Public Broadcasting Metadata Dictionary

PROJECT UPDATE

Alan Baker,
Minnesota Public Radio
Alison M. White, CPB

Public Broadcasting Metadata Dictionary

CHALLENGES

- Declining viewership; more competition
- Declining membership
- Reduced foundation and corporate funding
- DTV funding not guaranteed
- Declining state/university funding
- Increased consolidation of ownership and operations in media marketplace
- Changes in consumer technology and expectations

Public Broadcasting Metadata Dictionary

OPPORTUNITIES

- Continuing convergence of IT and broadcast technologies
- Dropping costs of server storage
- Advances in video and audio compression
- Development of content and asset management software systems
- Continuing development of Internet Protocol file transfer
- Availability of bandwidth
- Increasing “wiredness” of constituencies

Public Broadcasting Metadata Dictionary

ASSETS

- Reputation as trusted community institutions
- Strong local relationships and partnerships, especially in education
- Local and national content of high editorial integrity
- Data about the content (metadata) that enhance its usability and impact

Public Broadcasting Metadata Dictionary

We're swimming in METADATA!

- PBS and NPR program databases
- Programming and traffic software
- Broadcast routing and automation (PSIP)
- Digital logging/editing systems
- Tape archives and server storage
- Website content management systems

Public Broadcasting Metadata Dictionary

THE PROBLEM

- No consistent way of describing assets across organizations, systems or software
- No clear understanding of how constituents use content and metadata
- No established protocol for exchanging or translating content information, either manual or automatic

Public Broadcasting Metadata Dictionary

Why a METADATA DICTIONARY?

- **To ensure a robust quantity and quality of content data, such that it can be exchanged between systems, across platforms, and to our constituents.**

Public Broadcasting Metadata Dictionary

What is a METADATA DICTIONARY?

- **Set of agreements regarding:**
  - **Key data elements and qualifiers**
  - **Mandatory or optional, repeatable?**
  - **Controlled vocabularies and authority files.**

Public Broadcasting Metadata Dictionary

PARTICIPANTS

- PBS, APTVS, NETA
- NPR, PRI
- Public Interactive, PBS.org, NPR Online
- National producers
- Community radio and TV licensees
- State networks
- University radio and TV licensees
- Educators
- Subject matter experts

Public Broadcasting Metadata Dictionary

GOALS

- Develop and define User Requirements to inform the process
- Review existing metadata standards in library and media industry for applicability
- Compare and combine PB's metadata work into a Preliminary Metadata Dictionary

Dictionary Development
Progress Report

Alan Baker
Minnesota Public Radio

New content types require new workflow

Legacy systems

- MPR has 70,000 hours of audio
- Digital archive initiative
- No organizational model
- First major task was to find metadata schema
- Asset management
  - Naivete causes tunnel vision
  - Resources are scarce
  - Industry meltdown

Reality sets in. Ouch!

Challenges are global

- Common language for exchange
- Data consistency
- Adopt vs. adapt

Dictionary Team Progress Report

Today's goals

1. Overview of Public Broadcasting Metadata Dictionary

2. PubCore Dictionary use in the real world

Dictionary Team Progress Report

Asset Management

- **Why They don't GET it**
  - –Naivete causes tunnel vision
  - –Resources are scarce
  - –Industry meltdown
  - –Ecosystems rather than off-the-shelf product

Dictionary Team Progress Report

Evaluating existing standards

- Internal “standards”
- MARC
- Dublin Core
- SMEF
- MPEG-7
- SCORM
- METS
- EBU/P-Meta

Dictionary Team Progress Report

Good News -- Bad News

- Standards are actively being developed
  - CPB Metadata Dictionary
  - Dublin Core
  - MPEG-7

- Not ready yet
  - Vendor support not avail
  - Tools set underdeveloped

Dictionary Team Progress Report

Dublin Core Element Set

- 15 elements for content description
- Very basic, built for non-experts to use
- NISO standard
- dublincore.org

