



## VSF Technical Recommendations, TR-09-1 & TR-09-2

December 8, 2022 — The Video Services Forum is pleased to announce the publication of TR-09-1 ST2110 WAN Data Plane & TR-09-2 ST2110 WAN Control Plane. These documents are freely available from the VSF website <https://www.vsf.tv/>.

SMPTTE ST 2110 and AMWA NMOS are widely used within media production facilities for IP-based media flows and related control. The standards are focused on managed networks with negligible latencies and jitter, negligible packet loss, and uncontended high bandwidth. To address use cases over mesh/distributed/remote production networks and multi-campus operation, VSF members saw a need to define recommendations for the transport of ST 2110 media essences over Wide Area Networks (WANs) with an associated control plane including appropriate security considerations.

The SMPTE ST 2110 over WAN - Activity Group was formed in the fall of 2018 to address these use cases, including: Flow protection, Flow trunking, Essence alignment, Low latency handling, Format conversion, Compression, Protection of other data flows, Security, PTP trunking, WAN timing & associated control (NMOS) filtering and border proxying.

***TR-09-1 Transport of ST 2110 media essences over Wide Area Networks – Data Plane*** defines a method of media flows and related control plane information being shared securely and robustly over Wide Area connectivity.

***TR-09-2 Transport of ST 2110 media essences over Wide Area Networks – Control Plane*** defines a method of the related control plane information being shared securely and robustly over Wide Area connectivity.

For additional information about the VSF please visit [vsf.tv](https://www.vsf.tv/).

### About the Video Services Forum

Founded in 1997, the Video Services Forum is an international association composed of service providers, users and manufacturers dedicated to interoperability, quality metrics and education for video networking technologies. The organization's activities include providing forums to identify issues involving the development, engineering, installation, testing and maintenance of video networking technologies; exchanging non-proprietary information to promote the development of video networking technology; fostering resolution of issues common to the video services industry and promoting interoperability by contributing to and supporting development of standards by national and international standards bodies.

VSF

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