

Source: TSG SA1
Title: CRs (R99) to 22.101 on Interactions between applications requiring the access to UE resources
Document for: Approval
Agenda Item: 7.1.3

Spec	CR	Rev	Phase	Cat	Subject	Vers	New Vers	SA1 Doc. No.
22.101	055		R99	F	Handling of interactions between applications requiring the access to UE resources	3.10.0	3.11.0	S1-000631
22.101	056		R99	F	Handling of interactions between applications requiring the access to UE resources	3.10.0	3.11.0	S1-000693

Note: CRs 22.101-55 and 22.101-56 are mutually exclusive. If 22.101-055 is approved then 22.101-056 must be rejected and vice versa.

CHANGE REQUEST

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22.101 CR 055

Current Version: **3.10.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **SA#9**

list expected approval meeting # here ↑

for approval
for information

strategic
non-strategic (for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: TSG SA1 **Date:** 20 July 2000

Subject: Handling of interactions between applications requiring the access to UE resources

Work item: Service principles

Category: F Correction **Release:** Phase 2
(only one category shall be marked with an X) A Corresponds to a correction in an earlier release Release 96
B Addition of feature Release 97
C Functional modification of feature Release 98
D Editorial modification Release 99
Release 00

Reason for change: Currently WAP sessions and SIM toolkit services are not programmed to run simultaneously in a UE. In other words no rules have been defined to resolve contentions for the access to the handset resources such as display and keypad. The objective of this proposal is to define a user controlled mechanism to grant access to the UE resources to the applications running simultaneously. For R00, further work is expected to enrich the proposed procedure. This will be done in accordance with T2 work on Terminal Local Model.

Clauses affected: 13

Other specs affected: Other 3G core specifications → List of CRs:
Other GSM core specifications → List of CRs:
MS test specifications → List of CRs:
BSS test specifications → List of CRs:
O&M specifications → List of CRs:

Other comments: If this procedure is not agreed upon at SA#9, then the result will be non-consistent behaviour of terminals from different manufacturers when dealing with interactions between applications. This will seriously limit the development and large scale deployment of innovative applications such as m-commerce.

Note: CRs 22.101-55 and 22.101-56 are mutually exclusive. If 22.101-055 is approved then 22.101-056 must be rejected and vice versa.



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13 Types of features of UEs

3GPP specifications should support a wide variety of user equipment, i.e. setting any limitations on terminals should be avoided as much as possible. For example user equipment like hand-portable phones, personal digital assistants and laptop computers can clearly be seen as likely terminals.

In order not to limit the possible types of user equipment they are not standardised. The UE types could be categorised by their service capabilities rather than by their physical characteristics. Typical examples are speech only UE, narrowband data UE, wideband data UE, data and speech UE, etc..

In order to enhance functionality split and modularity inside the user equipment the interfaces of UE should be identified. Interfaces like UICC-interface, PCMCIA-interface and other PC-interfaces, including software interfaces, should be covered by references to the applicable interface standards.

UEs have to be capable of supporting a wide variety of teleservices and applications provided in PLMN environment. Limitations may exist on UEs capability to support all possible teleservices and information types (speech, narrowband data, wideband data, video, etc.) and therefore functionality to indicate capabilities of a UE shall be specified. UEs should be capable of supporting new supplementary services without any changes in UE.

The basic mandatory UE requirements are:

- Encrypted terminal-UICC interface;
- Support for GSM phase 2 and 2+ SIM cards, phase 1 5V SIM cards shall not be supported;
- Home environment and serving network registration and deregistration;
- Location update;
- Originating or receiving a connection oriented or a connectionless service;
- An unalterable equipment identification; IMEI, see TS 22.016 [12];
- Basic identification of the terminal capabilities related to services such as; the support for software downloading, application execution environment/interface, MExE terminal class, supported bearer services.
- Terminals capable for emergency calls shall support emergency call without a SIM/USIM.
- Support for the execution of algorithms required for encryption;
- Support for the method of handling automatic calling repeat attempt restrictions as specified in TS 22.001 [4];
- At least one capability type shall be standardised for mobile terminals supporting the GRAN and UTRAN radio interfaces.
- Under emergency situations, it may be desirable for the operator to prevent UE users from making access attempts

