



# IPTC Mirror

## Putting the NAR to Use

**Development of the NewsML 2 Architecture (NAR) moves into a new stage with the second experimental phase - EP#2 - under way. Main aim of this phase is to investigate the practical aspects of building content standards using the new architecture.**

The first experimental phase (EP#1) was intended to let IPTC members develop a better understanding of the NewsML2 Architecture (NAR) and provide feedback to help finalise the NAR Technical Specification.

Results from EP#1 highlighted a number of areas where changes would be appropriate, while development of the NAR continued during EP#1. An updated Model specification and XML Schema are now available for the second Experimental Phase 2 (EP#2).

### Next stage

Experimental Phase 2 (EP#2) takes the development programme on to the next stage. The aim is to investigate how well the NAR meets its underlying aim of providing a generic model for exchanging all kinds of newsworthy information (this model will be the framework for a future family of IPTC news exchange standards).

### Content standards

As part of this investigation the Working Groups dealing with general news markup, EventsML and SportsML have been asked to start developing their NAR based content standards.

In addition all IPTC members -

and parties invited by IPTC members who are interested into the NewsML 2 Architecture development - are encouraged to apply the current NAR draft to their own use cases.

Starting in early May 2006, EP#2 will run until the end of August 2006. At the end of the test period reports and requests for changes should be sent to the IPTC office ([office@iptc.org](mailto:office@iptc.org)).

This feedback will be reviewed by the NAR development group, along with - continuing - development work which will have been carried out while EP#2 was in progress. Conclusions will then be available for consideration at the IPTC 2006 Autumn Meeting (16 to 18 October).

### Test package

As with EP#1 an extensive test package is available for download ([http://iptc.org/std-dev/NAR/IPTC-NAR-EP2Packg\\_2.zip](http://iptc.org/std-dev/NAR/IPTC-NAR-EP2Packg_2.zip)). This package includes the following items:

- Document "About the Experimental Phase2".
- Model specification of the NAR in three parts:
  - Introduction to the Model;
  - Core Model specification (v 2);
  - Power Extension specification (v2).

### Welcome to new IPTC Members since March 2006

**BBC Scotland**, United Kingdom  
<http://www.bbc.co.uk/scotland>

**Korea Press Foundation**, Korea  
<http://www.kpf.or.kr>

**Mecom**, Germany  
<http://www.mecom.de>

**Profium Oy**, Finland  
<http://www.profium.com>

**Tera Digital Publishing**, Italy  
<http://www.teradp.com>

- Implementation of the Technical Specifications in W3C XML Schema files
  - Framework-08.xsd
  - NewsItem-08.xsd
  - TopicItem-0.8.xsd
  - NewsMessage-08.xsd
 (XML Schema documentation files are also available as HTML files in the sub directory XMLSchema-doc).
- Catalog file with URIs and recommended aliases for IPTC maintained metadata code schemes
- Draft IPTC NewsCodes required for NAR functionality. In addition there are:

## Summary

### NewsML 2 Architecture Working Party

NAR Experimental Phase 2 starts - **Page 1**. Test package available for download - **Page 1**. NAR development continues steadily, taking in results of the EP#1 tests - **Page 2**. I18N attributes - **Page 2**.

### News Content Working Party

EventsML development starts new phase using the NAR - **Page 3**.

New IPTC Members - **Page 1**.

PLUS initiative to establish a universal picture licensing system - **Page 2**.

NewsML in Italy - **Page 3**.

Ifra report on image processing using IPTC and EXIF data - **Page 3**.

Metadata in Broadcasting - **Page 4**.

The IPTC Mirror has hyperlinks for **web addresses** and for **page references**.

- a Glossary.
- And two files to contain examples and contributions from users of the NAR.

The initial EP#2 test package does not include the Technical Specification, which should be available during July 2006.

### Revisions

It should be noted that early EP#2 efforts identified a number of points that needed attention. These have been dealt with, with revised XML Schema and documentation being produced.

The new versions are included in the test package now available for download.

Users who have already downloaded the test package should check that they have the latest version.

Comments and contributions are welcome on the public "newsml-2" Yahoo group (<http://groups.yahoo.com/group/newsml-2>).

IPTC members can also take part in NAR development discussions by joining the internal group (<http://groups.yahoo.com/group/iptc-news-architecture-dev>).

*Anyone taking part in EP#2 (and in IPTC standards development in general) is reminded that any contributions are assumed to be provided under the IPTC Intellectual Property Policy (IPP) -*

*([http://www.iptc.org/download/public/IPTC-IntellectualProperty-Policy\\_2006.2.pdf](http://www.iptc.org/download/public/IPTC-IntellectualProperty-Policy_2006.2.pdf)).*

### NAR Development

Development of the NewsML 2 Architecture continued during the first experimental phase, while results from EP#1 raised a number of issues that have now been dealt with.

In addition to continuing discussion group and teleconference activities core members of the NAR working group were able to hold a full-day session in Vancouver (immediately following the Spring Meetings), with a further two-day meeting being held in Paris in mid-May.

