ETSI TS 126 247 V15.5.0 (2019-04)

TECHNICAL SPECIFICATION

Universal Mobile Telecommunications System (UMTS);
LTE;
Transparent end-to-end
Packet-switched Streaming Service (PSS);
Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)
(3GPP TS 26.247 version 15.5.0 Release 15)

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A GLOBAL INITIATIVE

Reference
RTS/TSGS-0426247vf50

Keywords
LTE,UMTS

ETSI

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The 3GPP transparent end-to-end packet-switched streaming service (PSS) specification consists of seven 3GPP TSs: 3GPP TS 22.233 [1], 3GPP TS 26.233 [2], 3GPP TS 26.234 [3], 3GPP TS 26.244 [4], 3GPP TS 26.245 [5], 3GPP TS 26.246 [6], and the present document.

The TS 22.233 contains the service requirements for the PSS. The TS 26.233 provides an overview of the PSS. The TS 26.234 provides the details of the protocols and codecs used by the PSS. The TS 26.244 defines the 3GPP file format (3GP) used by the PSS and MMS services. The TS 26.245 defines the Timed text format used by the PSS and MMS services. The TS 26.246 defines the 3GPP SMIL language profile. The present document defines Progressive Download and Dynamic Adaptive Streaming over HTTP.

The TS 26.244, TS 26.245 and TS 26.246 start with Release 6. Earlier releases of the 3GPP file format, the Timed text format and the 3GPP SMIL language profile can be found in TS 26.234.

The TS 26.247 starts with Release 10. Earlier releases of Progressive Download and Dynamic Adaptive Streaming over HTTP can be found in TS 26.234.

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Introduction

Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH) collects a set of technologies how progressive download and adaptive streaming of continuous media may be carried out exclusively over HTTP.

1 Scope

The present document specifies Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH). This specification is part of Packet-switched Streaming Service (PSS). HTTP-based progressive download and dynamic adaptive streaming are separated from TS 26.234 to differentiate from RTP-based streaming that is maintained in TS 26.234. HTTP-based progressive download and dynamic adaptive streaming may be deployed independently from RTP-based PSS, for example by using standard HTTP/1.1 servers for hosting data formatted as defined in the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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[56] IETF RFC 6455: "The WebSocket Protocol".

[57] 3GPP TS 23.003: "Numbering, addressing and identification".

[58] 3GPP TS 26.116: "Television (TV) over 3GPP services; Video profiles".

[59] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification".

[60] 3GPP TS 26.347: " Multimedia Broadcast/Multicast Service (MBMS); Application Programming Interface and URL".

[61] 3GPP TS 27.007: " Technical Specification Group Core Network and Terminals; AT command set for User Equipment (UE)".

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3 Definitions, abbreviations and conventions

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [7], in ISO/IEC 23009-1 [43], section 3.1, and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [7].

frame-packed stereoscopic 3D video: a video consisting of two views in which both views were packed into a single stream before compression.

multiview stereoscopic 3D video: a video consisting of two views packed into a single stream during compression.