Dictionary Team Progress Report

Dublin Core Element Set

- Title
- Creator
- Contributor
- Subject
- Description
- Publisher
- Date
- Identifier
- Type
- Format
- Relation
- Source
- Language
- Coverage
- Rights

Dictionary Team Progress Report

Qualified Dublin Core

- **Element Modifiers**
  - –Make the meaning of an element more narrow
- **Encoding Schemes**
  - –Specify a context for interpreting element values
  - –Controlled vocabularies or notation standards

Dictionary Team Progress Report

Qualified Dublin Core

- Subject
- Subject.Keyword
- Subject.Heading/Code
  - Controlled vocabularies (internal or other)
  - Applied standards (W3C DTF...)
  - Formatting is key to context
- Dumb down

Dictionary Team Progress Report

Public Broadcasting Core Set

15 Dublin Core Elements

- Title
- Creator
- Contributor
- Subject
- Description
- Publisher
- Date
- Identifier
- Type
- Format
- Relation
- Source
- Language
- Coverage
- Rights

PubCore adds four additional elements

16. Audience
17. Standards
18. Annotation
19. Location

Integration with existing systems

How can PubCore Dictionary be used?

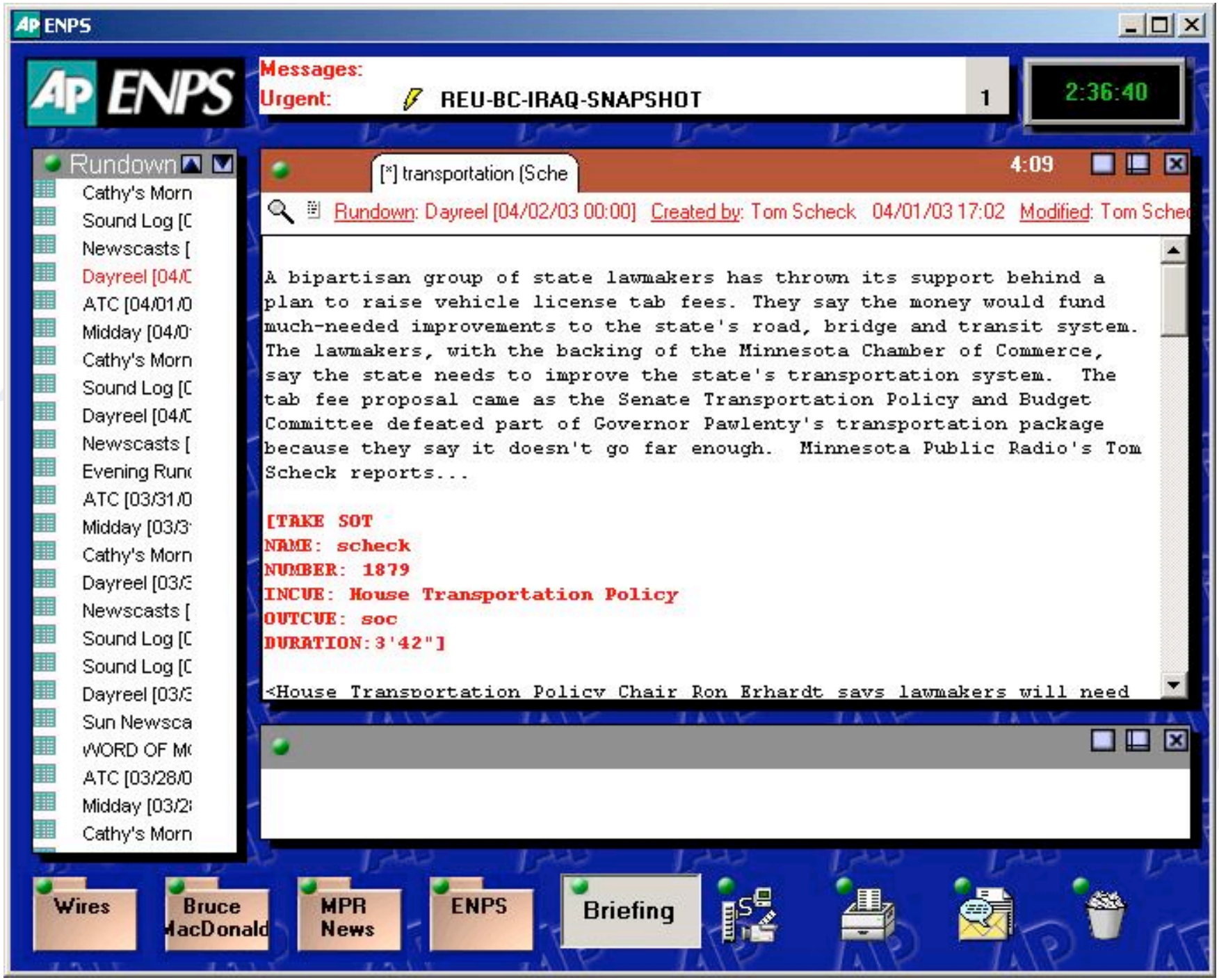
- Rubber meets the road
  - Tie broadcast tools to asset management and deep storage
  - Enable data consistency as data migrates through production chain
  - Provide known language and mark-up for content exchange
- No wasted effort

