A year ago, the NABA Cyber Security Working Group, under the leadership of Michael Miller (Disney | ABC), came up with a first document on what broadcasters require from vendors to secure their broadcast operations in the best possible way. Our UK partners, the Digital Production Partnership (DPP), adopted our requirements and added a few of their own. Last month at the IBC in Amsterdam, DPP Chair Helen Stevens (Director Broadcast Operations, ITV) and myself presented these requirements to broadcast suppliers at an event organized on the Ericsson stand.

Helen Stevens noted:
“Protecting the viewer’s experience, and the veracity of our output is the number one concern today. The growth in connected services and IP-driven production, as well as cloud platforms and applications, means that, as a modern broadcaster, our focus has to be on protecting our content from increasingly frequent cyber attacks.”

I added: “Cyber security is now one of the top strategic priorities for North American broadcasters. We will never protect ourselves fully from attacks, but we need to mitigate their impact. As we define our Information Security Requirements for the future, we expect suppliers to be our partners. In fact we need their ideas and expertise in finding solutions that work.”

Steve Plunkett, Chief Technology Officer at Ericsson said: “Media companies need confidence in the whole broadcast chain. That confidence is built upon trust in robust and resilient service design and testing - in all stages from program development to the point of transmission. The NABA/DPP requirements will help vendors explore whether their products really are secure by design, and can hold up against modern cyber criminals.”

The requirements were well received and, while everyone understands more work must be done, a beginning has been made. The EBU now has a standing committee on Cyber Security, as does the Association of International Broadcasters (AIB). The issue is getting attention from the broadcast community around the world, and NABA is planning a second round of discussions concerning broadcast requirements and best practices, and widening the discussion to include others from around the globe.

The full document containing suppliers’ cyber security requirements can be downloaded here.

To get a common understanding of Cyber issues for broadcasters, NABA is planning a Cyber Security Symposium hosted by NBCUniversal in New York on December 1st. You can read more about it in this edition of NABAcaster.
Director-General’s Report
Michael McEwen, NABA

Here it is already mid-October and we’re well into the fall season, which for broadcasters means assessing the new on-air-schedule performances, NHL Hockey starting, and the World Series is just a League Championship away. Go Jays!

For NABA though it is more than just the content and schedules, it’s what goes on behind them in broadcast operations and new technology. It’s been a busy year so far and it looks to stay that way for a while. As you’ll note in this NABAcaster, we continue our work in Cyber Security with a joint release of broadcaster requirements for equipment suppliers. We did that together with our UK partners, the Digital Production Partnership (DPP), in Amsterdam at the IBC (as mentioned in our cover story). Although this is just a beginning, our industry is becoming increasingly aware of the risks and the need to address them.

To that end, we are planning a Cyber Security Symposium in New York City on December 1st hosted by NBCUniversal at 30 Rockefeller Plaza. You can find a registration link on Page 5 of this NABAcaster.

Media over IP (MoIP)
Cyber Security becomes even more of an issue as we all move to IP-based production and distribution facilities. MoIP has been the focus of a Working Group of our Technical Committee. Chaired by NBCU’s Thomas Bause Mason, the group began its work late last year with a focus on education and current practices and, in recent months, a survey was taken of our broadcast members on their MoIP requirements.

The results are now being collated and will be presented to the Technical Committee on November 30th in New York and then shared with the Joint Task Force on Network Media (the JT-NM members include SMPTE, the European Broadcasting Union, and the Video Services Forum). It is our hope that our input to the JT-NM will inform the discussion and lead to common specifications, standards and practices; easing the way forward to building and making operational IP-broadcast production and operations plants.

File Formats
Clyde Smith (Fox) continues to lead our efforts on defining the specifications for common metadata in file-format workflows. Readers will recall that we are building a North American solution based on the work of the DPP in the UK. It is a process we began about a year and a half ago and we are in the final months of completing the work. Specifications for Air-Ready Masters have already been completed for legacy systems utilizing MPEG 2 and 4, and testing is in progress on creating the “Golden Files.” Library masters for HD and UHD are progressing to completion. We are working to have these specifications supported by SMPTE.

Of course, the goal is to simplify our workflow, create a better understanding by a common specification, and reduce expenses, errors and confusion. Some have noted that in an IP-based production plant, file formats will not be an issue. Perhaps that is true, but many broadcast organizations will continue to use file-based applications, specifications and rules for many years, and the need to support these systems in the most efficient and effective way possible remains.

As the specification and standards work winds up, the implementation phase begins with the most important step being “education.” This effort is being led by Bob Zitter (formerly CTO and EVP at HBO) and will focus on three crucial stakeholders: broadcasters, equipment manufacturers, and the production community. Educational papers that focus on the technical requirements, the business case, and the production challenges are all in the process of being prepared. Beginning in early 2017, seminars in Los Angeles, Atlanta, New York and Toronto will bring the message home to our industry. Broadcasters implementation will begin late this year and probably span the next couple of years as broadcasters update their equipment as part of their normal capital plan.

It is very exciting to see all of this come together, knowing that this work is being done by broadcasters for broadcasters and is based on the “user experience.”

