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Foreword

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The 3GPP transparent end-to-end packet-switched streaming service (PSS) specification consists of six 3GPP TSs: 3GPP TS 22.233 [1], 3GPP TS 26.233 [2], 3GPP TS 26.234 [3], 3GPP TS 26.244 [4], 3GPP TS 26.246 [5] 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 protocol and codecs used by the PSS. The TS 26.244 defines the 3GPP file format (3GP) used by the PPS and MMS services. The TS 26.246 defines the 3GPP SMIL language profile. The present document defines the Timed text format used by the PSS.

The TS 26.244, TS 26.245 (present document) 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.

Introduction

Timed text is text that is rendered at the terminal, in synchronization with other timed media such as video or audio. Timed text is used for such applications as closed captioning, titling, and other visual annotation of timed media.

1 Scope

The present document defines the timed text format relative to the 3GPP file format. This specification defines the format of timed text in downloaded files.

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.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TS 22.233: "Transparent End-to-End Packet-switched Streaming Service; Service aspects; Stage 1".
- [2] 3GPP TS 26.233: "Transparent end-to-end packet switched streaming service (PSS); General description".
- [3] 3GPP TS 26.234: "Transparent end-to-end packet switched streaming service (PSS); Protocols and codecs".
- [4] 3GPP TS 26.244: "Transparent end-to-end packet switched streaming service (PSS); 3GPP file format (3GP)".
- [5] 3GPP TS 26.246: "Transparent end-to-end packet switched streaming service (PSS); 3GPP SMIL Language Profile".
- [6] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [7] The Unicode Consortium: "The Unicode Standard", Version 3.0 Reading, MA, Addison-Wesley Developers Press, 2000, ISBN 0-201-61633-5.
- [8] "Unicode Standard Annex #13: Unicode Newline Guidelines", by Mark Davis. An integral part of The Unicode Standard, Version 3.1.
- [9] ISO/IEC 14496-14:2003 "Information technology Coding of audio-visual objects Part 14: MP4 file format".
- [10] ETSI EN 300 743 v1.4.1"Digital Video Broadcasting (DVB); Subtitling systems".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

continuous media: media with an inherent notion of time. In the present document speech, audio, video and timed text

discrete media: media that itself does not contain an element of time. In the present document all media not defined as continuous media