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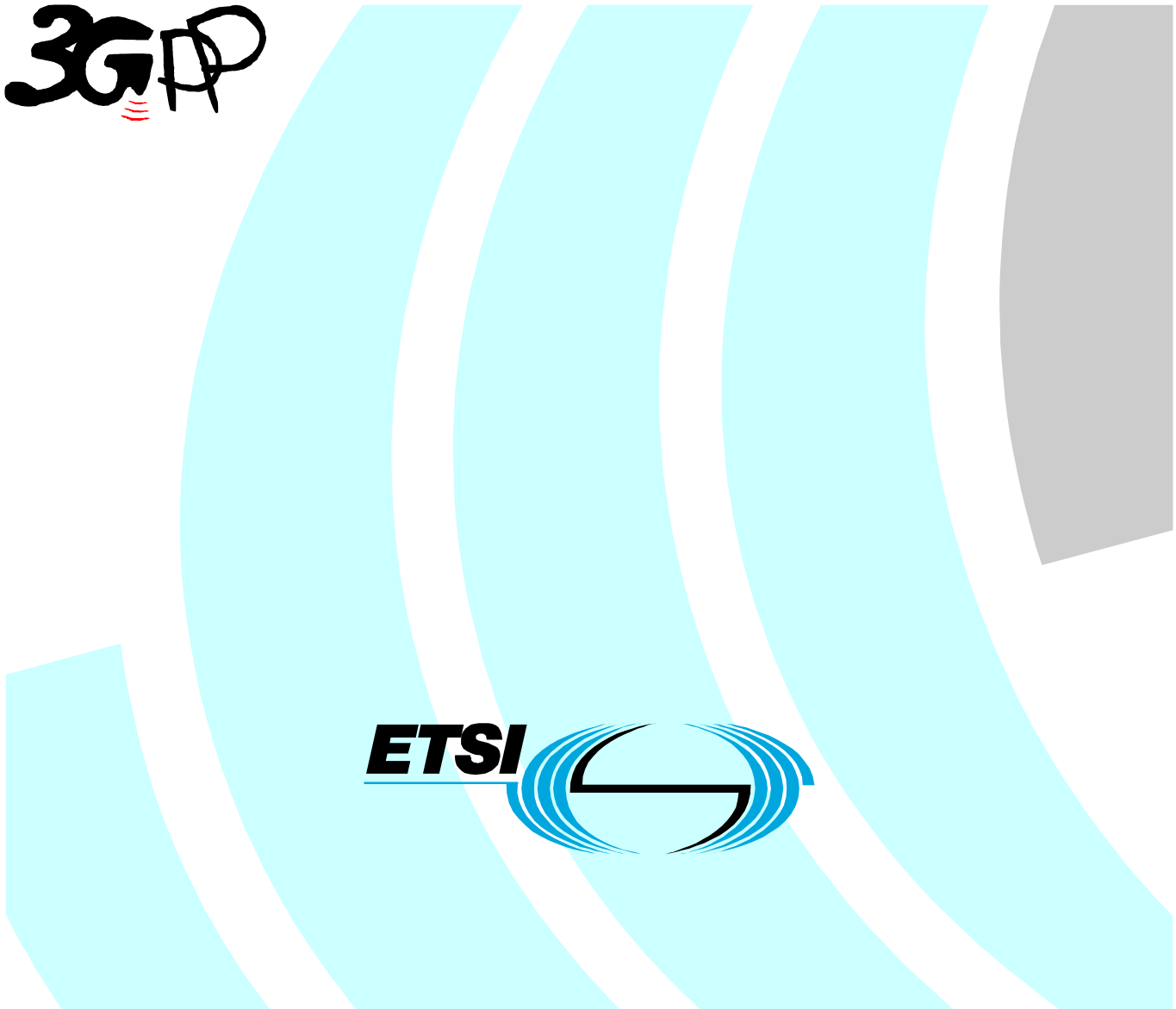
Technical Specification

Universal Mobile Telecommunications System (UMTS);
Application and user interaction in the UE;
Principles and specific requirements
(3GPP TS 23.227 version 5.1.0 Release 5)



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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
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Contents

Foreword

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

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Introduction

The present rapid development of a diversity of new applications and application environments for mobile usage creates a complexity of previously unseen proportions that the UE has to handle. These applications and application environments co-exist and execute independently in the UE, and thus have the potential to interact with each other in a way that could be detrimental to the positive user experience and sense of user control of the UE. There is a need to control and manage the total applications/interfaces environment and MT resources so as to produce a conceptually consistent and logically whole and integrated user experience.

