

Functionality	Development Name & Number	Status	What it Does	Operational Benefits	Target Completion
NMOS - CORE	Discovery & Registration IS-04	Published & STABLE	It enables automation so that Broadcast Controllers can identify and manage new devices, using automated workflows.	Reduces manual overhead in setting up networked systems. Operators can quickly identify devices available in an NMOS ecosystem, so they know what resources are available for use.	Published & STABLE
	Device Connection Management IS-05	Published & STABLE	It reduces need for vendor-specific integrations into Broadcast Controllers and provides a common API for managing connections between NMOS devices.	Allows operators to make quick and easy connections between devices in an NMOS ecosystem.	Published & STABLE
	Natural Grouping of NMOS Resources BCP-002-01	Published	It allows identification of Resources in NMOS specifications that are logically grouped together.	A user may use Natural Grouping, for example, to identify that a video and an audio stream are coming from a single hand-held camera, or that a particular set of feeds are all coming from a single studio.	Published
	NMOS Asset Distinguishing Information BCP-002-02	Published	It helps avoid inconsistent naming approaches across vendors by defining how vendors provide human-readable distinguishing information for NMOS Nodes and Devices. This information is subsequently available in the NMOS registry.	Having distinguishing information visible in an IS-04 registry makes identification of NMOS resources much quicker and easier for operational staff.	Published
	Annotation IS-13	Work in Progress	It allows applications (e.g. provisioning, control and monitoring) to update resource labels, descriptions, and to create and update user tags. This information is subsequently available in the NMOS registry.	Operators can easily distinguish between different resources. Often this is aided by user-provided information in addition to that which is provided by the vendor.	Q3, 2023
	Audio Channel Mapping IS-08	Published & STABLE	It allows broadcast controllers to query and manage the mapping of audio channels between the internal parts of a device and the incoming and outgoing streams of that device.	It allows operators to perform simple 'track patching', changing audio channel mappings to meet operational requirements.	Published & STABLE
	Stream Compatibility Management IS-11	Work in Progress	It provides information about Inputs associated with Senders, Outputs associated with Receivers, and also allows the configuration of media parameters of Senders and Inputs based on information from Receivers and Outputs.	Operators can tune the output of a Sender to be compatible with one or many corresponding Receivers on the fly.	Q3, 2023
NMOS - SECURITY	Secure Communication BCP-003-01	Published	It provides a method, using IT best practices, to secure communications between devices that are using the NMOS family of APIs.	Communications between NMOS devices is obscured in an interoperable way to make it difficult to either 'snoop' on operational communications between devices or to inject malicious communications on to the network.	Published
	Authorization BCP-003-02	Published	It provides a way to ensure, using IT best practices, that the controller trying to access an NMOS device is what it claims to be.	It reduces the likelihood of disruption of operations due to an unauthorized device on the network.	Published
	Certificate Provisioning BCP-003-03	Published	It defines an approach, using IT best practices, for devices to obtain certificates which can be used to prove that they are allowed to communicate with other devices in an NMOS ecosystem.	Provides a practical way of managing security certificates. Makes it very difficult for an unauthorized device on the network to be able to claim that it is allowed to be there.	Published
	Authorization IS-10	Published	It provides an interoperable approach built on widely used web-based technologies to enable an NMOS API server to accept or reject requests from a device or control client, depending on what it's allowed to do.	Limiting unnecessary access is an essential part of securing operations.	Published
	BCP-006-01 JPEG XS	Published	It enables broadcast controllers to manage ST 2110-22 JPEG-XS streams within the NMOS ecosystem, as described in VSF TR-08 "Transport of JPEG XS Video in ST 2110-22".	Operational personnel can manage compressed and uncompressed streams	Published
	BCP-006-02 H.264	Work in Progress	It enables broadcast controllers to manage H.264 compressed streams within the NMOS ecosystem.		Q3, 2023

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NMOS - COMPRESSED STREAMS	BCP-006-03 H.265	Work in Progress	It enables broadcast controllers to manage H.265 compressed streams within the NMOS ecosystem.	in an open and interoperable way in the NMOS ecosystem.	Q3, 2023
	MPEG Transport Streams	Incubating	It enables broadcast controllers to manage MPEG Transport Streams within the NMOS ecosystem.		Incubating
	Using NMOS with NDI transport	Work in Progress	It allows NMOS controllers to register NDI devices and to manage NDI streams.	It enables controllers to keep track of and control these different types of streams, supporting operators who frequently deal with a number of different essence types and transport mechanisms within their facilities.	Q4 2023
NMOS - CONTROL AND MONITORING	NMOS Control MS-05	Work in Progress	It allows devices to expose a mixture of standard and vendor specific models covering control, status and monitoring features.	Broadcast Controllers can integrate the public APIs of devices without requiring custom drivers for every device. Provides a way of modeling devices that has been openly developed by a community of vendors and users to cover non-vendor-specific operational needs. Allows vendor specific models to be discovered and integrated.	Q3, 2023
	NMOS Control Protocol IS-12	Work in Progress	It sets out the rules and requirements for implementing the NMOS Device Control protocol in devices and controllers.		
	NMOS Configuration Management	Incubating	It provides a common way to save and set the configuration of devices.	Facility builders and operations personnel can quickly configure devices to a known state. For example, unused frame synchronizers may all be set to a known configuration at midnight.	Incubating
NMOS - SYSTEMS	Event & Tally IS-07	Published	It defines a uniform mechanism to carry time-sensitive information, allowing NMOS devices to communicate information about states and state changes issued by sources (sensors, actuators etc).	It provides GPI-like functionality in an IP environment.	Published
	System Parameters IS-09	Published	It allows devices to determine key parameters such as PTP domain, and facility identity where they are currently installed, without requiring manual configuration.	Using IS-09, the amount of manual information which must be entered in order for a device to communicate in an NMOS ecosystem is reduced.	Published
NMOS - TESTING	Node/Registry Test Suites NMOS Testing Tool	Published	It allows NMOS Nodes and Registries to be tested for compliance with the NMOS API specifications and best practice recommendations.	It enables vendors, users and systems integrators to be confident that their NMOS Nodes and Registries will interoperate correctly with other vendors' equipment.	Published
	Controller Test Suites NMOS Testing Tool	Published	An automated testing tool and first of a planned series of test suites that allow NMOS Controllers to be tested for compliance with the NMOS API specifications and best practice recommendations.	It enables vendors, users and systems integrators to be confident that their NMOS Controllers will interoperate correctly with other vendors' equipment.	Published Other test suites to follow