Discussions on integrating the NAR metadata with the Semantic Web have continued, along with discussions on a rights metadata structure.

### I18N attributes

I18N is an industry standard abbreviation for internationalization (adopted because there are 18 letters between the 'I' and the 'N' in Internationalization).

Where appropriate I18N attributes have been added in the NAR.

Two attributes are used: **lang** specifies the language of text (according to the ISO 3066 standard or its successor).

**dir** specifies the directionality of text - left-to-right ("ltr", the default) or right-to-left ("rtl"). Characters in Unicode are assigned a directionality, left-to-right or right-to-left, to allow the text to be rendered properly.

Main developments since EP#1 - and forming part of the EP#2 package - include splitting the Model to provide a clear separation between

## Plus Picture Licensing

**An outline of the aims and activities of PLUS (Picture Licensing Universal System) was provided to delegates at the Spring Meeting by Jeff Sedlik, President and CEO of the PUS Coalition.**

This is described as being non-profit, multi-industry, and world-wide organisation with a narrowly focused mission to "Simplify and Facilitate Image Licensing". Membership consists of picture licensors and licensees, such as photographers, stock agencies, designers, publishers, along with software developers, legal representatives, researchers and manufacturers.

### Terminology

Jeff went on to explain that the problem with picture licensing was that there were no standards for terminology and definitions of terms, and no standardised licence structure. This meant that users saw complexity and risk - with these perceptions affecting buying behaviour.

The approach taken to address this problem was to form the PLUS coalition and start by generating a language of image licensing terms and standard definitions. This has been done and the resulting glossary of some 1500 terms is available - for free use - on [www.useplus.org](http://www.useplus.org). The glossary is also being published in book form.

Next step is to produce a standard media structure which will identify international media categories, organised by type, and with standard

billing codes. When complete this will be published as a Media Matrix with a Media Selector tool. Final stage will be to take the elements used to describe licenses and put them together in a universal Licence Format, which will be machine-readable and trackable.

### Complimentary

Jeff Sedlik said that he saw IPTC and PLUS as being complementary and that he would like to work with IPTC to ensure compatibility and provide the maximum benefits to users, and IPTC Managing Director Michael Steidl is a member of the PLUS Advisory Council.

*Jeff Sedlik explains the thinking behind PLUS.*



the Core and Power profiles.

### Namespaces

One area of specific concern during EP#2 was the use of separate namespaces for different items, as they were found to be difficult to handle. This has been dealt with by having all the main items merged into a single namespace. However, separate namespaces will still be used where required - as with the signature component.

### Metadata

Another area of concern was the strict ordering of metadata and at the "Power" level there are no longer any predefined metadata structures.

Provision has been made for the inclusion of GRDDL attributes. GRDDL is a mechanism for Gleaning Resource Descriptions from Dialects of Languages - or for getting RDF data out of XML and XHTML documents using explicitly associated transformations (typically represented in XSLT).

In addition the NewsItem, TopicItem and PackageItem are now almost completely implemented, and the set of Common Components have been extended with aggregate Common Components for persons, organisations (including companies), geopolitical areas and points of interest.

### EventsML

One of the first planned content standards based on the NAR is EventsML, with work on this standard having been held back while the NAR was produced.

With EP#2 under way, EventsML development has also moved into a new phase, starting with a conference call at the end of May.

### Requirements

A first step is to compare the earlier EventsML requirements (and draft schema suggestions) to the EP#2 version of the NAR and establish what features are specific to EventsML, and what can be taken from the NAR. For example it has to be decided if it would be appropriate to use the NAR TopicItem to describe events, or if it would be better to develop a specific EventItem (which would be based on the NAR AnyItem).

Similarly, consideration has to be given to the need for a specific AssignmentItem.

### Date considerations

One area that has to be dealt with is that of dates, with the NAR Working Party having specifically requested feedback from the EventsML WG.

There is a need to deal with partial dates, uncertain or approximate dates, date ranges (such as the start and end of an event), recurring events (for example every first Monday in a month), historical events (where anniversaries become events themselves), and holidays and festivals (which may be on fixed dates or on different dates in different years).

### Participation

Work on EventsML will be carried out using the established combination of a dedicated discussion group and conference calls, along with sessions at the regular IPTC

Meetings.

Members wishing to take part in this process should join the internal IPTC EventsML development group - <http://groups.yahoo.com/group/ipetc-eventsml-dev>.

## NewsML in Italy

The Italian Newspaper Publishers Federation - FIEG (Federazione Italiana Editori Giornali) are investigating the possibility of using NewsML 1 as the common news exchange format for the feeds of the major Italian news agencies. FIEG is also the body governing the current news exchange format "FIEG 81" - which is very similar to IPTC7901.

A preliminary meeting to consider use of NewsML 1 was held in Rome during April and IPTC Managing Director Michael Steidl was invited to give a presentation on NewsML 1, the NITF and the NewsCodes.

