



BXF – Raising a New Standard

By John Price – October 28, 2008

After years of work by numerous individuals from a cross-section of companies, the Broadcast eXchange Format (BXF) standard protocol is has finally been adopted by SMPTE (Society of Motion Picture and Television Engineers). So, what exactly does BXF do for you? In a nutshell, it provides a common protocol for allowing systems to communicate and exchange data.

BXF holds the promise of dynamic data updates between traffic and automation systems, providing a means for interoperability between systems maintaining and organizing scheduling, workflow and content management data. The main advantage of BXF will be timeliness and greater accuracy. Most broadcasters would see the benefit in areas of Traffic and Master Control. Traffic would receive timing and duration information for more accurate schedule logs, as well as notification that content is ingested and ready to run. The As Run information would be provided to Traffic for instant reconciliation as soon as the event plays. Master Control would be updated with any schedule changes from Traffic; changes made by either Traffic or Master Control would be instantly visible in both systems. This capability has the potential to dramatically increase the effectiveness of a broadcast station.

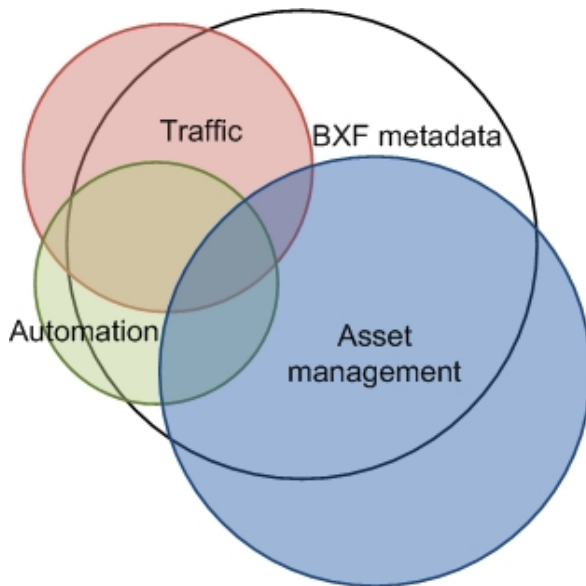


Figure 1 – Diagram of Data Interaction
are opportunities to share and exchange common data. No single system needs to know everything; they just need a way to get the information they need when they need it. This is the potential that BXF can achieve.

There is one inherent problem - BXF defines a standard protocol; it does NOT define the implementation. Yes, all of the above, and even more, are *possible*. But, that does not mean every company that says they have implemented BXF or are “BXF compatible” or “BXF compliant” will deliver all the benefits. BXF is an enabling technology. It will enable those systems that integrate BXF to communicate and exchange messages and data with other BXF integrated systems. The key will be what the vendor can do with the data and messages it receives from other BXF-enabled systems.

This has a dramatic impact on broadcast automation companies. Many have been leading and contributing mightily to the

In a typical station, different systems will have some metadata that is duplicated in other systems and some unique only to their own system. The colored circles in Figure 3 represent three systems - Traffic, Automation, and Asset Management, and the data overlap within these systems. The white circle, BXF metadata, represents all the data and messaging that BXF could potentially exchange and share. Each circle is a different size because each system maintains and collects different amounts (or attributes) of content and schedule metadata. Where systems overlap, there

“One recent standard that has gained momentum is the Broadcast eXchange Format (BXF) from the SMPTE S22-10 data exchange group. This format is squarely aimed at the current and future systems needing to exchange schedule and content information utilizing common XML-based messages. Several leading vendors, including Harris, have already embraced this standard, and others are in the process of adopting it. The benefits of open standards such as these include the ability to rapidly introduce unknown systems into the environment and to have a common understanding of data that can be utilized and shared with minimal impact.”

– Excerpt from Harris Broadcast Communications white paper:

[Distributed Enterprise Workflow Systems From Sales to Payout](#)

Andrew McCulloch, Chuck Kocsis
Harris Corporation, Denver, Colorado



SMPTE effort for BXF. The BXF standard can help solve the growing interoperability problem. The number of systems in a television station which store scheduling and content metadata is growing and the problem compounds itself as more output channels, data streams and information layers are added. For example, here is a quick list of just some of these systems:

- Newsroom Computer Systems
- Automation
- Traffic
- Program Management
- EPG and PSIP
- Archive and Asset Management
- Promotions and Branding
- Weather and Emergency Alerts
- Digital Content Delivery Systems
- Ad Servers
- Interactive and Internet Publishing

For automation companies the proof will be in the implementation. It is important to evaluate BXF and what it will do for you in your operation. If you know how you want the workflow to operate in your station, see if BXF enabled products can deliver that capability. And as they say in the US state of Missouri, “Show Me.”