(including emergency call attempts) or responding to pages in specified areas of a network, see TS 22.011 [11];

- Ciphering Indicator for terminals with a suitable display;

The ciphering indicator feature allows the ME to detect that ciphering is not switched on and to indicate this to the user. The ciphering indicator feature may be disabled by the home network operator setting data in the SIM/USIM. If this feature is not disabled by the SIM, then whenever a connection is in place, which is, or becomes unenciphered, an indication shall be given to the user. Ciphering itself is unaffected by this feature, and the user can choose how to proceed;

- Support for PLMN selection.
- Support for handling of interactions between toolkits concerning the access to UE input/output capabilities; Whenever an application (e.g. a SAT/MExE/WAP application) requires the access to the UE input/output capabilities (e.g. display, keyboard,...), the UE shall grant this access subject to the capabilities of the UE. This shall not cause the termination of any other applications (e.g. WAP browser or MExE/SAT application) which were previously using these UE resources. The UE shall give the user the ability to accept or reject the new application. In the case that the application request is rejected, the access to the UE input/output capabilities is returned to the applications which were previously using these UE resources. If the user decides to continue with the new application, then when this new application is terminated, the access to the UE input/output capabilities shall be returned to the UE to be re-allocated to applications (e.g. the preceding application which was interrupted). Note: rejecting a request to access the UE input/output capabilities by an application does not necessarily mean that it is terminated, but only that the access to the UE input/output capabilities are not granted to this application. Handling of rejection (termination, put on hold,...) is considered out of the scope of standardisation.

Annex A describes a number of features which may optionally be supported by the ME.

TSG-SA WG 1 (Services) meeting #10TSG S1 (00) 693
Orlando, USA 13th to 17th November 2000

Agenda Item:

3GPP TSG-T2 #10
Galway, IRELAND
August 28th - September 1th 2000

T2-000545

Liaison Statement

From: T2

To: TSG-SA, S1, T3

Cc: "New SMG9", WAP Forum

Subject: **LS on Priority of ME resources for WAP and SIM toolkit applications**

Contact: Kevin Holley
BT
+44 1473 605604
kevin.holley@bt.com

Attachments: <none>

T2 thanks S1 and T3 for their liaison statements on the above subject. T2 agrees with S1 and T3 that there is a need to resolve this issue for Release 99 and a need for a more generic solution in the longer term. However, concerning the S1 CR, T2 has the following concerns:

1. The reference to "input/output" implies a wider scope than is needed to resolve the urgent issue for R99, and therefore T2 proposes to restrict this to the MMI input/output rather than implying that this also covers the radio interface, infra red, Bluetooth, physical connector etc.
2. Depending on the ME implementation, it could be possible for the user to switch back and forth between applications and this should be allowed.
3. The handling of rejection should be done by the application, rather than saying that it is out of scope of standardisation

T2 attaches a proposed revised CR to the S1 document which clarifies these issues.

Concerning the T3 LS, T2 again agrees that there is a need for a more generic approach to this work and that there are different applications which will require different approaches, however there are more applications than just WAP and (U)SAT applications and this is one of the reasons for the ongoing T2 work on "Terminal Local Model". T2 believes that further work is required inside T2 on this subject and invites further contributions.

T2 notes that there is no meeting of S1 before the next SA meeting and therefore is sending this also to SA.

CHANGE REQUEST

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22.101 CR 056

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↑ CR number as allocated by MCC support team

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(U)SIM ME UTRAN / Radio Core Network

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Subject: Handling of interactions between applications requiring the access to UE resources

Work item: Service principles

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Note: rejecting a request to access the UE MMI input/output capabilities by an application does not necessarily mean that it is terminated, but only that the access to the UE MMI input/output capabilities are not granted to this application. Handling of rejection (termination, put on hold,...) is considered out of the scope of standardisation is the responsibility of the application.

Annex A describes a number of features which may optionally be supported by the ME.