



Fast Track for New IPTC 2000 Standard

Main aim of the Autumn 1999 Meeting was to start work on development of a new-generation Interchange Standard.

The importance of this was recognised by the high attendance, with over 30 delegates taking part. Intensive activity - in both the formal sessions and in informal groups - resulted in a highly successful outcome.

The decision to freeze development of the IIM (Information Interchange Model) and start work on a new-generation Interchange Standard was taken at the 1999 Annual General Meeting in Sydney. In keeping with this aim the Autumn Meeting (held in Amsterdam) started with a Standards Committee session, with the initial aim being to set up a suitable working structure. Summarising the reasons for the AGM decision, the new Chairman of the Standards Committee (John Iobst, NAA) said that over the past two years there had been a series of discussions on the possibility of re-engineering the IIM to meet new demands, with the final decision being to start with a clean slate.

One of the factors to be considered is that there might be advantages in allowing the metadata to evolve more rapidly than the standard itself. For example, the Subject Code System is developing very quickly - and the use of separate documents (tied to the standard, but not part of it) would allow for rapid updates. The existing IIM, and the DNPR (Digital Newsphoto Parameter Record), would be most directly affected by the changes, while it seemed likely that the Category Code and Special Text activity would continue more as less as before.

As a starting point for the new work, members were given a presentation by

Tony Allday and Jo Rabin of work that Reuters had carried out with the aim of achieving an evolutionary approach to news standards. Explaining their approach, Tony Allday said that while Reuters make extensive use of the IIM, they have not implemented much of the recent Working Party activity. This was because they have effectively ceased development of their IIM systems, though the Subject Code System was of interest.

He believed that the technical and commercial landscape has changed dramatically and though IPTC is alive and well, there is a need to ensure that the standards development process can move fast enough to respond to the changes in the market. The present system with three main working meetings a year was probably not enough - there was a need for more activity from ad-hoc groups, more use of Email and teleconferences, and possibly for some outside effort (from consultants).

XML Key

It looks as if XML related standards would be the key - and not just in the news space - with the potential to accelerate trade and commerce generally, reshaping industries and displacing incumbents. Metadata was another key element, adding considerable value to the basic information - in some cases the metadata could be considered as

Key Points

- Work started on IPTC 2000 - the new-generation interchange standard for the world's news industries.
- Revised working arrangements agreed - three new Working Parties set up.
- Challenging development schedule set for the new standard, with extensive use of electronic working.
- Newsphoto Working Party wound up. Digital Newsphoto Parameter Guideline 2 approved.
- Subject Code List Version 3 released - major extension for detailed Sports coverage in hand.
- Further progress reported in application of the NITF.



Jo Rabin outlined Reuters' thoughts on a new generation standard.

being worth more than the information itself.

It had taken a long time to get going, but Reuters were now committed to XML in a lot of areas. However, they did not consider that the NITF (the existing IPTC standard using XML) offered the flexibility they needed and so was not a complete answer. Business needs had forced Reuters to produce an experimental DTD (Document Type Definition) and work with XML in the real-world environment. To ensure acceptance any new standard produced by IPTC would need to be open, well publicised, and implemented - there was no future in developing standards without implementation.

A paper outlining a Reuters proposal for a 'media independent structural framework for representation of news' was presented by Jo Rabin, who started by saying that he favoured an evolutionary approach - with new standards developing from previous work. But now, the development process needed to be faster and allow for more frequent changes. So far as the IPTC role was concerned this might involve looking at the membership, the way standards were formulated, and the areas chosen for standards work.

Involvement

For a news industry standard the involvement of newspapers (as well as news agencies) was important, along with the participation of system vendors. Other news industry bodies (covering media such as radio, TV and magazines) should also be involved - the new generation standards will be media independent - as should complementary industries dealing with areas such as classified advertising and the financial markets. The relationship with other standards bodies - such as W3C (World Wide Web Consortium), and OASIS (Organisation for the Advancement of Struc-

tured Information Standards) also needed consideration, as IPTC should seek to influence work in related areas.

