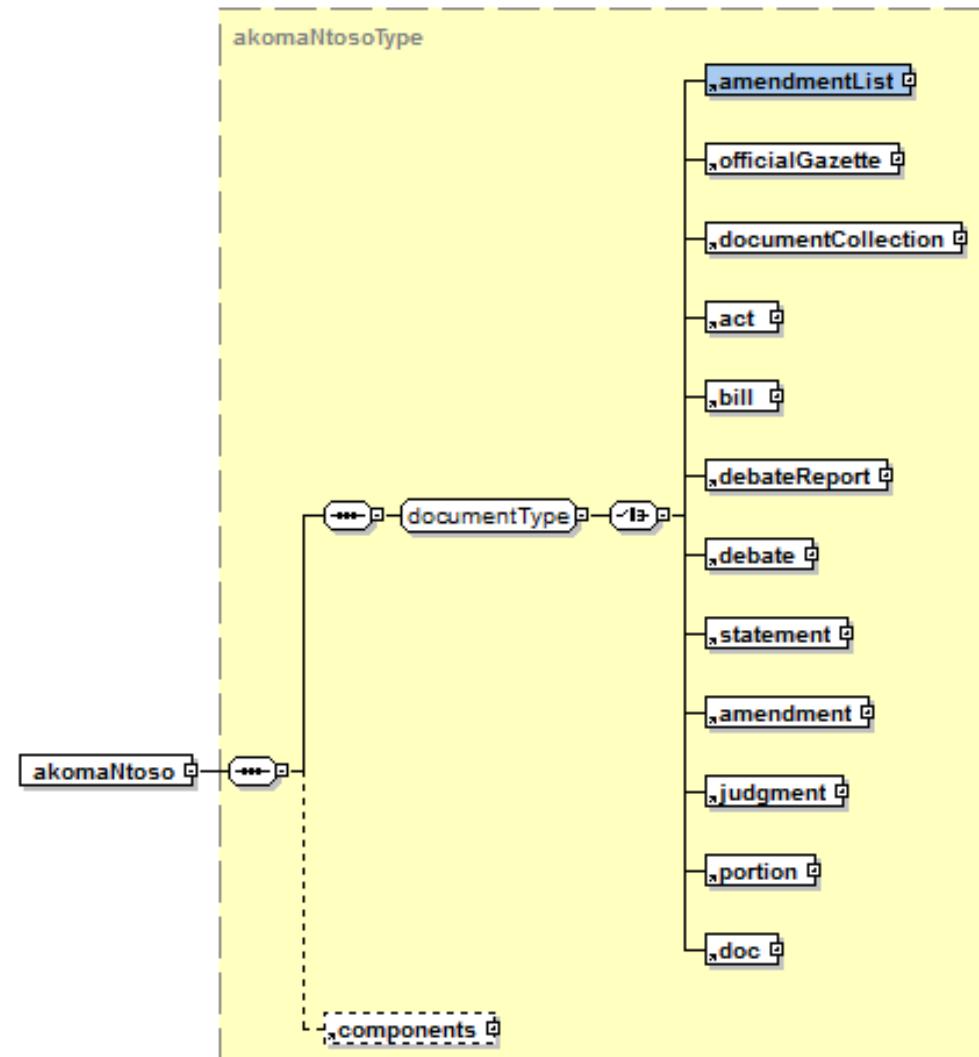
NIR	tipodocumento	akomaNtoso
Legge	docarticolato	act
LeggeCostituzionale	docarticolato	act
DecretoLegge	docarticolato	act
DecretoLegislativo	docarticolato	act
DecretoMinisteriale	docarticolato	act
RegioDecreto	docarticolato	act
Dpr	docarticolato	act
Dpcm	docarticolato	act
LeggeRegionale	docarticolato	act
AttoDiAuthority	semiarticolato	act
DecretoMinisterialeNN	semiarticolato	act
DprNN	semiarticolato	act
DpcmNN	semiarticolato	act
Comunicato		doc
DocArticolato	---	---
DocumentoNIR		doc
SemiArticolato	---	---



