Metadata Dictionary for Public Broadcasting Phase 3 Problem/Value Statement – Report from Task Team B

In order to respond to the "Problem/Value Statement" task, Team B answered a series of questions posed by CPB and WGBH project management:

What specific existing or anticipated problem will the Public Broadcasting Metadata Dictionary (PBMD) address?

First, and in general, we agreed with CPB's internal description of the project:

"As public broadcasting endeavors to maintain our value and values, we know we must do three things: develop and deliver content across multiple platforms, heighten our content and service partnerships, and develop more efficient methods to conduct our work. Our highly-valued content (video clips, audio, scripts, etc.) are digital assets that can be exchanged and distributed sometimes as easily as e-mail attachments. Our ability to network – to exchange this content – within and across our institutions and those of our educational and community partners has never been greater. We have been afforded a tremendous opportunity for service and for efficiency.

Metadata is fundamental to the exchange of this content. In a broadcasting context, metadata includes familiar terms such as "producer," "description", "date of broadcast," "file format," "rights holder," etc. Metadata exists on its own, or is digitally linked to a particular piece of content as associated data.

The Public Broadcasting Metadata Dictionary creates a single protocol for describing all public broadcasting content, both radio and television. The Dictionary will be a "touchstone," a single, streamlined standard to which other database structures, including that of PBS' "Orion" project, and other asset/content management systems will be "mapped." It can also be used as a guide for the onset of an archival or asset management process at an individual station or institution."

Basically, the creative/operational problem that the PBMD will solve is "You can't use it if you can't find it." We believe that PTV funds for both operations and capital investments are likely to shrink during the next few years, while the expectations of our constituents (including our funders) will grow! If we can't sensibly organize, reuse and re-purpose our assets, we will find ourselves delivering less and less product, and having less and less relevance to our audiences.

Certainly, the design of the new centralized interconnection system assumes a common metadata standard for PBS and stations, at least for full-length program content.

If the problem is anticipated rather than current, what assumptions have been made about a future course of events?

- We expect rapid deployment of the EIOP (enhanced Interconnection and Optimization Project) or similar architecture by PBS.
- We also assume that public television and radio stations are steadily moving toward all-digital production and distribution systems, in which metadata can

- and should be an integral part (even, at times, actually imbedded in the content).
- Finally, we anticipate continuing financial pressure to increase operating and production efficiencies.

How, specifically, might the PBMD solve the problem?

We believe that by "mapping" their existing database information to the "PB Core," and developing and sharing simple data translation tools, stations and producers and vendors can expect an easier flow of key content data throughout the whole production to distribution chain. In some cases, the work will be more internal to the station, and in others, the emphasis will be external.

The PBMD may also lead vendors to public broadcasting to work toward some commonality and general interoperability between software systems and equipment. (This will of course, be assisted by extended purchasing power of the EIOP stations.)

What service, revenue or cost saving opportunities might be addressed or more fully realized because of the existence of the PBMD?

A metadata standard, especially because it is tied into our interconnection future, can result in operational cost savings for stations. The less manual translation and re-entry required for daily operations, the lower the staff, and perhaps even software costs.

Certainly, within the production chain, cost savings will eventually be realized by reducing how many times we have to "touch" content to make use of it! Producers will shoot less, ultimately, if they are able to rapidly and sensibly search for existing content. (Of course, really taking adva

Standardized metadata helps us enormously in our marketing efforts, too. It allows, for example, an approved program description to stay with a program from the producer's desk, to PBS, to the interconnection system, to programming and traffic software, through master control/PSIP, to the cable operator, and to the home media device.

Content-sharing between our institutions or with our partners is a very exciting prospect. A common metadata protocol will make it easier to locate and retrieve content, so that it is used in new ways, on new platforms, by new constituents. One can image content collaborations that are designed more around filling the needs of individual students, or lifelong learners, rather than organized by medium or location. PTV and radio stations may have an "edge" in the metadata business with our partners (museums, higher ed, etc.), which might be a critical core competency and foster our transition to public service media "hubs."

Locating and sharing our content assets for formal (K-12) education seems very important to our collective future. One can imagine national digital repositories of educational metadata, from which educational designers and producers cull the work of an entire nation of PTV and PR producers!

The revenue that we see from new content infrastructures is probably more indirect than direct (such as increased membership, major giving tied to specific content, federal funding for special "collections" that we might have, etc.), there is a

possibility that we can find niche content for specific community and institutional needs, such as workforce training.

Again, what assumptions have been made about future course of events?

- We expect continued movement towards all-digital production and transmission.
- We anticipate lower costs for storage and connectivity; more bandwidth available for file transfer.
- Continued financial pressures to increase efficiency and lower costs.
- Increased reliance on strategic partnerships (with universities, museums, libraries, etc.) to leverage our assets and competencies, and to continue to have community relevance.

To whom might this work be important (who are the key stakeholders)?

- National organizations and distributors.
- Station management responsible for maintaining/increasing local service while holding/reducing costs.
- National and local production staff, programming, IT and engineering staff.
- Organizational partners, including K-12.
- Software vendors who serve PTV and PB across numerous disciplines (and create and sell software that houses data about content).