There was a very rapid flow of technologies - all XML based - which had to be responded to and the question was how to do this as quickly as possible. He believed that IPTC members were enthusiastic, committed, and aware of the technology - so one way of using their knowledge was for IPTC to specify the requirements for new standards. Consultants could then be used to prepare draft standards which would be ratified by the IPTC membership and released for industry use - possibly using OASIS as a repository.

Jo Rabin went on to say that the prototype standard - with the working name NewsML - described in his paper could be considered as an XML version of the IIM, but one that does much more. It was intended to be an end-to-end format for use in news production, storage and delivery. There would be a separation of the structure from the content encoding and, so far as possible, a separation of the structure from the metadata, while the metadata should apply irrespective of the media type. A set of basic requirements for a new standard were outlined in the paper - see the panel below.

Accelerated development

Concluding, Joe Rabin said that he envisaged a number of working groups: one to investigate the basic news container standard, another looking at a news content standard for text, and a third dealing with items such as the news content metadata. An accelerated development process was

called for, with broad involvement and, possibly, some form of outside assistance. Complementing this would be rapid, and real, implementation and publicity.

These presentations, taken in association with the work carried out at previous meetings, provided the basis for an extensive, and intensive, series of discussions. During the course of the Autumn meeting there were a total of five Standards Committee sessions (concentrating on the new standard), along with one for the Committee of the Whole Council which examined some of the more general implications for IPTC.

Working sessions were complemented by less formal gatherings and discussion groups, while there was also an extended Management Committee meeting. Views taken into account came from across the news industry - in addition to news agency representatives the meeting included delegates from newspapers, on-line and downstream services, and system vendors.

Reactions

Initial reactions to the Reuters presentations were favourable, with the general view being that the NewsML proposal would provide a good starting point for IPTC work - the concept of a new standard as an enhanced (XML) version of the IIM had been discussed and generally agreed on at the AGM. However, it was pointed out that it was important to remember that many users of IPTC standards still have services that are text based - some are only just starting to move on from the older standards like IPC 7901.

This means that the handling of legacy issues will need proper consideration. In gen-

Basic requirements for the proposed NewsML:

- Support the representation of electronic news entities - that is news items, parts of news items, collections of news items, relationships between news items, and metadata associated with news items.
- Be usable at all stages of the news production, storage and delivery process.
- Allow news items to consist of arbitrary mixtures of media types, languages and encodings.
- Be usable as a replacement for, or allow the transport of, all existing news formats.
- Support a number of different physical constructions of the same data.
- Support the development of news items over time.
- Be simply extensible and flexible.
- Allow for signature of metadata and story content.
- Not be unduly verbose.
- Use XML and other appropriate standards and recommendations.

Committee of the Whole Council

During the first discussions on the proposed interchange standard it became clear that some delegates were concerned about the more general points being raised about IPTC's organisational structure. These concerns covered both the scope of the proposals and the speed at which it appeared things were being pushed through. Time was needed for proper consideration and discussion of these points, and to allow this a special session of the Committee of the Whole Council was convened.

There was general recognition that new standards work cannot be considered in isolation, with new demands inevitably having an impact on the organisation itself. The achievements of IPTC have only been possible because of the good will and commitment of the members, and there is a continuing need to show that the investment made by members in IPTC's activities produces a real return.

Similarly, when major changes are being considered delegates may need time to consult within their member organisations to see how the changes could impact on their activities. Members were also reminded that if any major changes to IPTC's aims and structure are considered necessary, they have to be presented formally, with due notice, for consideration at the Annual General Meeting (or at a specially called Extraordinary General Meeting). Unfortunately, these factors tend to make it difficult for the organisation to react quickly, while it would be also be difficult to try and speed things up by adopting a more intensive meeting schedule than the current three per year.

However, delegates agreed that the strength of the membership, and its accumulated experience, means that IPTC remains the most appropriate body to undertake the work of producing standards for the news industry. The main problem is that if IPTC does not act, and act rapidly, other organisations are likely to move in and try to fill the perceived need for new news standards. This occurred with the NLM (News Markup Language) initiative, though in this case prompt action resulted in the NITF absorbing the initiative and being confirmed as the standard language for news markup. Similarly commercial pressures may result in individual members finding it necessary to go their own way.