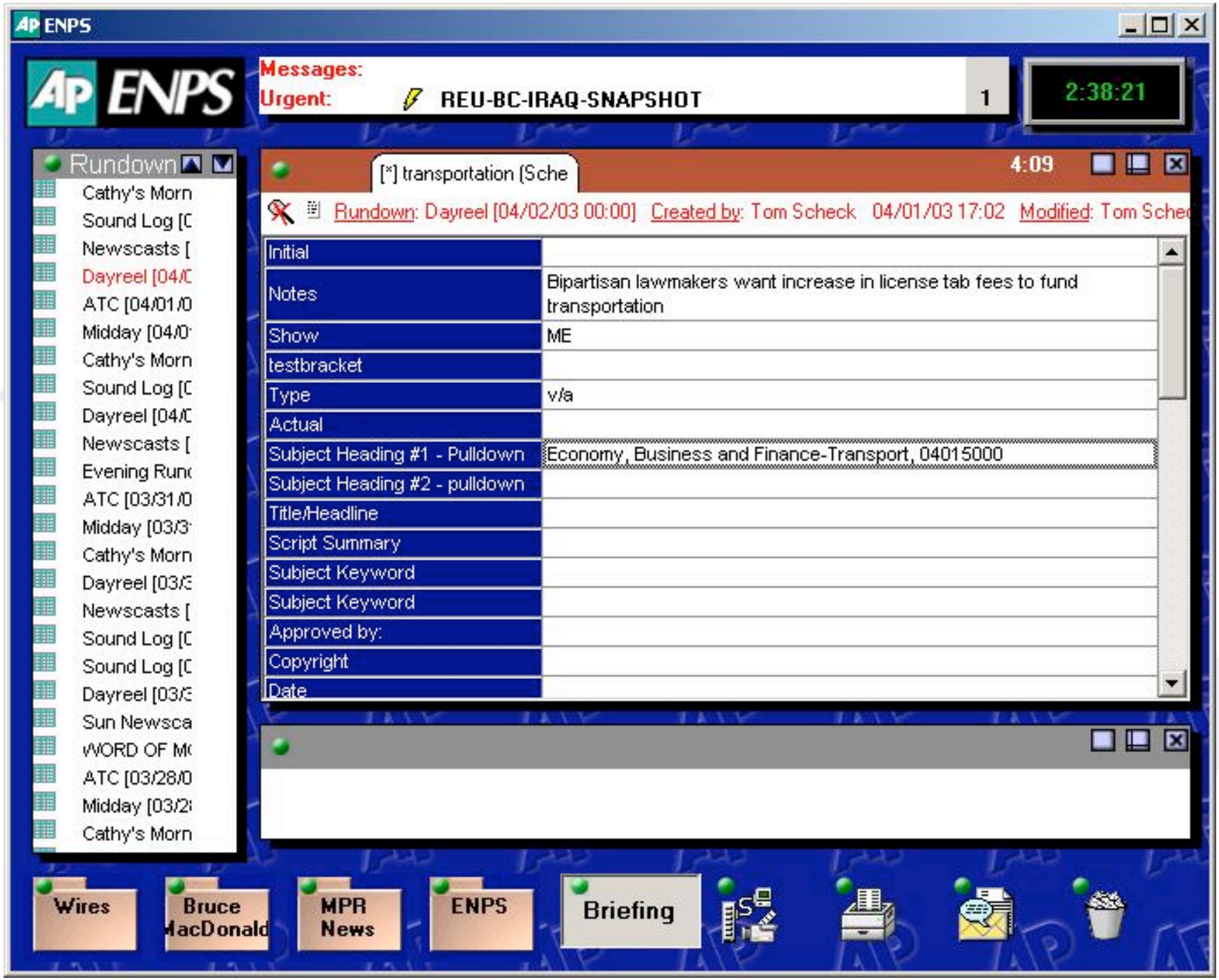
Integration with existing systems

PubCore metadata ingest and migration

ENPS
news text sys

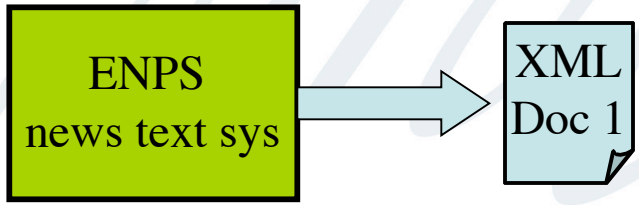
- Tools do not facilitate gathering data
- Customization creates non-standard data sets


ENPS
Messages:
Urgent:
REU-BC-IRAQ-SNAPSHOT
1
2:36:40
Rundown
Cathy's Morn
Sound Log [C
Newscasts [
Dayreel [04/C
ATC [04/01/0
Midday [04/0
Cathy's Morn
Sound Log [C
Dayreel [04/C
Newscasts [
Evening Runc
ATC [03/31/0
Midday [03/3
Cathy's Morn
Dayreel [03/3
Newscasts [
Sound Log [C
Sound Log [C
Dayreel [03/3
Sun Newsca
WORD OF M
ATC [03/28/0
Midday [03/2
Cathy's Morn
[*] transportation (Sche
4:09
Rundown: Dayreel [04/02/03 00:00] Created by: Tom Scheck 04/01/03 17:02 Modified: Tom Schec
A bipartisan group of state lawmakers has thrown its support behind a plan to raise vehicle license tab fees. They say the money would fund much-needed improvements to the state's road, bridge and transit system. The lawmakers, with the backing of the Minnesota Chamber of Commerce, say the state needs to improve the state's transportation system. The tab fee proposal came as the Senate Transportation Policy and Budget Committee defeated part of Governor Pawlenty's transportation package because they say it doesn't go far enough. Minnesota Public Radio's Tom Scheck reports...
