


NAR / specific standards

- NAR provides a generic framework
- NAR is *not* an IPTC standard for end users
- An IPTC news exchange standard implements the NAR for a specific usage.
- Example NewsML: representation of textual stories, pictures, audio & video clips, or multimedia stories (text associated with illustrations).
- Example SportsML: representation of sports results and statistics.


© IPTC – www.iptc.org 1



News Architecture

- The overall requirements the NAR has to meet:
 1. Simplify the processing of news objects
 2. Treat news, events, sports results and other news-related information the same way
 3. Use the latest XML technologies
 4. Make it compact
 5. Make it storage-friendly
 6. Make it semantically rich!
 7. Keep compatibility with the current model
- Create a News Architecture (NAR)
- Use it for all IPTC standards


© IPTC – www.iptc.org 2



NAR: after AGM 2005

- Worked on refinements of the News Structure
- Worked on data types and the main common components
- Worked on the metadata framework (tech. consulting)
- Worked on the XML syntax, plus technical documentation (tech. consulting)
- Discussed aspects of the processing model


© IPTC – www.iptc.org 3



NAR: in the 5 last months

- Only eight “usual suspects” worked on the development
- Mails (>=June):
 - NAR-dev: 474
 - N MDF-dev: 159
 - CoCo-dev: 257
 - NMAN-dev: 49
 - Total : ~ 950 posts
- Confcalls:
 - Agenda published on the IPTC web site http://www.iptc.org/membersonly/schedule_main.php#confcall
 - (>=June): 2 times a week = 19 times (40 hours !)
 - Notes published on the NAR-dev list
- Multiple version of the WG documents


© IPTC – www.iptc.org 4



NAR status October 2005

- A set of documents: modeling + tech specs
- A set of XML Schema files (.xsd)
- Consultancy:
 - for XML Schema implementation (Jay Cousins, Ulf Wingstedt)
 - for metadata implementation (Mark Birbeck)
- Interaction with other communities:
 - W3C (RDF/A & XHTML, semantic web)
 - Dublin Core
- Therefore: NAR is close to a good framework, but still many details to decide on.

© IPTC – www.iptc.org 5



NAR Model documents

- Key approach: “What NAR provides”
- Expressed as verbal documentation + UML diagrams
- Introduction to:
 - A model for the creation of common components
 - A set of datatypes and common components
 - A conceptual model
 - A metadata framework
- And two conformance levels
 - ‘core’ and ‘power’

© IPTC – www.iptc.org 6

NAR Technical Spec documents

- Key approach: “How NAR works in detail”
- Expressed as a more formal verbal documentation + XML samples
- Detailed definition of:
 - A set of datatypes
 - A set of common components
 - A set of reusable items
 - The processing model associated with each component and item.

NAR Glossary document

- Supplements the Model and the Tech Spec documents as a third document
- Includes
 - Glossary
 - Acronyms
 - External references (to documents outside the NAR work)

NAR: timeline

- Autumn 2005:
 - IPTC approval of a NAR **experimental period**.
- Winter 2005
 - Work on NewsML2 and EventsML specifications
 - Debriefing of the test period.
- Spring 2006: IPTC approval of the final NAR documentation.
- Summer 2006: roll-out of NewsML2 and EventsML

NAR Experimental period

- Goals:
 - Allow IPTC members to get a grip on the NAR.
 - Test “real life” use cases vs the NAR
 - Bring back practical issues not spotted by the WP.
 - Help on the finalization of the NAR tech spec.

Statement of the NAR WP

- Request to launch a experimental phase.
- Parallel with new public drafts & XML Schema
- For to IPTC members ONLY:
 - because external experiments would cause problems with resources and with timeline
- Use the model and XML Schemas
 - Test feeds (single media and multi media)
 - Object oriented applications
- Start: 1 December
- Feed back is due on 15 February 2006.

Processing open issues

- Members have to send comments to the NAR-dev Yahoo list.
- Each editor of a specific document will maintain a record of formal open issues, inline or in an appendix.
- The NAR WP prioritizes the open issues, discussion on the list.
- Each editor modifies his document in order to have a proposal ready for final discussion.
- After agreement at a conf call each editor updates his document, and forwards it to the «global-document» editor.

Consulting on open issues

- The NAR WP will try to find «self-contained technical issues» for which an expert can provide consultancy.

== END OF NAR OVERVIEW ==

IPTC

© IPTC – www.iptc.org 13

NSTR presentation

- Public draft last July, few comments received.
- DRAFT-NAR_1.0-spec-NewsStructure-Model_15.pdf**
- Since then: model is stable, only refinements.
- Last evolution:
 - Update of UML diagrams
 - the model and the technical specs were split. Both will soon be included in the global NAR documents.
- DRAFT-NAR_1.0-spec-NSTR-Model_16.pdf**
- DRAFT-NAR_1.0-spec-NSTR-TechSpec_1.pdf**
- DRAFT-NAR_1.0-spec-NMAN-TechSpec_5.pdf**

IPTC

© IPTC – www.iptc.org 14

NSTR: NAR Items

- A set of simple object called Items.
- All managed the same way, all with the same sets of metadata.
- Packageltem**: grouping of all kinds of Items.
 - Can include NewsItems, TopicItems or other Packageltems.
- Topicitem**: knowledge -> representation of a concept, dedicated structure for each type.
 - Participates to the creation of an news related ontology
- NewsItem**: news -> a news report , any media type, any format.