Because of this, attention was concentrated on the best way to proceed, with the intentions of positioning IPTC as the primary body carrying out work for the news industry, and of ensuring the continuing support of both the membership and

the industry (without such support there is no future in setting aims).

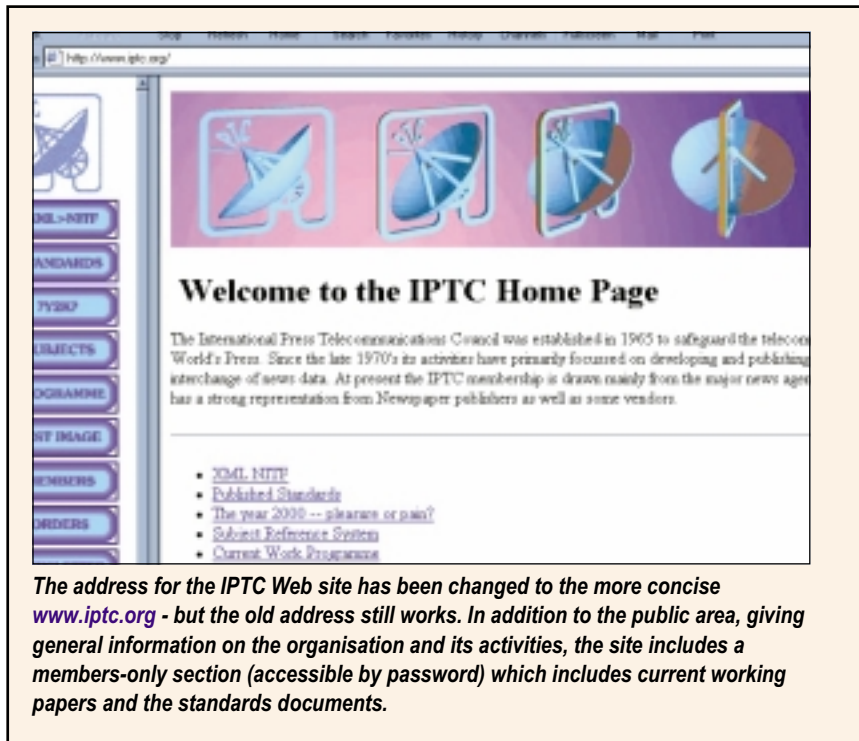
There were some feelings that the full title 'International Press Telecommunications Council' no longer properly reflects the activities of the organisation, and may tend to put off potential members (a similar problem has been encountered in the USA with the NAA Wire Service Committee). Against this, "IPTC" is well-known and respected in the news industry and a lot of work would be needed to achieve the same level of recognition with a new name. Accordingly, the favoured approach is to continue using the initials "IPTC" but with less emphasis on the full version of the name. There may also be a need for a new Mission Statement for the organisation.

Improving communications to the outside world was seen as essential, with target audiences including the newspaper industry, broadcasters, on-line publications and the broader publications industry. Additional efforts were needed to achieve an increase in the involvement of these industries in IPTC's work. Similarly more feedback was needed on the activities of other relevant standards bodies, such as W3C, OASIS, EBU/SMPTE, and related governmental initiatives, while consideration should also be given to the possibility of direct IPTC participation in such activities. To help meet these needs a new Public Relations Committee was subsequently established, with the specific aim of promoting the achievements and activities of IPTC and encouraging broader participation (which has always been a goal). Tony Allday (Reuters) has agreed to take on the Chair of this new group.

Delegates considered that there was a need to review activities on a regular basis to ensure that they remain relevant to industry needs. As far as possible, specific targets and schedules were needed for the technical activities, with work statements being kept deliberately short to focus attention. Faster progress could be made by increased use of Email and conference calls, with the meetings being used to review progress and set new targets.

Overall, the session proved particularly valuable in focusing attention on the broader aspects of IPTC's role in standards development. Dealing with things in this way also made it possible for the Standards Committee to concentrate on the technical details of the new work programme - which is its proper function. Many of the points raised were taken into account in setting up the work programme for the new IPTC 2000 standard.





organisation was particularly valuable. A related consideration was the amount of influence that IPTC (or IPTC members) could have on the activities of other standards bodies such as W3C to help ensure developments in XML, and other related areas, would take account of the particular needs of the news industry.

