

VSF
IPMX Activity Group Report
October 2025



Jack Douglass
PacketStorm Communication

IPMX Associated Organizations



EBU

IPMX Activity Group

- Chairs:
 - Jack Douglass (PacketStorm)
 - Jean Lapierre (Matrox)
- IPMX – Internet Protocol Media Experience
 - Series of VSF TRs that are published as TR-10 for ProAV Market
 - Based on SMPTE ST 2110 and NMOS
 - Compressed and Uncompressed Video, Audio and Data

IPMX Activity Group Participating Companies

Adeas BV	BBC	Diversified	LearnIPVideo	PacketStorm Communications
Analog Way	Bridge Technologies	EvertzAV	Macnical Americas	Panasonic
Appear	Christie Digital Systems	Imagine Communications	Media Links	PB Technologies Group
Arista Networks	Cisco	Intel	Meinberg	Sencore/PlexusAV
AT&T	Cobalt	intoPIX	Nextera Video	Warner Media
AWS Elemental	DHC Green Dot Digital	Lawo	NVIDIA	

Project Status

IPMX Project Status									
Document Number	Document Name	Working Draft	Submitted for Review / Approval	Posted VSF Website	Dirty Hands Workshop March 2023	IPMX Implementation Testing Event January 2024	IPMX Tested Event March 2025	PMX Dirty Hands Interoperability Test Event October 2025	IPMX Certification Tested Event January 2025
TR-10-0	Document Organization			Published					
TR-10-1	System Timing and Definitions document			Published					
TR-10-2	Video			Published					
TR-10-3	Audio			Published					
TR-10-4	Ancillary Data			Draft					
TR-10-5	HDCP Key Exchange Protocol (HKEP) Copy Protection			Published					
TR-10-6	Forward Error Correction (FEC)			Draft					
TR-10-7	Variable Bit-Rate Compressed Video			Draft					
TR-10-8	NMOS Requirements			Published					
TR-10-9	Minimum Requirements to be IPMX			Draft					
TR-10-10	HDMI Info Frame			Draft					
TR-10-11	Constant Bit Rate Compressed Video			Published					
TR-10-12	AES3 Transparent Transport (Audio)			Draft					
TR-10-13	Privacy Encryption Protocol (PEP)			Draft					
TR-10-14	USB Interface			Draft					
TR-10-15A	IPMX Codec Requirements for Compressed Video								
TR-10-16	HDR Info Block								
TP-10-1	IPMX Tested Event Test Plan (Phase 1)								
AGR-1-1	Selecting Network Switches for ProAV Applications								
AGR-1-2	Methods for Testing Switches for Pro AV Applications								
Dissector	IPMX rtcp info dissector			Published					
Dissector	IPMX HKEP dissector for HDCP			Published					
Report	VSF Pro-AV CODEC Landscape Report 0.8			Published					

IPMX Documents Posted on VSF Website

IPMX: Technical Recommendations 10-0 to 10-13

- TR-10-0:2024 Internet Protocol Media Experience (IPMX): General Organization – FINAL
- TR-10-1:2024 Internet Protocol Media Experience (IPMX): System Timing and Definitions – FINAL
- TR-10-2:2024 Internet Protocol Media Experience (IPMX): Uncompressed Active Video – FINAL
- TR-10-3:2024 Internet Protocol Media Experience (IPMX): PCM Digital Audio – FINAL
- TR-10-4:2023 Internet Protocol Media Experience (IPMX): SMPTE ST 291-1 Ancillary Data – DRAFT
- TR-10-5:2024 Internet Protocol Media Experience (IPMX): HDCP Key Exchange Protocol – FINAL
- TR-10-6:2022 Internet Protocol Media Experience (IPMX): Forward Error Correction – DRAFT
- TR-10-7:2022 Internet Protocol Media Experience (IPMX): Compressed Video – DRAFT
- TR-10-8:2024 Internet Protocol Media Experience (IPMX): NMOS Requirements – FINAL
- TR-10-9:2025 Internet Protocol Media Experience (IPMX): Requirements for System Environments and Device Behavior – DRAFT
- TR-10-10:2024 Internet Protocol Media Experience (IPMX): HDMI InfoFrame Packet Transport – DRAFT
- TR-10-11:2024 Internet Protocol Media Experience (IPMX): Constant Bit-Rate Compressed Video – FINAL
- TR-10-12:2023-2 Internet Protocol Media Experience (IPMX): AES3 Transparent Transport – DRAFT
- TR-10-13:2024 Internet Protocol Media Experience (IPMX): Privacy Encryption Protocol (PEP) – DRAFT
- TR-10-14:2024 Internet Protocol Media Experience (IPMX): IPMX USB – DRAFT

IPMX Wireshark Dissectors

- IPMX RTCP Info Dissector
- Wireshark Dissector for HKEP

IPMX Dirty Hands Interop – March 2023

- Purpose: Validate the core IMPX Technical Requirements draft documents
- Location: NFL Los Angeles
- Dates: March 6 to March 8, 2023
- Participating Companies
 - intoPix, Macnica, Matrox, Meinberg, Nextra/Adeas, PacketStorm, and PB Technologies Group

IPMX Implementation Testing Event – January 2024

- Purpose: Validate core IPMX documents, so they can be published based on Implementation Testing Event.
- Validation criteria:
 - At least two vendors interoperating with no critical or substantial issues.
- Location: Matrox, Munich, Germany
- Dates: January 20 to January 24, 2024
- Participating Companies
 - Cobalt, EvertzAV, intoPix, Macnica, Matrox, Netgear, Nextera/Adeas, PacketStorm