FM Chips in Smartphones
The Radio Committee’s Working Group on FM Chips in Smartphones is chaired by David Layer from the National Association of Broadcasters (NAB), and they have been developing strategies to encourage all North American mobile carriers to enable the already-embedded FM chip in smartphones. The Working Group is also encouraging handset manufacturers who have not yet embedded FM chips in their devices to do so as soon as possible.

From NABA’s perspective, these dual initiatives make perfect sense, both as a public service (as in times of emergency) and as a business opportunity, which an activated chip, alongside an app like NextRadio, provides for both the carrier and the broadcaster. Additionally, this makes smartphones even more indispensable to the consumer. It’s like a modern day Walkman on steroids with millions of chip-enabled phones becoming portable radios, but with all the added features of the digital age.

In the process of this work the NAB has undertaken market research in the US on the penetration of chip-enabled smartphones. The opportunity for NABA to partner with the NAB to get a better picture of the North American marketplace, by obtaining FM chip data from both Canada and Mexico, was just too good to pass up. We released our first results last month, which can be reviewed on our website here (and also on Page 5 of this issue). The short summary of these results is that FM-chip-enabled smartphone penetration in the US and Canada is good, and in Mexico it is very good. This is an initiative that makes so much sense for all the stakeholders that we find it

Continued on next page...
We are also looking ahead to February, when we will hold our Annual General Meeting (AGM) in Washington. PBS is hosting our AGM on February 15th and the next day (February 16th) the NAB will hold the third Future of Radio & Audio Symposium (FRAS). On the 14th of February, we will hold our Committee and Board of Directors meetings at members’ Washington offices. With all the challenges and opportunities of the Next Generation of Television looking to become less a technology-developing story and more about implementation strategies, Washington seemed like a good spot for the AGM. Canada and Mexico have both hosted a FRAS, so Washington and the NAB is a great fit. My thanks to the NAB and PBS for the generous support they are giving NABA by hosting these gatherings.

Changes at the NABA-RACC

After almost three years of leading this committee, Michael Miller (ABC) is stepping down from his role as Chair. He took over the committee when Bob Ross became NABA President in 2014. A lot has happened on Michael’s watch, notably the Cyber Security Working Group and the development of broadcaster requirements for vendors, the development of our Cyber Security Symposium (in partnership with TC Chair John Lee), and the creation of a number of SubTeams in the committee, which focus on a variety of different safety and security issues. Michael has a new job within the Disney organization and unfortunately needs to leave RACC. I know you will all join me in thanking him for his service and leadership. We wish you well Michael.

Thankfully RACC has had a very active Vice-Chair in John Moore (VP, Health & Safety, Fox). John has volunteered to take on the Chair’s job and will have a face-to-face meeting with his committee November 30th in New York. RACC will then have the opportunity to review its mandate and create a work plan for the year ahead. My thanks to John for doing this and we all look forward to his leadership.

The WBU Conference

On the final week of this month, at the end of the Asia-Pacific Broadcasting Union’s (ABU) General Assembly in Indonesia, the ABU will host the WBU for a one-day conference. There has not been a WBU Conference in more than twenty years, principally because the NAB Show and IBC provided both content and venues at their yearly conferences and exhibitions.

However, some of my counterparts from the WBU felt that there was a need for the WBU to come together for a day to look at the current issues in a global context. NABA is contributing expertise to a few panels; WBU-TC Chair Bob Plummer from Fox will be part of a technology panel, the CBC Ombudsman Esther Enkin will represent us on both the Climate Change and Disaster Prevention and the evolving responsibilities of Public Service Media in the Digital Era panels. Finally, I will Chair the Climate Change and Disaster panel and open the conference as Head of the WBU.

So, as I observed at the start of this report, it has been a busy year and for sure it’s going to continue that way as the year comes to a close.

WBU Conference Details and Program Finalized

Only a little more than a week remains until the gathering in Bali for the World Broadcasting Unions’ Conference. Everything is finalized by the hosts ABU and RRI and it is set to be a very worthwhile event for those able to attend.

If you have not yet registered for the WBU Conference, please do so promptly at:

Of particular interest to NABA members are the following panelists/speakers:
- Michael McEwen, Director-General, NABA | Head, WBU Secretariat
- Esther Enkin, Ombudsman, English Services, CBC/Radio-Canada
- Robert H. Plummer, Vice-Chair, Technical Committee, NABA

The full program is available at WBU Conference Program.
Reducing Risk in the Advertising Supply Chain

Harold Geller, Ad-ID

If “location, location, location” is real estate’s mantra, then “right audience, right time, right context” is marketing’s maxim. Advertisers must reach the right person with the appropriate message on the exact channel at the moment the prospect is using it. This can be particularly challenging in the digital landscape, where audiences cross screens and platforms with ease (for them). The complexity of deploying ads in this cross-platform environment is offset, however, by the opportunity to target unique — even individual — audiences with more precision, leading to a better engagement between a brand and its prospects.