An area that attracted a lot of attention was the relationship of the NITF to the proposed new standard, along with the continuing development of the NITF itself. Since NITF is now out in the industry, and gaining increasing acceptance, members did not want to let work on a new standard have the effect of holding back the introduction of NITF services.

Text format

Some delegates suggested that there could be advantages in having a simpler text format, and this may be incorporated in the new standard. However, the NITF itself will be little changed, continuing as a versatile text format alongside the new standard. If there is a practical need for a simpler 'lightweight' version of the NITF (say to allow new users to come up to speed faster) this could be achieved by using specifically defined subset, ensuring compatibility the parent standard and allowing migration to the fuller version where required. There might also be advantages in adopting a more descriptive approach to explain exactly what is in the NITF, and why it is there. A separate Special Text Working Party session - see page 8 - provided members with an update on NITF developments.

Convergence

Since the Standards Committee session were spread over three days - being broken up by a series of presentations and sessions for the Special Text, Category Codes, and Newsphoto Working Parties - dele-

eral, it seems that the print industry - which is still a very important news media - is slow to adopt new technology, so it tends to be the system vendors that drive the introduction of new standards. Unfortunately this can result in incompatibility problems, giving another reason for IPTC to develop industry-wide standards.

Multimedia

Multimedia capability was considered a key requirement, with some users already looking to supply multimedia output - one of the drawbacks of the IIM is that it is essentially a mono-media standard. The ability to handle multiple objects - such as a story with two or three related pictures, or a series of reports on an evolving news event - was also essential.

Work already carried out under initiatives like the dpa Clipping project and the ANSA Multimedia projects would be a valuable resource in achieving this. Overall there was a feeling that the aim should be to produce the best possible interchange system, while keeping it easy to use and simple to implement. This might be achieved by a modular construction, which would also make it easier for users to meet specific business needs.

Attitudes towards the possibility of using external consultants were mixed. While there was an appreciation that this approach could lead to more rapid progress, there was concern that costs might be high. There was a significant level of XML expertise amongst IPTC members, while the international perspective of the

XML extensions

XML (eXtensible Markup Language), which is being used as the basis for the new IPTC 2000 standard, is evolving very rapidly, and care is needed to ensure that the new standard will be able to make effective use of the growing family of XML standards. Several types of technical report are published by the W3C (Worldwide Web Consortium): Notes are public records of ideas but do not represent a commitment by the W3C to pursue work related to the note; Working Drafts represent work in progress, with a commitment by W3C; Proposed Recommendations represent a consensus by the group that produced them, and have been submitted for review; and finally a W3C Recommendation indicates that a specification is stable, contributes to Web interoperability, and has been reviewed by the W3C membership, who favour its adoption by the industry.

The status of some of the standards relevant to the new IPTC work is as follows:

- XML 1.0 - released as a Recommendation in February 1998 (and now well proven).
- RDF Resource Description Framework - Recommendation for the RDF Model and Syntax, February 1999
- RDF Schemas - Proposed Recommendation, March 1999
- SMIL Synchronised Multimedia Language - Recommendation, June 1998
- XML Schema Part 1: Structures and Part 2: Datatypes - Revised Working Drafts, November 1999
- Xlink XML Linking Language - Working Draft July 1999
- Xpointer XML Pointer Language Working Draft July 1999

Further information is available on www.w3.org/XML

gates had time to refine their initial impression, study the proposals in more detail and informally talk over some of the implications. The result was a gradual convergence of thoughts, with the later sessions producing agreement on the best way to proceed and the establishment of a new work programme. This programme is designed to allow rapid development of a new-generation news standard, which has been given the working title **IPTC 2000**. This is seen as a management and containing framework that will carry news text along with other media - such as images, audio and video - which will be handled as specific objects created using established industry-specific standards.

Three main areas of interest were identified, with a new Working Group being set up for each area, and Chairmen appointed. These groups are: News Structure and management (Chairman Jo Rabin, Reuters); News Text (Chairman Alan Karben, Wall Street Journal Interactive Edition); and General Metadata (Chairman Stéphane Guérillot, Agence France Presse). Mission Statements to define the aims and activities of these groups were developed, along with a Statement for the project as a whole.