[TAKE SOT
NAME: scheck
NUMBER: 1879
INCUE: House Transportation Policy
OUTCUE: soc
DURATION:3'42"]
<House Transportation Policy Chair Ron Erhardt says lawmakers will need
Wires
Bruce MacDonald
MPR News
ENPS
Briefing


ENPS
Messages:
Urgent:
REU-BC-IRAQ-SNAPSHOT
1
2:38:21
Rundown
Cathy's Morn
Sound Log [C
Newscasts [
Dayreel [04/C
ATC [04/01/0
Midday [04/0
Cathy's Morn
Sound Log [C
Dayreel [04/C
Newscasts [
Evening Runc
ATC [03/31/0
Midday [03/3
Cathy's Morn
Dayreel [03/3
Newscasts [
Sound Log [C
Sound Log [C
Dayreel [03/3
Sun Newsca
WORD OF M
ATC [03/28/0
Midday [03/2
Cathy's Morn
[*] transportation (Sche
4:09
Rundown: Dayreel [04/02/03 00:00] Created by: Tom Scheck 04/01/03 17:02 Modified: Tom Schec
Initial
Notes
Bipartisan lawmakers want increase in license tab fees to fund transportation
Show
ME
testbracket
Type
v/a
Actual
Subject Heading #1 - Pulldown
Economy, Business and Finance-Transport, 04015000
Subject Heading #2 - pulldown
Title/Headline
Script Summary
Subject Keyword
Subject Keyword
Approved by:
Copyright
Date
Wires
Bruce MacDonald
MPR News
ENPS
Briefing

