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Digital Video Subcommittee

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**MPEG DASH for IP-Based Cable Services
Part 2: DASH/TS Profile**

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Document Types and Tags

Document Type: Specification

Document Tags:

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| ☐ Architecture or Framework | ☐ Metric | ☒ Access Network |
| ☐ Procedure, Process or Method | ☒ Cloud | ☐ Customer Premises |

Document Release History

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1. Introduction

1.1. Executive Summary

This document is part of a suite of documents related to MPEG DASH for IP-Based cable services and is referred to as a whole SCTE 214. Part 1 describes general **MPD** constraints and common features supported by both the DASH TS profile and DASH ISO-BMFF profile. Part 2 contains further constraints for the DASH TS profile. Part 3 (*deprecated*) contains further constraints for the DASH ISO-BMFF profile. Part 4 provides an instance MPD template for the DASH TS profile. Part 5 which replaces Part 3 (*deprecated*) extends the features and constraints but only for ISO-BMFF DASH Profiles.

1.2. Scope

This document describes general **MPD** constraints and common features supported by both the DASH TS profile and DASH ISO-BMFF profile. This will allow a common feature parity between DASH Profile and ISO-BMFF Profile versions of the service and includes multiplexed segments. [SCTE 214-1] and 214-2 (this document) are used together to support DASH TS Profile delivery which is beneficial while transitioning from traditional broadcast MPEG-2 TS delivery structures using an ATS structured stream. Additional features developed in later DASH editions and needed for CABLE IP Services will be supported in SCTE 214-5 but only for constrained DASH ISO-BMFF Profiles with non-multiplexed segments.

Profile URNs for DASH/TS and DASH/FF appear in SCTE 214-2 and SCTE 214-5.

1.3. Benefits

This document assists in the transition between a broadcast cable infrastructure to a unicast IP based cable services while allowing for a gradual transition of backend systems supporting these services. This document specifically addresses details and features exclusive to the DASH TS/Profile.

1.4. Intended Audience

This document is intended for the development, operations, and maintenance of IP based cable services. It is useful for those creating, ingesting, and delivering content for adaptive streaming services.

1.5. Areas for Further Investigation or to be Added in Future Versions

Additional developments in this document are limited to including additional features that can co-exist with features and constructs defined in DASH edition 5 that enable parity between DASH MPEG-TS and DASH ISO-BMFF profiles which includes the use of multiplexed segments.

2. Normative References

2.1. SCTE References

[SCTE 35] ANSI/SCTE 35 2020, Digital Program Insertion Cueing Message for Cable

[SCTE 128-1] ANSI/SCTE 128-1 2020, AVC Video Constraints for Cable Television Part 1: Coding

[SCTE 128-2] ANSI/SCTE 128-2 2018, AVC Video Constraints for Cable Television Part 2: Transport