Intellectual Property

As anticipated, work will draw heavily on established intellectual property - in both the IIM and the NITF - but this will need to be extended and modified to meet the new requirements. A number of additional areas needing attention were identified during the extended discussions - such as News Management and Intellectual Property. Although the Subject Code System will form part of the general metadata, it was decided that its development will continue unchanged, under the existing Chairman (Kevin Roche, Dow Jones). A report on the Category Codes Working Party activities is given on page 7.

The need to get the new standard produced and into use rapidly means that, at least to begin with, it might not be possible to take advantage of the full potential offered by developments in the XML world, where the standards are themselves undergoing a rapid development. For example, the best approach would probably be to use an XML Schema to define the standard, but since Schemas are not yet finalised the first version of the standard may have to be based on a DTD (Document Type Definition). Similarly, it might be better to hold back on use of the Resource Descriptor Framework (RDF) and Namespaces.

Each of the Working groups has around ten members, as it was felt that the

Mission Statements

IPTC 2000

(Entire Project)

- **To develop an XML-based standard to represent and manage news throughout its lifecycle, including production, interchange, and consumer use.**

This project will take place under the Standards Committee and the work will be undertaken by three new working parties.

News Structure & Management

Working Party

Chairman: Jo Rabin

- **To develop an XML-based framework standard for structuring, relating and managing news objects and processes in a multimedia environment, drawing from IPTC published standards and other standards development.**

Including: News Management; Intellectual Property rights.

News Metadata

Working Party

Chairman: Stéphane Guérillot

- **To identify and define descriptive data, with associated structure and values, about news objects and their relationships.**

Including, as required throughout package: For instance (*Note: this is not part of the definition*); Header; News Management Data; Intellectual Property; Management Data; Publication Data; Subject Matter Data; Other Metadata; Body; Metadata; Media-specific Metadata; Media BLOB; News Text; Tables; Other BLOB.

News Text

Working Party

Chairman: Alan Karben

- **To produce XML-based components for structuring and marking news text, drawing from IPTC published standards and other standard development.**

Including: NITF, Other text, Tables, Special tables

concentrated effort possible with a small group would help ensure rapid progress. The intention is to carry out a much work as possible using Email, on-line discussion groups, and telephone conferences, along with Working Party sessions in between the main IPTC meetings. Given the general agreement on the need to move quickly a challenging schedule has been set. The electronic development process started immediately, with a first progress meeting planned to take place in London during November. A second development meeting would be in Miami during January, followed by a review of progress and further working sessions during the IPTC Spring Meeting (to be held in Nice during March 2000).

Newsphoto

A final session of the Newsphoto Digitisation Working Party took place during the Autumn 1999 Meeting, mainly to tidy up outstanding items. The main business was formal approval of Digital Newsphoto Parameter Record Guideline 2, which had been discussed at the 1999 Annual General Meeting and circulated for further comments. This Guideline provides recommendations for the practical implementation of colour management in the new agency environment, based on use of the colour management facilities in Adobe Photoshop 5.

No adverse comment, or proposals for

changes, had been received, so following a brief discussion the Guideline was approved for distribution, this was later formally confirmed by the Standards Committee.

Since there were no plans for further work (though the requirements for image handling will be considered during the IPTC 2000 development programme) the Working Party was formally wound up. Chairman Stéphane Guérillot thanked members for their participation and assistance on the Working Party, while Klaus Sprick expressed the members' thanks, both for Stéphane's efforts as Chairman and for the achievements of the Working Party over the years.

ANSA Multimedia Applications



Dr Angelo Marrara

A presentation by Dr Angelo Marrara, Research and Development Director of the Italian News Agency ANSA, described two of their current projects, which are based on the application of a combination of IPTC and open standards. These are the Multimedia News Browser and MIDA (a Multimedia Information Distributed Access System) both of which are designed as open systems. Standards being used include the IIM and the XML version of the NITF (from IPTC): the Internet standards DHTML (Dynamic Hypertext Markup Language), XSL (Extensible Style Language), RDF (Resource Description Framework) and Xlink (XML Linking Language); and HTTP (Hypertext Transfer Protocol) and Z39.50 for search and retrieval on IP networks.

