Public Broadcasting Metadata Dictionary Project
User Requirements Committee Report
September 2002

Background

As determined at the first meeting of the Metadata Working Group in April 2002, the User Requirements Committee was formed as a subset of the Working Group, and began its work in mid-July 2002. The Committee is comprised of the following members of the Working Group:

- Public Broadcasting Service (PBS) – Bea Morse
- OnCourse – Robin Mudge
- KCTS – Tim Olson
- Public Radio International (PRI) – Richard Ruotolo
- Wisconsin Public Television (WPT) – James Steinbach
- Consultant – Steven Vedro
- WPSX – Tracy Vosburgh

Goal

As referenced in the Project's April 26 Facilitator's Memo, the User Requirements Committee was formed **t**o ascertain and represent public broadcasting user needs; i.e., how constituencies will use public broadcasting data and content. The Committee's work was underscored by the agreed-upon premise that the public broadcasting metadata dictionary has to reflect the various constituencies who will use it.

The User Requirements Committee's work was undertaken with the goal of providing its findings to the Dictionary Review Committee in standardized use case formats, in order to maximize the usability of the information gathered.

Process

The User Requirements Committee was presented with "strawman" lists of data sources, and internal and external constituents. Each member of the Committee was asked to interview one or several new Working Group members regarding their generation and use of rich media data. The Committee was given a list of interview questions for each interview, and each Committee member was asked to add specific questions relating to each interviewee's area of work/discipline.

The Committee was presented with a sample use case format, to facilitate the comparison and summary of the information gathered. The information revealed during the interviews was in some cases challenging to express in a use case format; in those cases, Committee members were asked not to sacrifice the gathering of information for the format in which it would be represented. The

results of the interviews generated 18 documents submitted by the User Requirements Committee to date, and several more are expected as additional Working Group members are added and interviewed.

Tim Olson/KCTS prepared the following summary of those materials.

Metadata Use Case Summary - Issues & Recommendations

Program Level vs. Clip Level Data
Program Level
- Public broadcasting tradition
- Primary users: programmers, traffic systems, video sales

Clip Level
- The future of public broadcasting?
- Primary users: producers, educators, footage sales and broadband
- New business models: OnCourse, American Field Guide, VOD…
- Requires costly, labor intensive, indexing

Rights Management
- Key to new business models
- Program and clip level

Small Mandatory Core Set with Voluntary Extensions
- 90% of all metadata is never used
- Producers do not and will not fill out numerous fields

Interactive TV Data Needs
- PTV data must be able to pass through existing standards, specifically existing transport and application standards (ATSC, OCAP, DAYS, PSIP, DVB)

MPEG-7
Consider using MPEG-7 as a PTV metadata model because
- Addresses many different applications in many different environments
- Flexible and extensible framework
- Does not define a monolithic system for content description, but a set of methods and tools
- Works with other leading standards including TV Anytime, Dublin Core, SMPTE, EBU P/Meta.
- Uses XML

XML
- Provides great flexibility in transcoding imperfectly matched metadata sets

NPR Library Controlled Vocabularies
- A resource if they are willing to share

Fields Mentioned in Use Cases

- Unique ID   (doesn't currently exist)
- NOLA code
- Title   (series, episode & historical)
- Episode number
- Number of episodes in series
- Length
- Distributor
- Rights   (program level, clip level)
- Cost to the station   (APS only?)
- Rating   (TVG,TV14, TVMA, …)
- Flag   (for violence, language or other)
- Technical   (Captions, Stereo, SAP)
- Ancillary materials
- Product offers
- URL   (series & episode)
- Airdate   (local, national, other)
- Underwriters

- Contact names
- Footage log   (producers only)

- Still photo
- Description   (series, episode, long, short, guide)
- Keyword/Topic   (Easter, Bob Hope, animals, religion, purple butterfly)
- Genre
- Geographical area

- Instructional level/grade level
- Subject
- National Education Standards
- State Education Standards

- Video location   (on Internet, multiple resolution versions)
- Price for download   (future?)

      ITV Specific Fields
- Time to live
- User Access control
- Kill Authorization
- Source
- Encryption key
- Certificate checking