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**CONSTRAINTS ON AVC VIDEO CODING FOR DIGITAL
PROGRAM INSERTION**

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CONSTRAINTS ON AVC VIDEO CODING FOR DIGITAL PROGRAM INSERTION

1.0 SCOPE

This document defines additional video coding and transport constraints on ANSI/SCTE 128 (which constrains ITU-T H.264/ ISO/IEC 14496-10 (“AVC”) video compression) for Digital Program Insertion applications using SCTE 35 messaging. Note: This standard applies only when both the insertion content and the network use AVC video coding.

2.0 DEFINITIONS AND ACRONYMS

Throughout this document, the terms used have specific meanings. Because some of the terms that are defined in ISO/IEC 13818-1 [3] and ISO/IEC 14496-10 [4] have very specific technical meanings, the reader is referred to the original sources for their definition. For terms used in this document, brief definitions are given below.

TERM	DESCRIPTION
AVC	Abbreviation for “Advanced Video Coding” and refers specifically to video compression standardized in ISO/IEC 14496-10 [4].
CPB	Coded Picture Buffer (as defined in ISO/IEC 14496-10 [4]).
DPB	Decoded Picture Buffer (as defined in ISO/IEC 14496-10 [4]).
DTS	Abbreviation for “Decoding Time Stamp” defined in ISO/IEC 13818-1 [3].
IDR	Abbreviation for “Instantaneous Decoding Refresh.” A picture type defined in ISO/IEC 14496-10 [4].
IDR NAL unit	An IDR slice as defined in ISO/IEC 14496-10 [4]. (A NAL unit with nal_unit_type = 5.)
NAL	Abbreviation for “Network Abstraction Layer” defined in ISO/IEC 14496-10 [4].
PES	Abbreviation for “Packetized Elementary Stream” defined in ISO/IEC 13818-1 [3].
PTS	Abbreviation for “Presentation Time Stamp.” Defined in ISO/IEC 13818-1 [3].