Aims for the Multimedia News Browser are; 1) To receive News Text and Photographs in real time; 2) Search and retrieve on an XML NewsData repository (with NewsText and NewsPhoto); 3) Search and retrieve on the Web; and 4)

XML link handling. The intention is to provide a uniform approach to data handling at the application level. Photo metadata is handled in RDF with a DTD and the IIM envelope record is dealt with as an XML document (NewsText and NewsPhoto are also XML documents). The RDF and image data can be delivered separately or kept together.

The Multimedia News Browser uses HTML for display, and a demonstration by Dr Marrara showed how the browser could be used to search both text and images.

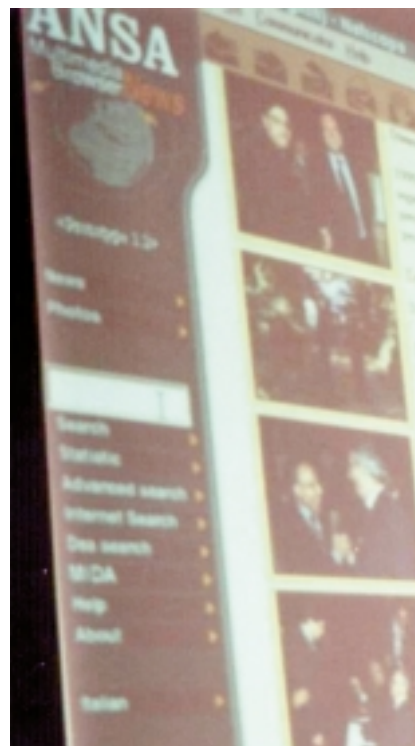
MIDA is designed to let users query a number of databases at the same time, and consists of a NewsData search profile based on the NITF; a distributed resource discovery system; and an accounting system. A generic query has to be used so the system can search more than one database at the same time, and to achieve this a new Dataset (based on the NITF) has been defined with the element descriptions corresponding to the 'Dublin Core'.

The accounting system is also XML based and is used to verify that the user is authorised to access the database (or databases) and to log the usage. This is achieved by combination of a User Profile Manager, Event Manager, and an Accounting DTD.

The MIDA business model takes account of the needs of a number of possible users. These include content providers who wish to resell their content through a distributed

environment; and newspapers, who could benefit from uniform access to News Agency data - which might be integrated with information from an in-house database. Similarly journalists would appreciate having a single tool to access a range of multimedia news data. Finally the system could be used for public access systems with a micropayment arrangement.

Planned developments include completion of the News Data Search Profile and the Accounting system, integration of NewsAudio and NewsVideo into the XML repository, and integration of the News Agencies Multilingual Categorisation System (NAMIC).



The ANSA Multimedia News Browser is designed to provide a uniform approach to data handling. The current version can be used to search both pictures and text, with extensions planned to handle Audio and Video.

Category Codes

A revised version of the Politics section had been produced by the Ad-Hoc group during a meeting in early September and was presented to the Category Codes Working Party. Their new list has twenty-three Subject Matter Names, all with definitions. In addition Subject Detail entries (again with definitions) have been included under three of the headings - Defence, Government, and Interior Policies. Agreement was given to publication of Version 3 of the Subject Code System, which incorporates a large number of other additions and amendments approved during previous meetings.

The Ad-Hoc group also reviewed the attribute definitions, with approval being given to their proposal to extend *Results & Listings* to become *Results, Listings & Statistics*, with the separate *Statistics*

Extract of proposed Subjection details for Athletics - Track and Field (15005000)

15005001	100m
15005002	200m
15005003	400m
15005004	800m
15005005	1000m
15005006	1500m
15005007	Mile
15005008	2000m

Johan Lindgren from the Swedish News Agency TT has developed a multi-lingual Subject Code Reference program which provides a simple way of looking up the terms, reference numbers and descriptions. The system also gives equivalent terms and translations for other language versions of the lists. Possible developments include adding the reference number for the code list, and a further window to give translations of the descriptions.

attribute being removed. Previously circulated proposals from the German special-interest group for a number of further attributes were then discussed and approved, so they could also be included in Version 3 of the list. The additional attributes are: *Synopsis* - Condensed version of a single news information; *Quote* - One or two sentence verbatim in direct quote; *Press-Digest* - Transmission of an editorial comment by another medium completely or in parts without significant journalistic changes; *Review* - A critique of a creative activity or service, for example of a book, a film, or a restaurant; and *Curtain Raiser* - Used when the object contains information about the staging and outcome of an immediately upcoming event.