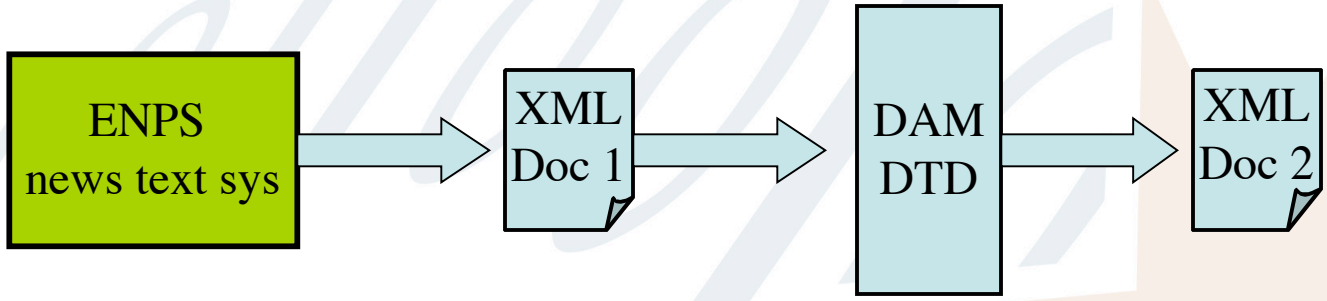
Integration with existing systems

PubCore metadata ingest and migration



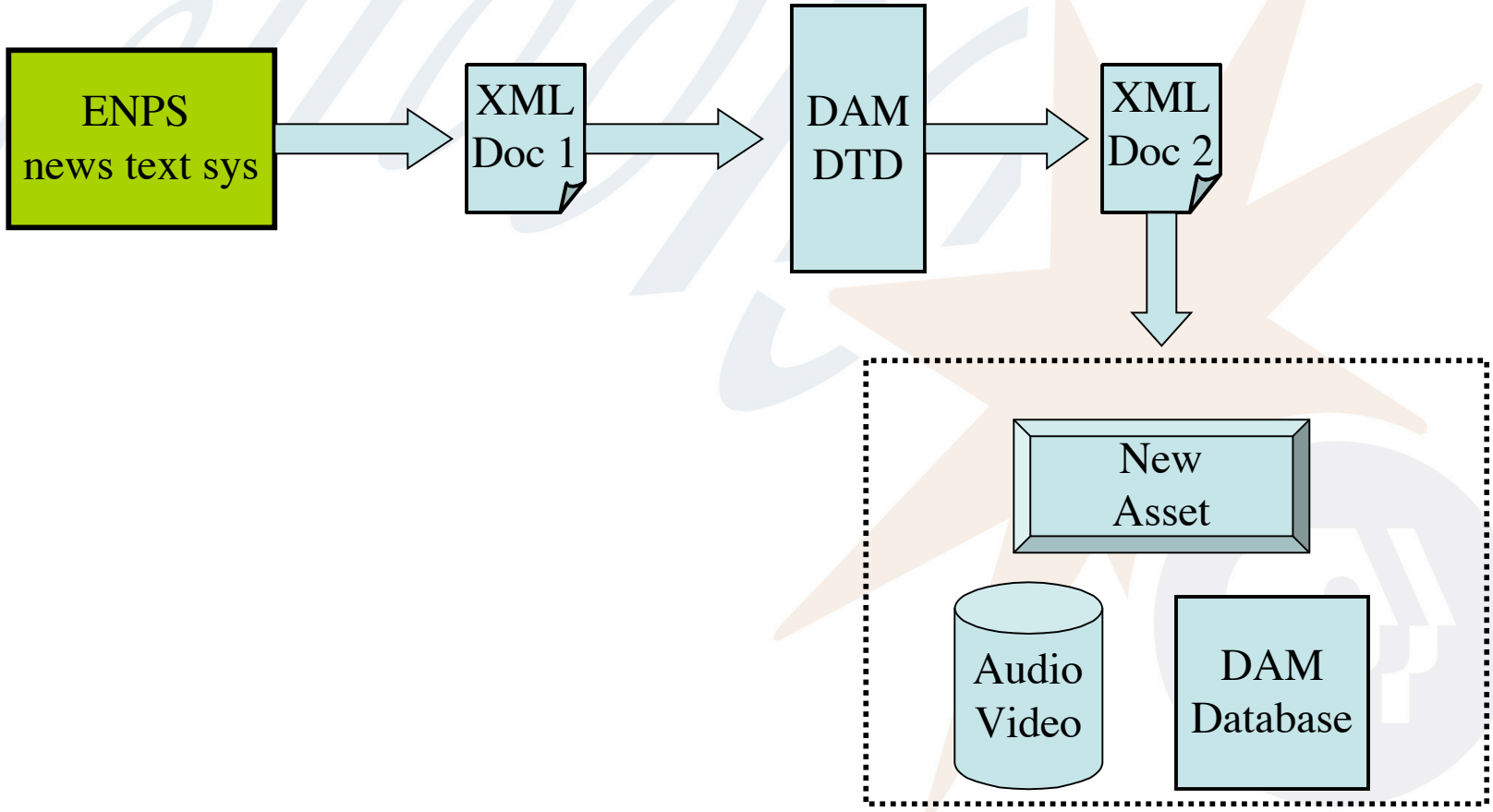
Integration with existing systems

PubCore metadata ingest and migration



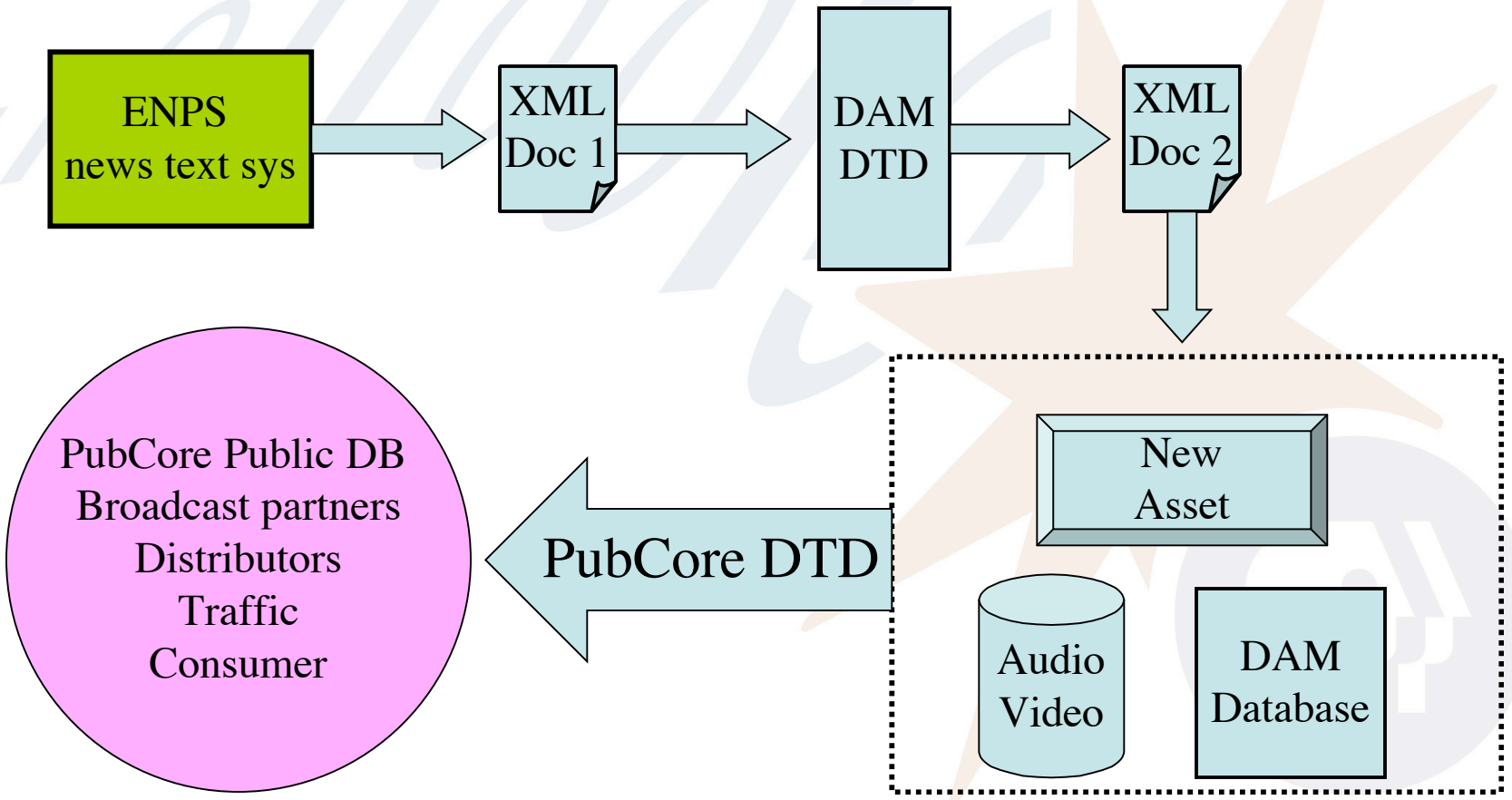
Integration with existing systems

PubCore metadata ingest and migration



Integration with existing systems

PubCore metadata ingest and migration



Dictionary Team Progress Report

Qualified Dublin Core

- **Element Modifiers**
  - –Make the meaning of an element more narrow
- **Encoding Schemes**
  - –Specify a context for interpreting element values
  - –Controlled vocabularies or notation standards

Dictionary Team Progress Report

Qualified Dublin Core

- **Element Modifiers**
  - –Make the meaning of an element more narrow
- **Encoding Schemes**