This initiative is a joint effort of all major Italian news agencies: ANSA ([www.ansa.it](http://www.ansa.it)), Adn Kronos ([www.adnkronos.it](http://www.adnkronos.it)) and AGI (Agenzia Italia - [www.agi.it](http://www.agi.it) - [www.agenziaitalia.it/italian-news.shtml](http://www.agenziaitalia.it/italian-news.shtml)) along with TmNews APcom ([www.apcom.it](http://www.apcom.it)).

## Ifra image processing report

Ifra have published a special report "Automatic image processing of EXIF-JPEG news photos" which considers ways of improving the quality and speed of picture reproduction.

It points out that the EXIF data header and the IPTC data header are already contained in JPEG picture files and can be used to improve workflow.

Although the IPTC header data is well known and widely used (with its application being simplified by development of the IPTC Core for XMP - [www.iptc4xmp.org](http://www.iptc4xmp.org)) the value of EXIF data is less widely appreciated. This data is captured when the photograph is taken (with a digital camera) and includes information on the camera

and the settings used, which can be used in the automation of image processing.

The report explains that to take advantage of both the IPTC and the EXIF metadata, newspapers and magazines need to have compatible software to access them. This includes picture browsers and picture desks, picture processing software, production systems and archiving systems.

At the moment EXIF metadata is so undervalued that many news agencies and picture sources currently remove the data so that the image file conforms to an older JPEG standard, but this approach limits the development of modern picture workflows.

However, software such as Adobe Photoshop and the Apple and Microsoft file management systems are already designed to read and use IPTC and EXIF metadata.

Ifra Special Reports are available - under different conditions - to both Ifra members and non-members - see [www.ifra.com](http://www.ifra.com).

# Metadata in Broadcasting

**Speaking at the Spring Meeting, Jean-Pierre Evain of the EBU Technical Department took an informative and challenging look at the role of metadata in broadcasting, and the possible application of IPTC standards.**



Jean-Pierre Evain

The European Broadcasting Union (EBU) is the largest professional association of national broadcasters in the world. Within the Union there is a lot of co-operation on technical issues along with co-production of content and the Eurovision network

There has been metadata activity in the EBU for the past 10 to 15 years, but now its value has become more

recognised. Reasons for this include its importance for digital asset management, the way that management and sharing of accurate structured information is a key to success, and the fact that metadata is a tool to handle future challenges, such as those posed by personal digital recorders.

## Activities

Within the EBU an important mission is to share information, and metadata activities include: P/MAG (Metadata Advisory Group); EBU Digital Strategy Group's Archive group; World Broadcasting Union's ISOG (International Satellite Operations Group); Information and Statistics Group (ESCORT); and News exchange (Eurovision).

In addition to existing standards there are solutions developed by EBU members, and developments within the industry.

Another aspect is defining solutions and influencing standards development with extensive involvement in external activities such as SMPTE. (Society of Motion Picture Television Engineers), MFX (Material eXchange Format), TV-Anytime, and now with IPTC!

## Data exchange

There is a strong focus on data exchange with a range of different formats in use. Within broadcast facilities the larger organisations tend to develop in-house solutions, while smaller broadcasters buy turnkey solutions. This provides a justification for common exchange formats

The EBU P/META is a scheme for metadata exchange with a basic vocabulary to describe

content and advanced structures for programme and news exchange. It includes controlled terms (harmonised with TV-Anytime and ESCORT) and there is a XML representation. This scheme is under active development.

## Eurovision

The Eurovision Network is one of the largest networks collecting news for broadcasters with offices in Washington, New York, Singapore, Beijing and Moscow. It also acquires sports rights - currently it has Olympic rights until 2012 (including rights for broadcasting, internet and mobile delivery).

At present Eurovision is using a proprietary metadata format.

## Involvement with IPTC

Turning to EBU participation in IPTC activities, Jean-Pierre said that there was a primary interest in NewsML 2 and was considering the possibility of adopting it. Some profiling and adoption of EBU extensions (in NewsML 2) would be helpful in this direction, as would a mapping between NewsML 2 and the EBU content structure.

It also seems possible that it would be appropriate to make use of SportsML. In this context the EBU would be willing to take part in a joint effort (with IPTC) to lobby the CIO/IOC (International Olympic Committee) in this direction.

An important incentive for EBU members would be the adoption of IPTC standards by the Eurovision Network and this would be helped by a clear commitment from news agencies, and from the CIO.

## Business to consumer metadata

A new challenge in the application of metadata is in the business to consumer and there is already a solution for electronic programme guides - TV-Anytime. Specifications for TV-Anytime have been published, the standard has been adopted by DVB (Digital Video Broadcasting Project) and the mobile electronic programme guide is based on the standard.

## Common solutions

In conclusion Jean-Pierre Evain considered the chances of success for common metadata solutions. He felt that this was yet another challenge - in all cases the issue was to agree on common information and its representation.

Unfortunately common representation formats can still allow for different representations of the same information. And often the metadata "gurus" think that their representation of information is the only viable solution!