IPTC

© IPTC – www.iptc.org 15

NSTR: Management properties

- Driven by a (to be) detailed processing model
- A set of properties, shared by all Items
 - Persistent, universally unique identifier
 - Version number
 - Type
 - Provider
 - Date first issued and date last modified
 - Status
 - etc.

IPTC

© IPTC – www.iptc.org 16

NSTR: Packageltem

Recursive Groups = Ordered, unordered or alternative sets of items; Inclusion of Items by reference, "hints" supported

```

classDiagram
    class Packageltem {
        role: interview
        role: sidebar
        role: background
    }
    class NewsItem {
        type: text
    }
    class Topicitem {
        type: person
    }
    class Packageltem2 {
        type: composite
    }
    Packageltem <|-- NewsItem
    Packageltem <|-- Topicitem
    Packageltem <|-- Packageltem2
  
```

IPTC

© IPTC – www.iptc.org 17

NSTR: Topicitem

- Management properties
- Links to other Items
- Descriptive metadata
- Rights metadata
- Publication metadata
- Signature metadata

IPTC

© IPTC – www.iptc.org 18

NSTR: NewsItem

- Management properties
- Links to other items
- Descriptive metadata
- Rights metadata
- Publication metadata
- Signature metadata

NewsItem

Content

Rendition (ex: thumbnail)
Content characteristics

Rendition (ex: preview)
Content characteristics

Rendition (ex: high definition)
Original files
Content characteristics

Content: inclusion by value or by reference

© IPTC – www.iptc.org 19

NSTR: Conformance levels

- At least two levels of complexity
 - “core” profile
 - “power” profile
- Provision for provider defined extensions
- Some modules of the framework belong to the “power” profile
 - Ex. rights, signature, partial update.
- The “core” profile is as easy to learn as RSS or Atom... but do more from the start.
- The “power” profile offers top level features.

© IPTC – www.iptc.org 20

NSTR: Exchange

- An **optional** exchange message optimized for push replication.
- **NewsMessage**: can transport any kind of Item, individually or in packages

© IPTC – www.iptc.org 21

NSTR: Links

- Links between items
 - A news item (e.g. a text) can be associated with another news item (e.g. pictures)
 - A Person item can be linked to specific news items about the person (i.e. occurrences)
- These are “navigation” links between news objects.
- + extended to links to any other resource (on the Web)

© IPTC – www.iptc.org 22

NSTR: Relationships btw concepts

- Named relationships between concepts
 - Events (the concept) can be associated with other events, people with organizations etc...
 - Subjects can be associated in thesauri.
- These are semantic relationships.
- RDF: these are “triples” (subject, predicate, object)

© IPTC – www.iptc.org 23

NSTR: Semantic News

Has participant

Is member of

Event

Person

Organis

NewsItem

NewsItem

NewsItem

Report about an event

Interview of a person

Report about an organisation

© IPTC – www.iptc.org 24

NSTR: How to use the model

- For applying the NAR to a specific content related news exchange standard this standard's WG has to consider:
 - Is the content news?
 - Assess structure and processing of NewsItem
 - Reuse existing or create a new content class of NewsItem
 - Is the content knowledge?
 - Assess structure and processing of TopicItem
 - Reuse existing or create a new concept type of TopicItem
 - Is the content something different?
 - Create a new item class by derivation from AnyItem
 - E.g.: AssignmentItem (EventsML)

Example: EventsML

- Process:
 - Specify the event component (= “the content”, information about the event) in coordination with the CoCo WG.
 - Model the coverage item and assignment item: what content? Which relationships?
 - Create your items based on the provided schemas.

NSTR open issues

- Open issues
 - Item identifiers: single URN as specified by RFC3085 vs a generic GUID plus a version identifier.
 - “Content class” vs N MDF “concept type”
 - Position of the content Characteristics in the structure
 - Expression of usage rights associated only with a specific single content component
 - Details of the topic header (specific metadata, thesauri, semantic networks)

NAR XML implementation

- Consultancy provided by Rivcom/CNet
- Remember: 1st part – Implementation Guidelines – finally approved in May 2005.
- Goal: create a set of XML Schema files
 - a/ delivery of [requirements](#) to the consultants
 - b/ first [delivery](#) of a draft XML Schema
 - c/ IPTC made [comments](#), sent to the consultants
 - d/ consultants provided a new [deliverable](#)
- Three iterations -> current draft is 0.3

XML Schema presentation

- Using XML Spy.
- Framework-0.3.xsd
- PackageItem-0.3.xsd
- TopicItem-0.3.xsd
- NewsItem-0.3.xsd
- NewsMessage-0.3.xsd
- Associated samples