Protocols, Standards & Jargon Buster

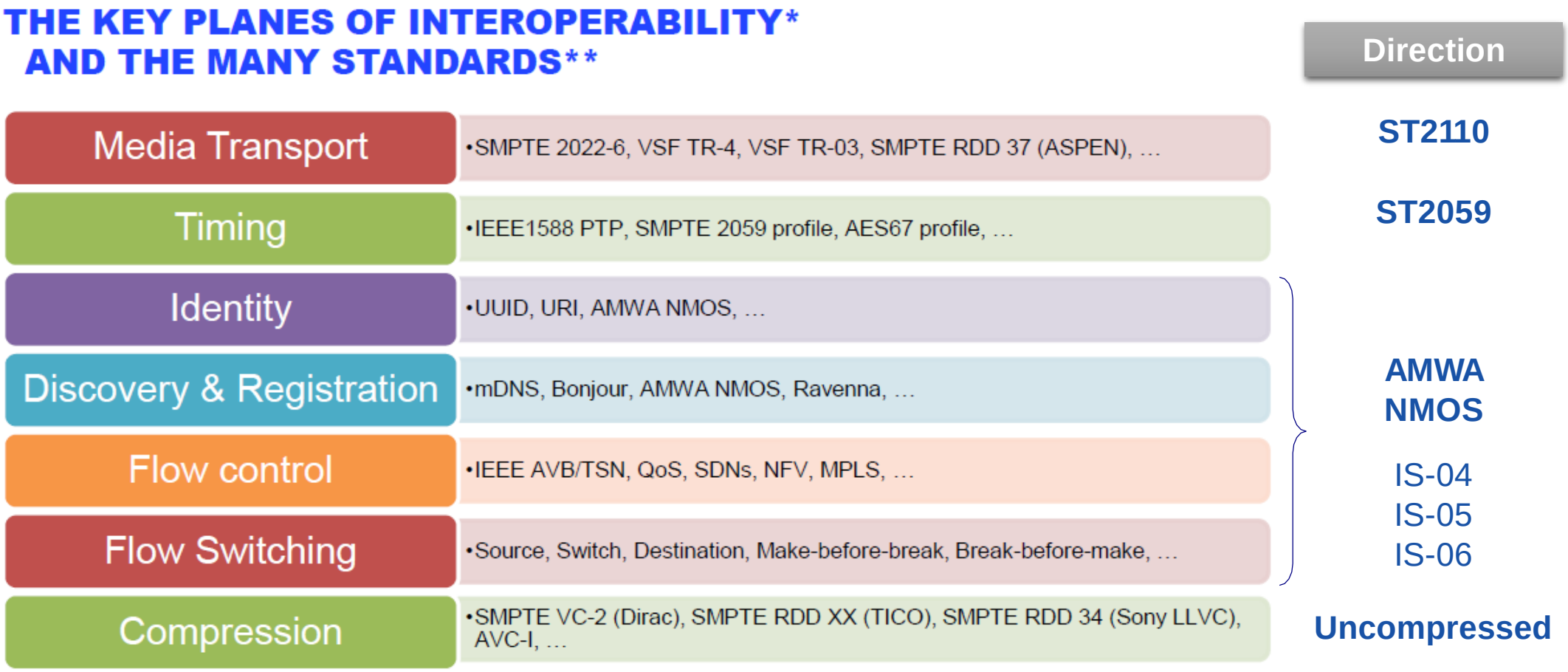
SONY

Leading the Standards

Sony is key member of the Joint Taskforce on Networked Media funded by EBU, SMPTE & VSF back in 2013.

As active member of SMPTE & principle board member of AMWA, Sony has led the standardization of SMPTE ST2059 and latest work on SMPTE ST2110 and AMWA NMOS specifications with sharing Open Source code of its IS-04 implementations.

EBU's 7 Layers for Interoperability



ST2110 Family overview

Standard	Description	Status
ST2110-10	Overall (System Timing and Definition)	Published (Sept/2017)
ST2110-20	Uncompressed Video Transfer	Published (Sept/2017)
ST2110-21	Packet Delivery Timing / Shaping	Published (Nov/2017)
ST2110-22	Compressed Video Transfer(Constant Bit-Rate)	DP(Document Publication) Ballot
RP2110-23	ST2110-20 Multiple Stream Transfer	Pre-FCD comments review
ST2110-30	PCM Audio Transfer (AES67)	Published (Sept/2017)
ST2110-31	AES-3 Audio Transfer	Published (Jun/2018)
ST2110-40	ST291 Ancillary Data Transfer	Published (Apr/2018)
ST2110-41	General Metadata Transfer	Project statement review
ST2110-42	SDP Transfer by ST2110-41	Project statement review
ST2022-7	Redundancy (Hitless failover) for RTP stream	Published (Now under reviewing for update)
ST2059-1	Relationship between Video frame and PTP time	Published (2015)
ST2059-2	SMPTE profile for IEEE1588/PTP	Published (2015)

