ETSI TS 123 335 V13.1.0 (2016-04)

Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
LTE;
User Data Convergence (UDC);
Technical realization and information flows;
Stage 2
(3GPP TS 23.335 version 13.1.0 Release 13)

Reference
RTS/TSGC-0423335vd10

Keywords
GSM,LTE,UMTS

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Contents

Foreword

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Introduction

The UDC concept (3GPP TS 22.101 [3]) supports a layered architecture, separating the data from the application logic in the 3GPP system, so that user data is stored in a logically unique repository allowing access from core and service layer entities, named Application Front Ends.

Network elements and functionalities should be designed to access user data remotely and without storing them permanently locally, i.e. the Front Ends shall work in a subscriber dateless configuration.

1 Scope

The present document describes the procedures and signalling flows associated to the technical realization of the 3GPP User Data Convergence (UDC). It furthermore indicates some requirements for the stage 3 specifications.

Special consideration is put in the following areas:

- reference architecture for the UDC concept

- general description of procedures for the user data manipulation (e.g. create, delete, update, etc.)

- identification of the requirements on the UDC for the applicability of the mechanisms described in this document.

User data convergence is an optional concept to ensure data consistency and simplify creation of new services by providing easy access to the user data, as well as to ensure the consistency of storage and data models and to have minimum impact on traffic mechanisms, reference points and protocols of network elements.

Standization of the Data Model for the Ud interface between Front-Ends and the UDR is out of the scope of 3GPP.

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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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TR 22.985: "Service requirement for the User Data Convergence (UDC)".

[3] 3GPP TS 22.101: "Service aspects; Service principles".

[4] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[5] 3GPP TS 23.002: "Network architecture".

[6] 3GPP TS 32.182: "User Data Convergence (UDC); Common Baseline Information Model (CBIM)".

[7] 3GPP TS 33.210: "3G Security; Network Domain Security; IP network layer security".

[8] 3GPP TS 32.181: "Telecommunication management; User Data Convergence (UDC); Framework for Model Handling and Management".

[9] 3GPP TS 23.179: "Functional architecture and information flows to support mission critical communication services".