MEA Information and Knowledge Management Initiative
1st Steering Committee Meeting

22-24 June 2010   *Glion, Switzerland*

Development of Information Exchange Formats

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Information Sharing Needs with MEAs

- Frequent Information Sharing Needs

  - Shared calendar of events (Rio, BLG, UNEP)

  - Who's who & yellow pages (persons, organizations, roles)

  - Meeting outcomes

    - Decisions

    - Reports

  - MEA Parties

- Other Information Sharing Needs

  - Case studies

  - Projects & Initiatives (fact sheets)

  - Country profiles

  - References (documents, websites, databases, etc)

  - ...

➔ Selection for Proof-of-Concept

Information Types for Proof-of-Concept

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- Selection Criteria
  - Importance
  - Usefulness
  - Feasibility

- Decisions (including Resolutions & Recommendations)
  - Most important MEA product
  - A cross search is missing and would be useful
  - Core information fairly simple

- Meetings
  - MEAs convene many meetings
  - There is no integrated calendar of MEA meetings
  - Intrinsically linked to decisions (COP meetings)
  - Information type well understood

Conceptual Formats

- Decision

  - MEA body & meeting number: CBD COP 9
  - Decision number: IX/10
  - Decision title: Financial Mechanism
  - Decision subjects: Funding
  - + Details (URL, files, text, languages)

- Meeting

  - MEA: CBD
  - Meeting title & short name: WGRI 3
  - Meeting Dates: 10-20 May 2010
  - Meeting Venue :   Nairobi, Kenya
  - Meeting subjects: Strategic Plan, Implementation
  - + Details (URL, documents, information, organizers)

➔ Details in annexes I & II of MEA IKM working group report

Controlled Vocabularies

- Why controlled vocabularies?
  - To optimize logical structure (categories, classifications)
  - To avoid ambiguities
  - To enable information exchange

- Standard controlled vocabularies (existing)

Countries	ISO 3166-1	(ch, fr, gb, ke)
Languages	ISO 639-2	(en, es, fr)
Date/Time	RFC 3339	(2010-06-22T12:00:00Z)

- MEA-specific controlled vocabularies (to agree upon)

MEA	CITES, CMS, CBD, SC, BC, RC, …
Subjects	difficult
Decision status	Active, Amended, Retired
Meeting status	Tentative, Confirmed, Cancelled, Postponed

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Technical Implementation

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- XML based format
    - Internet standard for information exchange
    - Several ways of organizing XML

- Choice of Atom Format + extensions
    - Robust successor of RSS for feeds
    - Designed for information exchange of news
    - Well understood by most systems
    - Extensible to support other formats
    - Supports multiple languages
    - Supports controlled vocabularies (category tag)
    - Validation possible by W3C tools
    - Selected by many web 2.0 service providers

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Feed = List of Entries (~ Database Table = List of Records)

Feed

```
<feed xmlns='http://www.w3.org/2005/Atom'
      xmlns:mea='http://mea.unep.org/2010'>
   <title>Stockholm Convention Decisions</title>
   <author> <name>Stockholm Convention</name> </author>
   <updated>2006-01-23T16:26:03-08:00</updated>
   <id>http://chm.pops.int/decisons</id>
   <link href='http://chm.pops.int/decisions' rel='self'/>


   <entry>

         <id>http://mea.unep.org/sc-decision-123</id>
         <link href='http://chm.pops.int/decision-123'/>
         <title type='text'>Decision 123</title>
         <content type='text'>This is the content</content>
   </entry>

</feed>
```

Entry

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Controlled Vocabulary Implementation

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- 3 XML attributes to Atom <category> element:
    - Scheme: classification scheme
    - Term: coded value for machine (language independent)
    - Label: text value for human (optional)

- Example:

```
<entry >
    <id>http://mea.unep.org/decisions/123</id>
    <title>Decision 123</title>
    <content type='text'>This is decision 123</content>
    <category
        scheme='http://mea.unep.org/2010/format'
        term='http://mea.unep.org/2010/format#decision'  />
    <category
        scheme='http://mea.unep.org/2010/subject'
        term='http://mea.unep.org/2010/subject#forest'
        label='Forest'  />
</entry>
```

- Implemented as Atom extension:

  - Namespace: mea="http://mea.unep.org/2010"

  - mea:decisionId

  - mea:decisionCode

  - …

- Example:

```
<entry >
    <id>http://mea.unep.org/decisions/36</id>
    <title>Decision title</title>

    <mea:decisionCode number="36">IX/36</mea:decisionCode>

    <category
        scheme='http://mea.unep.org/2010/subject'
        term='http://mea.unep.org/2010/subject#forest'
        label='Forest'  />
</entry>
```

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- Implemented with XML Language attribute
  - xml:lang='es'
  - Always possible under XHTML content

- Example

```
<entry >
    <id>http://mea.unep.org/decisions/36</id>

    <title type="xhtml">
       <div xmlns="http://www.w3.org/1999/xhtml">
                <div xml:lang="en">Title</div>
                <div xml:lang="fr">Titre</div>
                <div xml:lang="es">Titulo</div>
       </div>
    </title>

</entry>
```

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Final Comments

- Overall format ready for decisions and meetings

- Pay attention to details
  - Unique identification
  - Categories
  - Relationships
  - Translations

- Robust format extensible to additional information types

- Do not forget other implementation aspects
  - System architecture
  - Web service type
  - Search mechanism (Querying)
  - Application Programming Interface (API)

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Thank you

Any Question / Comment?

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