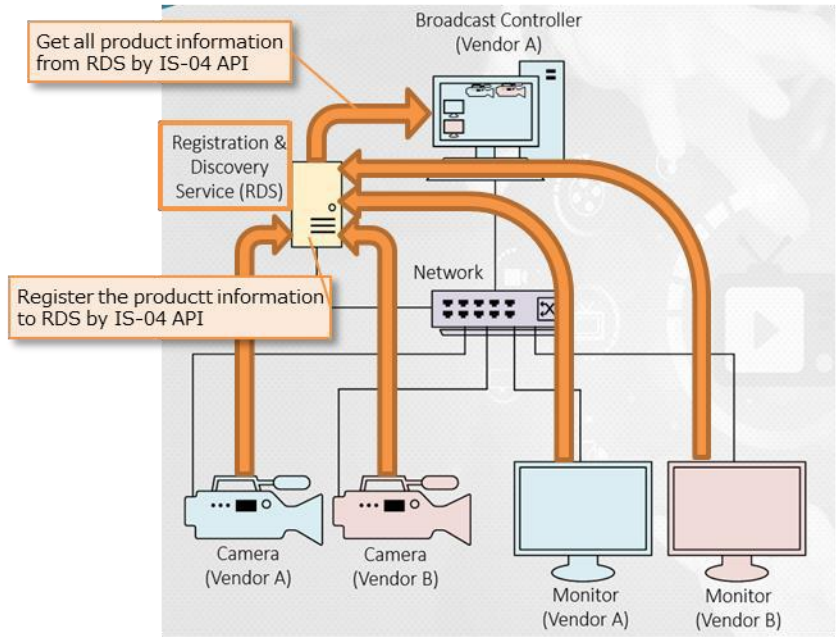
NMOS Family overview

NMOS	Description	Latest Ver.	Status
IS-04	Discovery & Registration	v1.2	Released in Oct 2017
IS-05	Connection Management (cross-point switching)	V1.0	Released in Oct 2017
IS-06	Network Control (topology discovery)	V1.0	Released in Oct 2018
IS-07	Event and Tally	N/A	Discussion open
IS-08	Audio Mapping	N/A	New Discussion

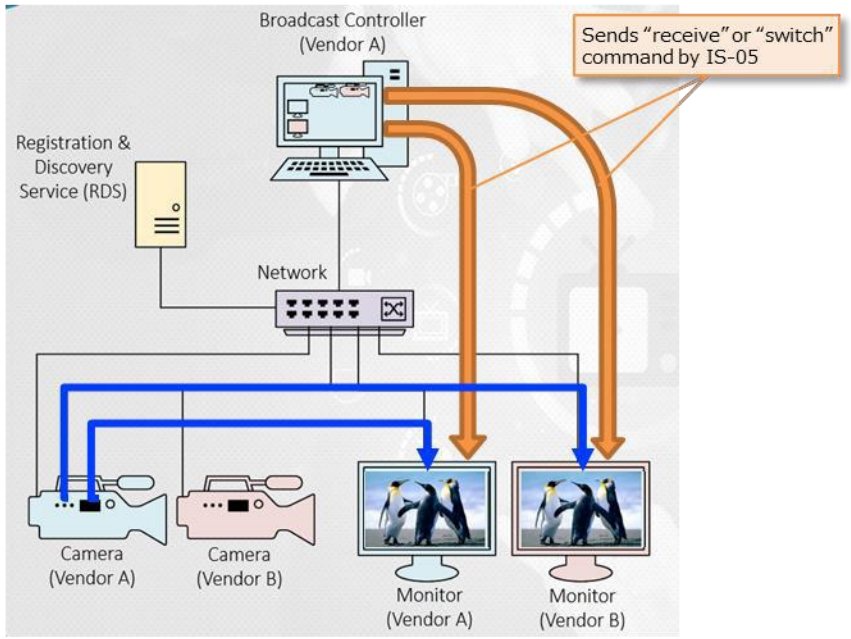
NMOS IS-04 & IS-05

IS-04 defines Registration & Discovery of devices (senders &/or receivers)
IS-05 defines flow switching between sender/receivers

Registration & Discovery (IS-04)



Flow Switching (IS-05)



This APIs realize the "multiple-vendor" system