Technology and the creation of protocols and standards are helping publishers and advertisers to improve ad delivery to video players across multiple platforms for a more seamless experience. The January 2016 introduction of the Interactive Advertising Bureau’s (IAB) updated Digital Video Ad Serving Template (VAST) 4.0 is “helping to enable in the digital world what is possible in the broadcast world,” explains Alanna Gombert, General Manager of the IAB Tech Lab. “As a delivery protocol, it provides a pathway for each ad to be delivered properly in digital.”

A template for structuring ad tags that serve ads to video players, VAST 4.0 addresses several challenges for both linear and on-demand delivery, from separating the video and interactive files for more successful ad display across devices and platforms to supporting server-side ad-stitching for seamless display within a video content stream. It also supports a mezzanine file and ready-to-serve ad files that improve the quality of the ad played, based on the environment. That environment now includes over-the-air, online, over-the-top, mobile and place-based platforms.

An essential ingredient in VAST 4.0 is its requirement for a universal, unique ad identifier, such as Ad-ID in the U.S. Calling for a system-wide identifier helps advertisers maintain control over the ads they offer and helps media publishers ensure the correct ad asset is pulled for insertion.

Reduce Risk in the Advertising Supply Chain

Without a consistently applied universal identifier, creative assets may be assigned different identifiers for every system they pass through. This modern-day Babel leads to confusion, inaccurate reporting, and manual rekeying and duplication of effort that can introduce error into the advertising supply chain.

Previous versions of VAST required that assets be identified, but did not stipulate how or by whom. Without such standards, it was difficult to determine an asset’s origins, or whether it was the correct ad to be served.

Such knowledge is critical to reduce risk in the advertising supply chain, particularly today’s complex digital video marketplace, where digital video asset data, coding and distribution are extremely fragmented. To create the broadcast-like experience, without buffering or wheeling, ad-stitching services must be able to quickly determine which asset to stitch into a video content stream. Likewise, ad-decisioning and ad-serving systems need unique, universal identifiers to deliver a specific ad to a specific audience — depending on factors from device type and screen size to user preferences and geography. If each ad asset uses a different identification system, it increases risk that the wrong ad will be served.

“Ad-ID as the identifier makes it clear as day as to what this ad really is,” says Jarred Wilichinsky, Vice-President of Video Monetization and Operations at CBS Interactive. “When a stitching service sees an Ad-ID code, it knows exactly what that piece of creative is. And if there have been any revisions to that creative, there’s a new Ad-ID. So there is no confusion. Knowing what advertiser [the ad] is from, how long the ad is [and] what category it is means we are all speaking the same language.”

Beyond Delivery Accuracy: Measuring Performance

Wilichinsky adds that VAST 4.0 and its requirement for a universal identifier have implications for other “interesting executions,” from programmatic to competitive separation, as well as for video operations to improve the quality of execution and the user experience.

Most immediately, Ad-ID provides a level of metadata for each asset that enables performance measurement. No matter where the asset is deployed, it can be tracked, monitored and measured using its singular Ad-ID code. Ad-ID’s Complete External Access module gives media outlets, online publishers, measurement vendors and other approved companies access to all Ad-ID codes and metadata for greater insight from the data.

Julian Zilberbrand, Executive Vice-President of Audience Science at Viacom, strongly encourages practitioners to leverage the measurement functionality in VAST 4.0 and its requirement for a universal identifier. “I cannot emphasize enough the importance of having deeper Continued on next page...
sets of information and data," he said during a webinar about VAST 4.0. "Universal ad identification, with the deep metadata that it’s providing, will give you additional intelligence on not only your investment, but on the quality of the creative, how it’s working and how you choose to potentially optimize or manage your media. Ad-ID is a proxy to really getting better at what we do as marketers."

In the U.S., Ad-ID is the standard for identifying ad assets across every media platform. It is a joint venture of the Association of National Advertisers (ANA) and the American Association of Advertising Agencies (4As). Of the more than 334,000 video ad assets produced in 2015, more than 80 percent were registered using Ad-ID.

A universal identifier from a central authority brings greater transparency to the advertising marketplace. It helps eliminate the costly errors associated with inconsistently applied asset identifiers throughout the advertising supply chain, while enabling more granular audience measurement across multiple platforms. In short, it helps ensure the right audience sees the right ad, in the right context, at the right time -- across multiple platforms. ■

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NABA Members & Issues in the News

- More than 100 Million to Adopt Next-Generation TVs by 2020
- Harmonic Delivers OTT Compression
- Forward Auction Week #1 Nets Nearly $11 Billion
- NAB to FCC: ATSC 3.0 is Next Competition Driver
- Emmis’ Smulyan: Yes, We Will Get NextRadio on the iPhone
- CBS All Access Launches Ad-Free Tier
- App-based OTT, Smart Home are Top-Two North American Pay Opportunities
- Linear TV Still Delivers the Most Revenue Per Viewer Hour
- Despite FCC Help, AM Radio Still Faces Hurdles
- Televisa and TV Azteca Join Forces for Telenovela

Looking Ahead — Key Dates & Upcoming Events

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A complete list of upcoming events is available at: www.nabanet.com/nabaweb/calendar/calendar.asp

The NABAcaster newsletter is available online at: www.nabanet.com/nabaweb/newsletter/NABA caster.asp

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