

IP Showcase at IBC 2017 & How to Qualify

June 16th, 2017



IP Showcase Goals for IBC 2017

- The following organizations have indicated support for the following goals in the context of IBC 2017: AES, AIMS, AMWA, EBU, IABM, Media Networking Alliance (MNA), SMPTE, VSF.



- GOALS
 - Demonstration that **SMPTE ST 2110** is both interoperable and viable for **real broadcast applications**.
 - Articulation/Presentation of the **business & creative benefits of IP**
 - **Education**.

3 Pillars of “IP Showcase” Booth

- Interop Demonstrations
 - Like NAB 2017 the interop will be based on the SMPTE ST 2110 final committee drafts, ST 2059, ST 2022-7 and NMOS IS-04 Registration & Discovery but at IBC we are planning multiple demonstration pods as follows:
 - **Live Production (New!)**
 - **Playout (New!)**
 - **General Interoperability** (similar style area as we had at NAB 2017)
 - **NMOS Connection Management (New!)**
- IP Showcase Theater
 - We will build on the success of NAB 2017 with a co-located theater to provide education to the industry, and showcase the benefits of moving to IP. Priority will be given to broadcaster presentations about their IP installations/plans as this adds to momentum
- “IP in Action” Wall
 - This will be similar in concept to the same wall at NAB 2017 where we showcase current and future-committed IP installations. This time we will strive to increase the number of reference sites from 10 to 20



How Do I Qualify for the IBC 2017 IP Showcase Interop Demonstrations?

- To qualify for the ***live production, playout*** or ***general interoperability pods*** you must:
 - Sign the MOU and attend the qualification & staging event during the week of August 14th at the Fox facility in the Woodlands, TX USA.
 - Demonstrate ST 2110 interoperability of your product(s)
- To qualify for the ***NMOS Connection Management*** pod you must:
 - Sign the MOU and attend the AMWA NMOS device connection management workshop scheduled for the week of August 7th in the UK.
 - Demonstrate sufficient interoperability at that event as determined by the AMWA organizers.

Please read the following information carefully as it contains important information regarding each of these two qualification events and the criteria for qualification

Additional Information on the Woodlands, TX Qualifying Event (1 of 3)

- A key purpose of the week of August 14th qualifying event in Texas will be to stage the **live production**, **playout** and **general interop** pods of the IBC 2017 Interop demonstration.
 - As such this event will not be a “dirty hands” interop where people would have time and equipment to troubleshoot and verify for the first time their SMPTE ST2110/AMWA NMOS IS-04 designs.
- Rather, companies are expected to bring pre-verified designs to the August event. Pre-verification means that the design has been tested with one or more company’s SMPTE ST2110/AMWA NMOS IS-04 implementation prior to showing up at the August staging event.

Additional Information on the Woodlands, TX Qualifying Event (2 of 3)

- **Qualification Success Criteria.** The qualification will be **pass/fail** as follows: To qualify a vendor must demonstrate ST 2110 interoperability during the August event. Products will be connected, and if they do not immediately interoperate, some measure of time will be given for that company to verify software versions, re-seat cards and do other integration related tasks. However, there will be no facilities or allowance for deep troubleshooting of the basics of one's protocol design. If in the judgment of the JT-NM technical board, a company has not successfully connected into the system because the issue is deeper than mere integration, the technical board will "fail" that product and that product will not qualify for the IBC demonstration.

Additional Information on the Woodlands, TX Qualifying Event (3 of 3)

- A company's equipment must attend the week of August 14th event
- A company is not strictly required to send employees to the week of August 14th event.
 - In this case a company is responsible for arranging for someone to install/configure equipment for them.
 - We are allowing this in deference to small companies where the cost of attendance at the event may be high.
 - This being said, clearly there can be a higher risk of failure if one employs this strategy. We leave it up to individual companies to make their own risk/cost decision
- After the Houston event, vendors are expected to ship qualifying product directly from the Woodlands, TX event on the week of August 14th to a to-be-designated location to facilitate smooth setup at IBC. Shipment will be the responsibility of each vendor.

What Technologies Will be Showcased within the live production, playout and general interop pods at the IBC IP Showcase?

- In general, products ***shall*** demonstrate interoperability of the appropriate SMPTE ST 2110-10/20/30/40 protocols and should (desired, but not required) support AMWA IS-04 Registration & Discovery.
 - **Note: AES67 transmitter implementations with zero offset are required for interoperability with SMPTE ST 2110-30, in other words the transmitter's SDP must have a=mediack:direct=0.**
 - **Note: ST 2110-10 requires all devices to:**
 - have a “slave only” control
 - Support ST 2059-2. ST 2059-2 requires devices to not reply to management messages with a multicast ack
- We also plan to demonstrate SMPTE ST 2022-7 functionality with at least some of the products so participation with ST 2022-7 in conjunction with the above protocols is encouraged
- We also plan to demonstrate ST 2059
- Qualification for the live production, playout and general interop pods at IBC 2017 IP Showcase will be based on the above protocols. Designs based on SMPTE ST 2022-2, ST 2022-6, VSF TR03, VSF TR04, and SMPTE ST 2110-50, or JPEG 2K will ***not*** be included.

Additional Information on the UK based qualifying event

- Unlike the Houston qualifying event, the AMWA NMOS device connection management workshop during the week of August 7th in the UK is an engineering, “dirty hands” workshop.
- The primary purpose of the August 7th event is to progress development of a connection management API for IP systems.
- The intent is to showcase this progress at the IBC IP Showcase in an **AMWA Connection Management** pod.
- Therefore companies wishing to demonstrate in this pod at IBC must attend the Device Connection Management workshop during the week of August 7th.

Does Qualification Guarantee Product Placement at the IBC IP Showcase?

- Qualification of a product in one of the qualification events does not guarantee placement of that product within the IBC IP Showcase. The JT-NM Technical Board will strive to include products based on the following principles within space and design constraints:
 - Inclusion of as many companies and products as possible (a major goal of the Interop)
 - Creation of live production and playout workflows that are realistic and convey the message that ST 2110 can be used in these applications
 - Example : If there are 5 production switchers, there could be space constraints where the JT-NM technical board needs to make a decision on which switcher(s) to include. This will be done based on the 1st principle of inclusion of as many companies as possible and secondly, the principle conveying a strong message to the market.
- Note: In the event that any such situation arises, we plan to have signage for all companies that qualify, regardless of whether those products can be included in the IBC IP Showcase. This gives all companies credit for their qualification and demonstrates to the industry the vast support for ST 2110.

Additional Expectation (applies to all pods)

- Vendors are expected to exhibit at the IBC IP Showcase **every** product **selected** at a qualification event.