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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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Introduction

The present document has been created as part of the MBMS Transport Protocol and API (TRAPI) work item and is based on the conclusions of TR 26.852 [6] in order to provide application-friendly methods and interfaces to access 3GPP MBMS User services. The present document is primarily targeted for developers of web and user applications and attempts to abstract complex MBMS procedures in simple methods and interfaces. MBMS Client vendors can implement this API and URL to simplify the integration of MBMS User Services.

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1 Scope

The present document provides application methods and interfaces between an MBMS-aware application and the UE MBMS Client to access 3GPP MBMS User services. The purpose of the document is the definition of enablers in order to simplify the usage of MBMS in web-centric as well as app-based service environments.

The present document defines several APIs to access MBMS User Services and a URL to access resources available as part of an MBMS User Service. The MBMS User Services are defined in TS 26.346 [5] and are not part of 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.
- 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 TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.146: "Multimedia Broadcast/Multicast Service; Stage 1".
- [3] 3GPP TS 22.246: "Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1".
- [4] 3GPP TS 23.246: "Multimedia Broadcast/Multicast Service (MBMS); Architecture and functional description".
- [5] 3GPP TS 26.346: "Multimedia Broadcast/Multicast Service (MBMS); Protocols and codecs".
- [6] 3GPP TR 26.852: "Multimedia Broadcast/Multicast Service (MBMS); Extensions and profiling".
- [7] 3GPP TS 26.247: "Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)".
- [8] IETF RFC 2616: "Hypertext Transfer Protocol -- HTTP/1.1".
- [9] Object Management Group: "Interface Definition Language™ (IDL™) 4.0".
- [10] IETF RFC 3066: "Tags for the Identification of Languages".
- [11] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".
- [12] 3GPP TS 29.116: "Representational state transfer over xMB reference point between content provider and BM-SC".
- [13] IETF RFC 7595: "Guidelines and Registration Procedures for URI Schemes".
- [14] IETF RFC 7230: "Hypertext Transfer Protocol (HTTP/1.1): Message Syntax and Routing".
- [15] IETF RFC 7553, "The Uniform Resource Identifier (URI) DNS Resource Record"
- [16] IETF RFC 6335, "Internet Assigned Numbers Authority (IANA) Procedures for the Management of the Service Name and Transport Protocol Port Number Registry"