Jean-François Richard (AFP) presented the results of a major effort to extend the Sports section to the Subject Detail level. His proposal includes several hundred new entries, generally based on the practices of the relevant governing bodies. For example, the Athletics details include all recognised IAAF (International Amateur Athletics Federation) events, while Boxing takes account of the many different federations and categories within the sport.

Specific attention has been paid to the treatment of named events, which are given a generic classification with the actual name being included as a keyword. This makes it easier to keep up with changes, such as those that occur when one sponsor is replaced by another, or the nature of a competition changes (for example the longstanding annual Five Nations rugby union competition changes to the Six Nations competition next year).

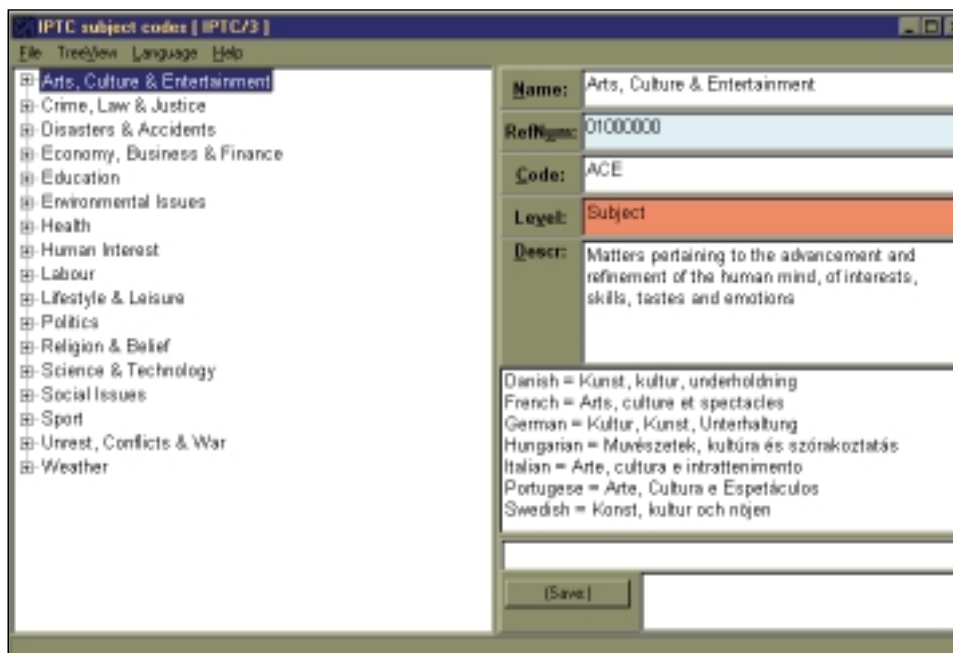
A comprehensive set of Qualifiers is also included in the proposal, to give a further level of qualification. Typical uses of the

Revised Politics Subject Names

11000000	Politics (general)
11001000	Defence
11002000	Diplomacy
11003000	Elections
11004000	Espionage & Intelligence
11005000	Foreign Aid
11006000	Government
11007000	Human Rights
11008000	Local authorities
11009000	Parliament
11010000	Parties
11011000	Refugees
11012000	Regional authorities
11013000	State Budget & Taxes
11014000	Treaties & International Organisations
11015000	Constitution
11016000	Interior Policies
11017000	Migration
11018000	Citizens Initiative & Recall
11019000	Referenda
11020000	Nuclear Policies

qualifier would be to give further information on a specific event (Male, Female, Doubles, Mixed Doubles, Team etc); age information (Junior, Senior, Under 18); and to manage specific stories that are applicable to any sport (such as doping, sponsorship, marketing).

