

**Source:** SA1  
**Title:** CR to 22.057 on MeXE service discovery  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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Spec	CR	Re v	Phas e	Subject	Cat	Versio n- Curren t	Versio n-New
22.057	006		Rel-5	MeXE service discovery	B	5.0.0	5.1.0

CR-Form-v3

## CHANGE REQUEST

⌘ **TS 22.057** CR **006** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ MExE service discovery				
<b>Source:</b>	⌘ SA1				
<b>Work item code:</b>	⌘ MExE-ENHANC	<b>Date:</b>	⌘ 07/02/01		
<b>Category:</b>	⌘ <b>B</b>	<b>Release:</b>	⌘ REL-5		
	Use <u>one</u> of the following categories: <b>F</b> (essential correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (Addition of feature), <b>C</b> (Functional modification of feature) <b>D</b> (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) REL-4 (Release 4) REL-5 (Release 5)		

<b>Reason for change:</b>	⌘	Although MExE generically supports service discovery by "surfing" to websites and downloading applications from operators' and other parties servers, it is helpful to explicitly clarify this as a requirement.
<b>Summary of change:</b>	⌘	The requirement for the support of service discovery is explicitly included in the high level requirements
<b>Consequences if not approved:</b>	⌘	

<b>Clauses affected:</b>	⌘	6.1
<b>Other specs affected:</b>	⌘	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘	

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## 6 General MExE requirements

### 6.1 High level MExE requirements

The high level requirements of MExE are as follows:

- the means for MExE service provider specific services to be supported by all UEs of a particular class (i.e. the need for a common set of APIs and development tools), and accessible across a range of networks;
- provide the user with a more sophisticated user interfaces (e.g. browser-like) with a rich variety of MMI concepts to control and invoke services (i.e. softkeys, icons, voice recognition etc.);
- the user's and MExE service providers capability to control the "look and feel" of applications and applets;
- the ability of the user to personalise the user interface;
- the ability of the user to personalise services and individual media components of a multimedia service;
- provide support of a wide variety of applications and applets;
- provide the means for MExE service providers to authenticate MExE subscribers;
- provide the user access to Internet and Intranet based applications and applets (via both standard Internet and Wireless optimised protocols);
- the means to transfer applications, applets and content automatically or on demand to a MExE UE from a MExE service provider, and upgrade existing applications across the network;
- the means to support direct MExE UE to MExE UE interaction of MExE services;
- the need for an inherent security architecture such that both the MExE UE and MExE server sides of a connection are authenticated (possibly by a brokerage server), and have access to a range of encryption and security functions in order to maintain the security and integrity of the network. The MExE service provider shall maintain security of subscribers personal data and network data, with all aspects relating to network security being centred on the SIM/USIM;
- the ability for the MExE service provider to charge subscribers for MExE service provider provided MExE services, at connect time, when downloading, or on usage;
- the means for MExE service provider specific applications and applets on the MExE UE to communicate with applications in the MExE service environment using industry standard protocols (e.g. a MExE server etc);
- the ability to provide information to MExE service providers (e.g. location information of UE' for use with location dependent services);
- the means for MExE service providers and their applications and applets to determine MExE UE capabilities (i.e. MExE Classmark, technology, supported bearers according to network capabilities and network subscription etc.). (This shall be used by MExE servers to adapt application and applet transfer to MExE UE capabilities, and shall be used by applications and applets whilst running to adapt their behaviour to the UE's capabilities.);
- the opportunity for MExE service providers to apply expertise and software developed for other platforms;
- provision of APIs and tools to develop MExE services which are applicable for MExE UE';
- the means for the user to manage (i.e. identify version, delete, modify, save etc.) the applications, applets and content on the MExE UE;
- the means for the user to control acceptance (i.e. by Security Level, level of trust etc.) of applications, applets and content transferred to the MExE UE. (It shall be possible for the user to finely control a trusted application or applet's access rights on the MExE UE, such as reading/writing/deletion of files stored on the MExE UE);
- the means for MExE applications to perform some AT command functionality without compromise to security of MExE as defined in clause 8;

- the means for authentication certificates associated with applications to be managed and stored in the SIM/USIM;
- the ability for a MExE application to negotiate the QoS, and the ability to indicate to a MExE application changes in the QoS;
- the ability of MExE applications to be notified that handover is about to occur, is occurring or has occurred;
- the means for MExE UE manufacturers to download and upgrade their existing codec in a MExE UE. A generic mechanism to download other proprietary software into the execution environment of the UE shall be available to the manufacturer. The downloading of platform independent MExE applications, such as streaming audio, that support multimedia capabilities shall also be possible;
- the means for data to be synchronised between the MExE UE and the MExE service environment;
- the ability to support IP multimedia services;
- the ability to discover services offered by the Home Environment, valued added service providers with associated with the Home Environment, and third parties.

Some of the above requirements are subsequently elaborated.