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Akoma Ntoso



Root è `<akomantoso>`

- ACT
- BILL
- REPORT
- DEBATE RECORD (Hansard)
- Judgment
- documentCollection
- Amendment
- Portion
- Doc



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Cosa c'è in più

- documentComponent
 - emendamenti, liste di emendamenti, ordine del giorno, sentenze, faldoni, etc.
 - porzioni di documenti per frammentare documenti molto lunghi o codici
 - un robusto sistema standard di nomenclatura degli id
-
- workflow dell'iter
 - metadati per la preservazione a lungo termine
 - classificazione dei riferimenti all'interno della sentenza
 - rinumerazione e modifiche anomale
-
- collegamento con ontologie esterne
 - migliore gestione delle note autoriali
 - migliore gestione del multilinguismo nel testo
 - migliore modellazione delle firme con anche il ruolo del firmatario



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ASSUNTO

/akn/uy/collection/assunto1230

CARPETA_SANADO

/akn/uy/collection/senado/carpeta395-2010

doc1

doc1

DESTRIBUITO

10-Feb-2015

collectionBody

Bill10-10-2010@
2015-feb-02.xml

Motivosv2.xml

Bill.xml

10-10-2010

REPARTIDO

collectionBody

doc1

doc2

Motivos.xml

18-10-2010

CARPETA_CAMERA

/akn/uy/collection/camera/c
arpeta555-2010

REPARTIDO

/akn/uy/collection/camera/2010
-09-27/repartido379-2010/

collectionBody

Bill.xml

Motivos.xml

Firme digitali sui documenti AKN

```
<akomantoso xmlns="http://www.akomantoso.org/1.0">
  <judgment>
    <meta>
      Metadata annotation: by the editor
      Ontology annotation: by the editor
      Workflow metadata: by the system
      Analysis metadata: by the expert
    </meta>
    <header>
      Authorial content: by the author
    </header>
    <preamble>
      Authorial content: by the author
    </preamble>
    <judgementBody>
      Authorial content: by the author
    </judgementBody>
    <attachments>
      Authorial content: by the author
    </attachments>
  </judgment>
</akomantoso>
```

Signature of the editor 

Signature of the author 

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Akoma Ntoso e urn:nir



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Esempio Regione Piemonte

```
<act name="LeggeRegionale">
  <meta>
    <identification source="#supremaCorteDiCassazione">
      <FRBRWork>
        <FRBRthis
          value="/akn/it/ac/legge/regione.piemonte/1992-01-14/1/main"/>
          <FRBRuri value="/akn/it/ac/legge/regione.piemonte/1992-
01-14/1"/>
          <FRBRalias value="urn:nir:regione.piemonte:legge:1992-
01-14;1" name="urn:nir"/>
          <FRBRdate name="Enactment" date="1992-01-14"/>
          <FRBRAuthor href="#emanante" as="#author"/>
          <FRBRcountry value="it"/>
    </FRBRWork>
```



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Esempio Regione Piemonte

- Tutta la legislazione della Regione Piemonte convertita da NIR ad AKN
- http://lodpiemonte.cirsfid.unibo.it/?page_id=137



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Riferimento in AKN

- <rif xlink:href="urn:nir:stato:legge:1985-08-08;431#art1bi">
articolo 1 bis della legge 8 agosto 1985, n. 431 </rif>
- <ref href="/akn/it/act/legge/stato/1985-08-08/431/ita/1985-08-08#art1bis" refersTo="#ref_1">articolo 1 bis della legge 8 agosto 1985, n. 431</ref>

nei metadati....

- <TLCReference eld="ref_2" href="urn:nir:stato:legge:1985-08-08;431#art1bis" showAs="alias" name="urn:nir"/>



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Akom Ntoso nel processo di standardizzazione OASIS



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- LegalXML.org Community – 1998.
 - Legal, court, business, academic, and technology professionals.
 - Collaboration on non-proprietary standards for the legal community.
- OASIS LegalXML Member Section – March 2002.



