



**Specification Information Note**  
**WAP-171\_103-WTAIGSM-20010516-a**  
Version 16-May-2001

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for

Wireless Application Protocol  
WAP-171-WTAIGSM-20000707-a  
Wireless Telephony Application Interface Specification  
Version 07-Jul-2000

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# 1. Scope

This document provides changes and corrections to the following document files:

- WAP-171-WTAIGSM-20000707-a

It includes changes from the following change requests:

- CREC-WTAIGSM-TELSTRA-07-MAY-2001-1

# 2. Notation

In the subsections describing the changes new text is underlined. Removed text has ~~striketrough~~ marks. The presented text is copied from the specification. Text that is not presented is not affected at all. The change descriptions may also include editor's notes similar to the one below. The notes are not part of the actual changes and must not be included in the changed text.

**Editor's note:** Framed notes like these only clarify where and how the changes shall be applied.

## 3. Update references to USSD

### 3.1 Change Classification

Class 3 – Clerical Corrections

### 3.2 Change Summary

The WTAIGSM specification defines an event and a function that relate to USSD. The WTAIGSM specification makes reference to the Phase 1 USSD specification, but this is a high level specification and does not contain enough detail to describe the features used by WTAI. The Phase 1 specification does refer to more detailed GSM documentation, however it is more appropriate for the WTAIGSM specification to refer to these documents directly. This Change adds references to:

- GSM 03.38 " Digital cellular telecommunications system (Phase 2+); Alphabets and language-specific information"
- GSM 04.80 " Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 supplementary services specification; Formats and coding"
- GSM 04.90 " Digital cellular telecommunications system (Phase 2+); Unstructured Supplementary Service Data (USSD); Stage 3"

### 3.3 Change Description

**Editor's note:** Changes in chapter 3.1 Normative References, normativ references added.

Section 7.1.3 wtaev-gsm/ru, references corrected and section 7.2.7 WTAGSM.sendUSSD are updated with new refereces.

**Editor's note:** On page 5.

### 3.1 Normative references

[FORMAT]	WAP-188, "WAP General Formats Document", WAP Forum. URL: <a href="http://www.wapforum.org/">http://www.wapforum.org/</a>
[GSM 02.84]	GSM 02.84 "Digital cellular telecommunications system; Multi Party (MPY) supplementary services; Stage 1"
[GSM 02.90]	GSM 02.90 "Digital cellular telecommunications system; Unstructured Supplementary Services Data (USSD) – Stage 1"
[GSM 03.38]	<a href="#">GSM 03.38 " Digital cellular telecommunications system (Phase 2+); Alphabets and language-specific information"</a>
[GSM 04.07]	GSM 04.07 "Digital cellular telecommunications system (Phase 2+); Mobile radio interface signalling layer 3; General aspects"
[GSM 04.08]	GSM 04.08 "Digital cellular telecommunications system (Phase 2+); Mobile radio interface; Layer 3 specification"

- [GSM 04.80] [GSM 04.80 " Digital cellular telecommunications system \(Phase 2+\); Mobile radio interface layer 3 supplementary services specification; Formats and coding"](#)
- [GSM 04.90] [GSM 04.90 " Digital cellular telecommunications system \(Phase 2+\); Unstructured Supplementary Service Data \(USSD\); Stage 3"](#)
- [RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997. URL: <http://www.ietf.org/rfc/rfc2119.txt>
- [RFC2396] "Uniform Resource Identifiers (URI): Generic Syntax." T. Berners-Lee, R. Fielding, L. Masinter, et al., August 1998. URL: <http://www.ietf.org/rfc/rfc2396.txt>
- [WAP] "Wireless Application Protocol Architecture Specification", WAP Forum, 30-Apr-1998. URL: <http://www.wapforum.org/>
- [WMLScript] "WMLScript Language Specification", WAP Forum, 17-Jun-1999. URL: <http://www.wapforum.org/>
- [WTA] WAP-169, "Wireless Telephony Application Specification", WAP Forum. URL: <http://www.wapforum.org/>
- [WTAI] WAP-170, "Wireless Telephony Application Interface Specification", WAP Forum. URL: <http://www.wapforum.org/>

Editor's note: On page 13.