IPMX Tested Event– March 2025

- Location: Evertz, Burbank, CA
- Dates: March 24 to 28, 2025
- Attendance:
 - 12 Participating Companies
 - 17 Attendees
- Purpose:
 - Not a Dirty Hands Test Event
 - Validate Test Plan that will be used for certification
 - Testing based on AIMS IPMX Profiles
 - Uncompressed Video
 - Compressed Video
 - Uncompressed Audio

IPMX Tested Event – March 2025

- Purpose (Continued):
 - Validate the core IPMX Technical Requirements
 - TR-10-0 – Document Organization
 - TR-10-1 – System Timing and Definitions
 - TR-10-2 – Uncompressed Video
 - TR-10-3 – PCM Audio
 - TR-10-8 – NMOS Requirements including AMWA IS-11 NMOS Stream Compatibility Management
 - TR-10-9 – IPMX Requirements for System Environment and Device Behavior
 - TR-10-11 – CBR Video
 - Provide a snapshot in time of how vendor equipment aligns to key parts of the standards and specifications
 - Increase the likelihood that IPMX devices will interoperate

IPMX Tested Event – March 2025

- IPMX Early Adopter Badge and Supporter Badge:
 - Companies that actively participate in the IPMX Tested Event in March will receive a badge
 - Badge is an acknowledgement of participation in a critical test for IPMX's development



IPMX Tested Event – March 2025

- Adeas
- Cobalt
- EvertzAV
- intoPIX
- Matrox
- Nextera
- PlexusAV / Sencore

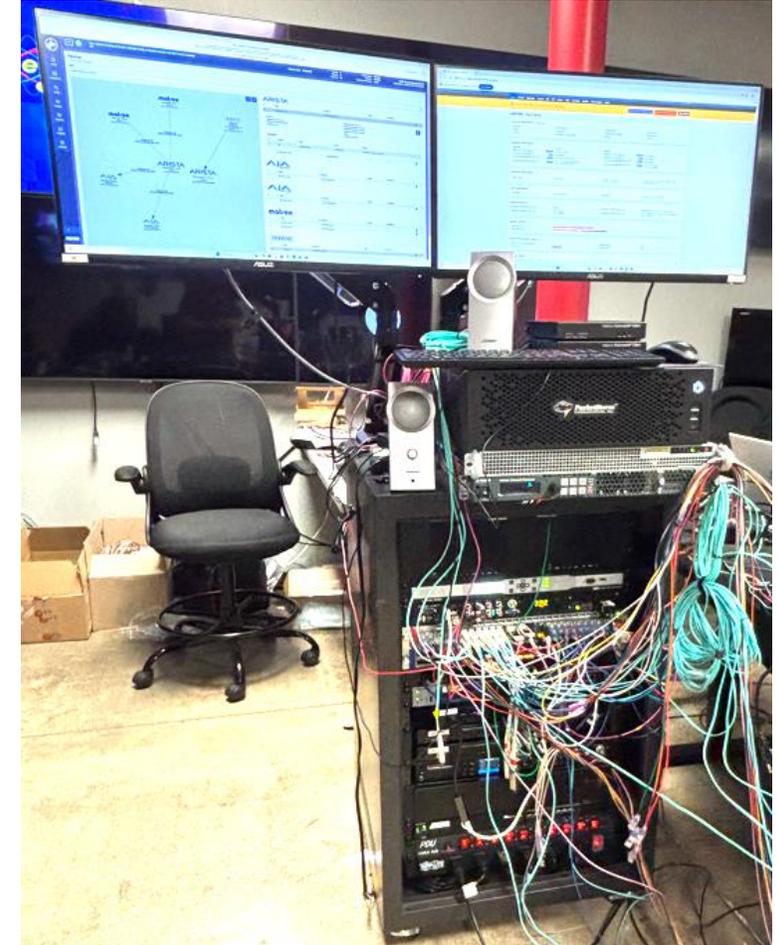


IPMX Tested Event – March 2025

- AVPro (Murideo)
- Meinberg
- PacketStorm Communications
- PB Technologies Group
- Whitcomb Consulting



IPMX Tested Event – March 2025



IPMX Tested Event – March 2025

Conclusions

- Positive results for all senders and receivers for all profiles
- Interop test between all senders and receivers that validated the test results
- Test plan is progressing well but needs more refinement
 - Need a more detailed NMOS test
 - Need to identify and qualify reference senders and receivers
 - Refine infrastructure requirements for execution of the test plan
- Infrastructure needs to meet the requirements of the test plan
- Need more automation to execute the test plan
- Need third party team of engineers to administer the tests

IPMX Dirty Hands Test Event– October 2025

- Location: Munich, Germany
- Dates: October 27 to 31, 2025
- Attendance:
 - Adeas, Bridge Technology, Cobalt, Evertz, intoPIX, Matrox, Nextera, Panasonic, PlexusAV
 - 15 Attendees
- Purpose:
 - Last multi-vendor test event before first “certification” event
 - Test IPMX TRs that have not been published or have been updated that are required for January 2026 IPMX Certification Test Event.
 - NMOS, PEP, HDCP – Only a few companies are required to validate
 - Fine tune test plan and automation for January 2026 IPMX Certification Test Event
 - Informal Interop Testing

IPMX Certification Tested Event – January 2026

- Location: EBU, Geneva, Switzerland
- Dates: January 19 to January 23, 2026
- Attendance:
 - TBD
- Purpose:
 - First IPMX Certification Test Event
 - IPMX Product Certifications
 - Products that pass will be listed in the registry and have legal permission to use the IPMX name and logo with their products
 - Announce IPMX Certification Test Results at ISE 2026 in Barcelona, Spain
 - Will not be like JT-NM Tested Event where test results are released.
 - Only vendors that receive IPMX certification will in the press release.

Any Questions?



THANK YOU