LegalDocML/Akoma Ntoso

- Call for participation opens: 28 February 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:
 - Laurel Shifrin, LexisNexis



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LegalDocML TC members

- 43 members in the TC

**Africa i-Parliaments Action Plan (UN/DESA) - Belgian
Fedict - Chile Biblioteca del Congreso Nacional -
Cornell Law School - European Parliament - Ghana
Parliament - Glasgow Caledonian University - Kenya
National Council for Law Reporting - Lebanese
Parliament - Maurius Naaonal Assembly - Uganda
Parliament -University of Bologna-CIRSFID -
University of Liverpool - Uruguay Parliament - US
Military Health Services - LexisNexis, a Division of
Reed Elsevier – Well Fargo – Library of Congress -
National Center for State Courts – State of California –
Autonoma de Barcelona, DTI.....**



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FIRST STEP

Working Draft

Committee Specification

SECOND STEP

JOB DONE

#1 Public Review

Committee Specification

THIRD STEP

Statements of Use

Candidate standard

#2 Public Review

FOURTH STEP



Balloting

OASIS Standard

OASIS TC Workflow

Full Majority Vote

Full Majority Vote
Open for 30 days

Special Majority Vote.

Three use cases

Open for 60 days

15% of the OASIS



<https://www.oasis-open.org/committees/legaldocml/>


Advancing open standards for the information society

Other Languages

I want to:

Standards | Committees | Join | News | Events | Resources | Member Sections

OASIS LegalDocumentML (LegalDocML) TC

[Join This TC](#) [TC Members Page](#) [Send A Comment](#)

Monica Palmirani, monica.palmirani@unibo.it, TC Convener

Providing Feedback: OASIS welcomes feedback on its technical activities from potential users, developers, and others to better assure the interoperability and quality of OASIS work.



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Documentazione e schemi

1. Akoma Ntoso Version 1.0 Part 1: XML Vocabulary
2. Akoma Ntoso Version 1.0 Part 2: Specifications
3. Akoma Ntoso Naming Convention Version
4. Akoma Ntoso Media Type Version 1.0



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4 Documenti - Akoma Ntoso Version 1.0

Part 1:

Akoma Ntoso Version 1.0 Part 1: XML Vocabulary

- HTML (Authoritative):
- <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part1-vocabulary/akn-core-v1.0-csprd01-part1-vocabulary.html>
- Editable source: <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part1-vocabulary/akn-core-v1.0-csprd01-part1-vocabulary.doc>
- PDF: <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part1-vocabulary/akn-core-v1.0-csprd01-part1-vocabulary.pdf>



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4 Documenti – Akoma Ntoso Version 1.0

Part 2

Akoma Ntoso Version 1.0 Part 2: Specifications

- HTML & Editable source (Authoritative): <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part2-specs/akn-core-v1.0-csprd01-part2-specs.html>
-
- XML schemas: <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part2-specs/schemas/>
- XML examples: <http://docs.oasis-open.org/legaldocml/akn-core/v1.0/csprd01/part2-specs/examples/>



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4 Documenti

Akoma Ntoso Naming Convention Version 1.0

- HTML (Authoritative):
<http://docs.oasis-open.org/legaldocml/akn-nc/v1.0/csprd01/akn-nc-v1.0-csprd01.html>
- Editable source:
<http://docs.oasis-open.org/legaldocml/akn-nc/v1.0/csprd01/akn-nc-v1.0-csprd01.doc>
- PDF: <http://docs.oasis-open.org/legaldocml/akn-nc/v1.0/csprd01/akn-nc-v1.0-csprd01.pdf>