The detailed proposals have been circulated with any comments and/or additions being asked for by the end of November, so a final version can be prepared for consideration. The aim is to achieve formal approval for the additions



(both the detail codes and the system of qualifiers) at the 2000 Spring meeting, so making it possible for members to bring the full Sports coding system into use for the 2000 Olympics.

Special Text

Members were updated on the proceedings of a session, held at AP in New York, which included a demonstration of the AP NITF test environment and server - if there is sufficient user demand, AP are now in a position to supply a NITF feed over their satellite box.

There have been a series of minor changes and additions to the NITF and an updated Version 1.3 of the DTD will be released in the near future. Details of any additional requirements would be welcome. One specific change was to change the definitions of the entity substitutions, this makes it possible to enforce future changes - to the Subject Code System, for example - at the application level rather than in the DTD itself.

During discussions it was pointed out that the NITF has to be accessible to three types of user, or prospective user: publishers (who may, or may not, have a technical understanding); technical staff on newspapers; and programmers who may have no news background, and so could find some of the tags confusing. To improve usability it may be necessary to undertake a full review of the tags and definitions, this could include expanding some of the definitions for added clarity.

Glenn Cruickshank (Tribune Solutions) provided some valuable feedback on NITF use. Around 2000 stories a day are being processed for a range of publications - The Salt Lake (Ut) Tribune; The Tacoma (Wa) News Tribune; Walla Walla (Wa) Union Bulletin; Crain Communications - Chicago (28 trade publications); Crain Communications - Detroit (8 trade Publications). The NewsView 2000 application has facilities for digital asset



The NITF now has its own Web Site - www.nitf.org - which acts as an information resource for interested parties. The site includes contact information and the DTD, which can be downloaded. Assistance from members in developing the site would be welcome - one specific need is for translations of the content into additional languages.

management, text archiving, conversion and distribution to content aggregators, and the creation of Web sites.

Custom filters are used to convert a range of inputs (including Atex, DTI, Ctext, Word and Cybergraphics) into NITF for use, with a further set of filters for outputs (HTML, Folio, Nexis VSF, MediaStream, National Federation of the Blind, Scipps). In general the standard is proving to be very robust, while many of the users are unaware that

they are using NITF. A few minor changes to the DTD were found necessary to accommodate specific needs (such as allowing multiple paragraphs in captions, and to add notations for archive use). The Subject Code system is also being used, again with minor changes for local applications. One area identified as needing further work is the Sports section, but, as noted in the Category Codes report, efforts are already being made here.

Mirror Publication

In order to provide fuller coverage of the new standards activities in Amsterdam the October and November issues of the Mirror were combined to give this edition. The normal publication schedule will resume with the December Issue - as usual there will not be a January issue, but the February 2000 edition is planned for distribution in late January.

Pressure of space meant that it was not possible to include details on a couple of the additional presentations given at the Autumn Meeting - the Sail Labs Multi-Lingual Catalogue, and the match-EDV CaptionWriter II - these will be covered in future issues.

Update

Latest papers issued

CAT 99/29	Guideline Oct 99
CWC 99/02	Autumn Minutes
IIMWP 99/06	AGM Minutes
MMWP 99/04	Spring Minutes
MRWP 99/03	AGM Agenda
NSM 99/03	NewsML Functions
NTX 99/01	TT-NITF History
NPDWP 99/04	Autumn Minutes
STA 99/11	NAMIC Overview
STXT 99/14	Autumn Minutes
TEC 99/03	Spring Minutes

Published by the International Press
Telecommunications Council
Royal Albert House, Sheet Street,
Windsor, Berkshire SL4 1BE
England
Managing Director: David Allen
Editor: Hugh Johnstone
TEL: +44(0)1753 705051
Fax: +44(0)1753 831541
Email: m_director_iptc@dial.pipex.com
editor_iptc@dial.pipex.com
Web Page: www.iptc.org

IPTC Documents

**IPTC-NAA Information Interchange Model
and
IPTC-NAA Digital Newsphoto
Parameter Record**

**IPTC Recommended Message Format
7901
News Industry Text Format**

IPTC Satellite Systems for Press Use