### 7.1.3 wtaev-gsm/ru

**Event Name:** USSDReceived

**Event ID:** wtaev-gsm/ru

**Parameters:** *message, codingScheme, type, transactionId*

**Description:** Indicates a USSD message has been received.

The *message* parameter contains the USSD message. It may contain any of the USSD characters permitted by GSM 02.90. For type 3 messages, this parameter must contain an empty string.

The *codingScheme* parameter specifies the encoding of the *message* parameter. The *codingScheme* parameter must contain one of the values specified in [GSM 04.90 and GSM 03.38](#) ~~GSM 02.90~~. For type 3 messages, this parameter must contain an empty string.

The *type* parameter indicates the type of USSD message, [as specified in GSM 04.80](#). It must be one of the following values:

"0" = result to a ProcessUnstructuredSS-Request operation

"1" = UnstructuredSS-Request operation

"2" = UnstructuredSS-Notify operation

"3" = error to a ProcessUnstructuredSS-Request operation

The *transactionId* parameter contains the transaction ID of the message as specified in GSM 04.07 §11.

Editor's note: On page 17.

### 7.2.7 WTAGSM.sendUSSD

**Function:** `sendUSSD(message, codingScheme, type, transactionId)`

<b>Function ID:</b>	6
<b>Description:</b>	<p>Sends a USSD message. This function is blocking. If this function is invoked successfully, the USSD message is guaranteed to be conveyed to the network.</p> <p>The <i>message</i> parameter contains the USSD message to send. It may contain any of the USSD characters permitted by <del>GSM 04.90 and GSM 03.38</del> GSM 02.90 <a href="#">GSM 02.90</a>.</p> <p>The <i>codingScheme</i> parameter specifies the encoding of the <i>message</i> parameter. The <i>codingScheme</i> parameter must contain one of the values specified in GSM 02.90 <a href="#">04.90 and GSM 03.38</a>.</p> <p>The <i>type</i> parameter indicates the type of USSD message, <a href="#">as described in section 7.1.3</a>.</p> <p>NOTE: For a type 2 message, the mobile must send a RELEASE COMPLETE message for the transaction ID associated with this USSD message after sending the FACILITY message.</p> <p>In the case where the sent USSD message is in response to a network initiated USSD message, i.e. a type 1 or 2 message, the <i>transactionId</i> parameter contains the transaction ID of the corresponding network initiated USSD message as specified in GSM 04.07 §11. If the sent USSD message is not in response to a network initiated USSD message, i.e. a type 0 message, then this parameter shall take the value 0.</p> <p>This function returns the transaction ID of the USSD message as specified in GSM 04.07 §11 if successful, or returns <i>invalid</i> if the function fails. Note that the returned value is equal to the <i>transactionId</i> parameter only for type 1 and type 2 messages.</p>
<b>Permission Types:</b>	BLANKET, CONTEXT, SINGLE (see [WTA]).
<b>Parameters:</b>	<p><i>message</i> = string (USSD message body)</p> <p><i>codingScheme</i> = integer</p> <p><i>type</i> = integer (message type:</p> <p>0 = ProcessUnstructuredSS-Request operation</p> <p>1 = result of a UnstructuredSS-Request operation</p> <p>2 = result of a UnstructuredSS-Notify operation)</p> <p><i>transactionId</i> = integer (message transaction ID)</p>
<b>Return value:</b>	<p>integer (transaction ID), or <i>invalid</i> (failure indication) or <i>error-code</i> (must be one of the following decimal values:</p> <p>-100 = USSD dialogue in progress</p> <p>-101 = illegal characters or too many characters</p> <p>-106 = network is not available</p> <p>-1 = unspecified error)</p>
<b>Associated Events:</b>	-
<b>Exceptions:</b>	<p>If the <i>codingScheme</i> parameter contains an unacceptable value, this function returns <i>invalid</i>.</p> <p>If the <i>type</i> parameter contains an unacceptable value, this function returns <i>invalid</i>.</p> <p>If the <i>type</i> parameter indicates the message is type 1 or type 2 and the <i>transactionId</i> parameter contains an unacceptable value, this function returns <i>invalid</i>.</p> <p>If the device cannot deliver of the USSD message this function returns <i>invalid</i>.</p>
<b>Example:</b>	var tid2 = WTAGSM.sendUSSD(resultMsg, coding, 1, tid);