Akoma Ntoso Media Type Version 1.0

- HTML (Authoritative):<http://docs.oasis-open.org/legaldocml/akn-media/v1.0/csprd01/akn-media-v1.0-csprd01.html>
- Editable source:<http://docs.oasis-open.org/legaldocml/akn-media/v1.0/csprd01/akn-media-v1.0-csprd01.doc>
- PDF: <http://docs.oasis-open.org/legaldocml/akn-media/v1.0/csprd01/akn-media-v1.0-csprd01.pdf>
- Akoma Ntoso Naming Convention Version 1.0:
<http://docs.oasis-open.org/legaldocml/akn-nc/v1.0/csprd01/akn-nc-v1.0-csprd01.zip>



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Come contribuire

Comments may be submitted to the TC by any person through the use of the OASIS TC Comment Facility which can be used by following the instructions on the TC's "Send A Comment" page, or directly at:

- https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=legaldocml

Comments submitted by TC non-members for this work and for other work of this TC are publicly archived and can be viewed at:

- <https://lists.oasis-open.org/archives/legaldocml-comment/>



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Tre importanti eventi



Akoma Ntoso School
The Akoma Ntoso school in Washington DC



LEX
XML documents
Legal ontologies
Naming legal resources
XML STANDARD
Ontology design
NLP techniques
Legal knowledge
legal metadata
Legal sources on the web
ONTOLOGY IN LEGAL DOMAIN
Linguistic ontologies
Legal Reasoning
Semantic Web

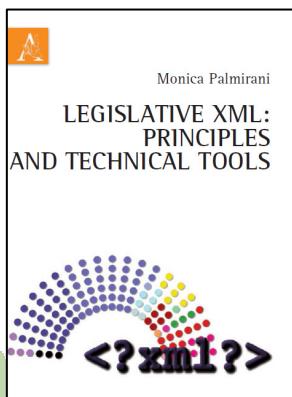
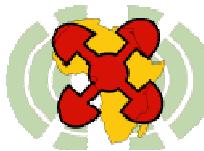
Legal domain
legislative traditions
legal sources
ARGUMENTATION
Linguistic ontologies
Legal markup
Semantic Legal XML
driving rules
Nomative references
Legal ontologies
web technologies
Macro languages
XML standards

LexSummerSchool 2015
Managing Legal Resources in the Semantic Web
September 7 - 15, 2015

DEADLINE 15 JULY 2015

Want to learn more about Legal XML standards, applications and tools?
Want to know risks and opportunities of Legal XML standards?
Want to foster the Semantic Web technologies and improve the legislative document management in your public administration?
Want to get in touch with the experts in Semantic Web applied in legal domain?

Faculty of Law, Ravenna Campus - Via Oberdan, 1



INTERNATIONAL AKOMA NTOSO CONFERENCE (IANC 2015)

1st August 1st, 2015
George Mason University
Fairfax, Virginia (USA)

PROGRAM CHAIRS
Monica Palmirani, University of Bologna, OASIS LegalDocML Co-chair
Fabio Vitali, University of Bologna, OASIS LegalDocML Co-chair

CALL FOR CONTRIBUTIONS

Authors are invited to submit original contributions of theoretical or practical relevance, experience reports, case studies, demonstrations or applications.
Papers (full- 10-15 pages ; short- 8 pages, in the proceeding) as well as abstracts (60-80 words) must be in English and may be submitted:
<http://www.oasisdocs.org/conference/ianc2015>
Please upload all submissions as PDF files in LNCS format (<http://www.springer-dsp.com/lnccs.html>).
To ensure high quality, submitted papers will be carefully peer-reviewed by at least 3 PC members based on originality, significance, technical soundness, and clarity of exposition.

All accepted papers will be published in the Springer LNCS series.

IMPORTANT DATES

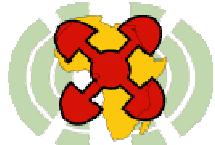
Paper Submission Deadline: June 15th, 2015
Author Notification: June 30th, 2015
Camera Ready Paper: July 10th, 2015

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