The present document outlines a generic model for the interaction between these applications. It further specifies a set of basic principles and requirements for these applications to co-exist on the UE. This specification may also result in presenting to the user a coherent user experience.

The present document's purpose is *not* to categorise the applications peripherals, but to try to structure the events that are internal and external to, and has to be handled by, the MT Core Functions. This means that the structure or grouping of the events should be made from a *MT centric* perspective. Some applications run on the UE side have counterparts in the network. The present document addresses the interactions within the UE.

The User Equipment functional model used in this specification is defined by the model included in 23.101 [8].

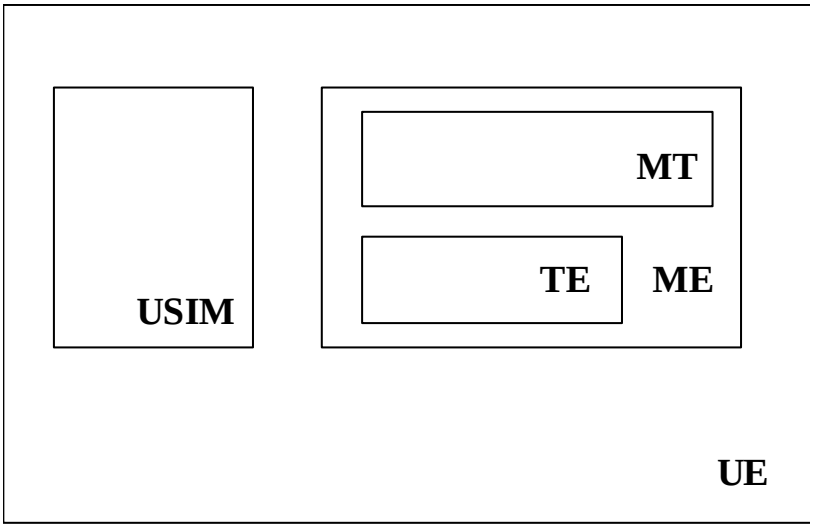

Figure 1: Functional Model for the User Equipment

1 Scope

The present document defines the principles for scheduling UE resources and controlling UE interactions and resolving conflicts between independently running applications in different application execution environment (e.g. MExE, USAT etc.) and internal and external peripherals (e.g. infra-red, Bluetooth, USIM, radio interface, MMI, memory etc.).

The present document is divided in two parts: clause 4 defines a framework for event handling. Clause 5 addresses some specific issues.

Annex A contains an informative background to the problem area.

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.
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[1] 3GPP TR 21.905 "Vocabulary for 3GPP specifications"

[2] 3GPP TS 23.057: "Mobile Execution Environment (MExE); Functional description; Stage 2".

[3] WAP, WAP Forum, "WAP Technical Specifications Suite" (http://www.wapforum.com/)

[4] 3GPP TS 31.101: "UICC-Terminal Interface; Physical and Logical Characteristics".

[5] 3GPP TS 31.102: "Characteristics of the USIM Application".

[6] 3GPP TS 31.111: "USIM Application Toolkit (USAT)".

[7] 3GPP TS 22.038: "USIM/SIM Application Toolkit (USAT/SAT); Service description; Stage 1".

[8] 3GPP TS 23.101: "General UMTS Architecture"

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in the referred documents and the following apply:

call: voice and data calls, USSD, SMS, fax, GPRS calls, supplementary services, etc.

preferences: includes authorisations, priorities, options, etc.

authorisation: permission to set up and or receive any call or only certain types of call and access rights to user data

MT Core Functions: software functions that contain the central logic for the MT, including for instance the scheduling of events