  - –Specify a context for interpreting element values
  - –Controlled vocabularies or notation standards

Dictionary Team Progress Report

Qualified Dublin Core

- **Element Modifiers**
  - –Make the meaning of an element more narrow
- **Encoding Schemes**
  - –Specify a context for interpreting element values
  - –Controlled vocabularies or notation standards

Dictionary Team Progress Report

Qualified Dublin Core

- **Element Modifiers**
  - –Make the meaning of an element more narrow
- **Encoding Schemes**
  - –Specify a context for interpreting element values
  - –Controlled vocabularies or notation standards

Dictionary Team Progress Report

How to Prepare

- **Adopt obvious standards**
  - –Dublin Core

- **Provide solid data to other projects**
  - –Detail your needs
  - –Suggest workflow modifications
  - –Establish flow from Web to broadcast

Panel Discussion

How can PubCore Dictionary be used?

- Tools
- Production chain
- Work flow
- Skills
- Resources
- Collaborative development
- Other

Public Broadcasting Metadata Dictionary

NEXT STEPS

- Bump it up!
- Develop strong problem/value statement
- Make a plan for sustainability
  - What's involved?
  - Who's responsible?
  - What's the cost?
- Develop compliance strategy
  - National and local organizations
  - Key vendors

Public Broadcasting Metadata Dictionary

NEXT STEPS

- Enhance project communications
- Develop and release Request for Comments (RFC)
- Evaluate related standards as needed
- Plan and activate test implementations in real-life PB data-translation scenarios
- Publish PBMD Version One

Public Broadcasting Metadata Dictionary

PROJECT UPDATE

Alan Baker,
Minnesota Public Radio
Alison M. White, CPB