

Agenda Item: 5.3.3

Source: T3

Title: WI on alignment with requirements regarding USSD usage
Document for: Approval

Work Item Description

Title: USSD message transfer to USIM

1 3GPP Work Area

X	Terminals
X	Radio Access
X	Core Network
X	Services

2 Linked work items

This WI is a subset of an existing SA1 WI described in document S1-040213.

3 Justification

SA1 has decided that a secure download mechanism over USSD must be specified, see S1-040213.

A mechanism to deliver USSD strings from the USIM to the network and receive the reply has existed since R99, however, there is currently no specified delivery and transfer mechanism for the USIM to receive Network initiated USSD. This feature is considered to be very desirable by many operators. To illustrate its usefulness, and by way of example, the following two use cases are given:

Use Case 1 – One shot Download

In this use case the network sends a packet of data to the USIM to cause a file to be updated or an application to be triggered. This might happen as part of a call or independently of a call. The data will be 8bit as typically this communication is encrypted and addressed using TS 31.115. The USIM may reply with a small package of encrypted data as 'Proof of receipt' as described in TS 31.115.

Use Case 2 – Interactive session with the USIM

In this case the network initiates an interactive dialogue with the USIM consisting of many data packets alternately to and from the USIM as a 'session' with an application on the USIM. This might happen as part of a call but is more likely to be independent of a call. The data will be 8bit as typically this communication is encrypted and addressed using TS 31.115 in both directions.

4 Objective

The objectives are:

- a) To specify the stage 3 technical requirements for USSD message delivery and transfer to the USIM
- b) To identify secure mechanisms that will enable the above use cases to be satisfied

Whilst considering this matter TSG T3 has so far identified the need for:

- the addition of addressing in the USSD message;
- the addition of a USSD data download command to USAT;
- the addition of a USSD section to TS 31.115 to clarify the use of this specification over USSD;

- the addition of the Java API routines for the above commands.
- the solution shall be backward compatible

5 Service Aspects
Specified by SA1, see S1-040213.

6 Terminal and USIM Aspects
T3 to adapt the secure mechanism defined in 31.115 for the transfer of USSD messages between the network and the UICC.

7 Charging Aspects
Not a T3 issue.

8 Security Aspects
Security is a primary consideration and SA3 are expected to endorse the chosen solution to be specified.

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes	X	X			
No					
Don't know			X	X	

10 Expected Output and Time scale (to be updated at each plenary)

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
Affected existing specifications						
Spec No.	CR	Subject		Approved at plenary#		Comments
31.115				#32		
31.102				#32		
31.111				#32		
		This list should be completed when the stage 1 requirements have been further developed				

11 Work item rapporteurs

Christophe Dubois (Axalto)

12 Work item leadership

SA 1

13 Supporting Companies

Axalto, Gemplus, Cingular, Vodafone

X	Feature (go to 14a)
	Building Block (go to 14b)
	Work Task (go to 14c)

14a The WI is a Feature: List of building blocks under this feature

Building Blocks and Work Tasks are anticipated to be identified when the stage 2 is presented “for information”.

14b The WI is a Building Block: parent Feature

(one Work Item identified as a feature)

14c The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)