3GPP TSG CN Plenary Meeting #20
04-06 June 2003. Hämeenlinna, FINLAND

NP-030244

Source:	**CN5 (OSA)**		
Title:	**Rel-5 CR 29.198-05 OSA API Part 5: Generic user interaction**		
Agenda item:	**8.2**		
Document for:	**APPROVAL**		

Doc-1st-Level	Spec	CR	R	Ph	Subject	Cat	Ver-Curr	Doc-2nd-Level	WI
NP-030244	29.198-05	036	-	Rel-5	Clarify IpUI sendInfoReq()	F	5.2.0	N5-030180	OSA2
NP-030244	29.198-05	037	-	Rel-5	Update TpUIInfo for consistency with GMS capabilities	F	5.2.0	N5-030274	OSA2

CR-Form-v7

CHANGE REQUEST

| ⌘ | **29.198-05** CR | **036** | ⌘**rev** | **-** | ⌘ | Current version: | **5.2.0** | ⌘ |

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

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network ☐   Core Network **X**

Title:	⌘	Clarify IpUI sendInfoReq()

Source:	⌘	Scott Broussard (IBM, scottjb@us.ibm.com)

Work item code:⌘	OSA2		***Date:*** ⌘	02/05/2003

Category:	⌘	**F**	***Release:*** ⌘	*REL-5*

Use <u>one</u> of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(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)*
Rel-6   *(Release 6)*

Reason for change: ⌘		The Generic User Interaction service is an important service for telecom applications, particularly enhanced services. The specification provides for a lot of flexibility, however, the implementations that are currently available have many restrictions. One such feature that is important for applications is the ability to play a message through sendInfoReq() and specify a URL to a .wav file, however few support this, therefore configuring specific pre-defined messages on the gateway is necessary, and this does not adequately provide for dynamic content. Release 4 has added the capability to use binary data P_UI_INFO_BIN_DATA, however the description of sendInfoReq() was not updated.
Summary of change: ⌘		This change requests that the description for IpUI.sendInfoReq() be clarified to more strongly recommend that the gateway implementors support the TpUIInfo P_UI_INFO_ADDRESS and P_UI_INFO_BIN_DATA formats, that allows the application to specify a dynamic content, such as wave audio, or text, or other data. To avoid making an explicit recommendation in the specification, the text simply points out more explicitly the value of dynamic content. Caching can be done if desired by the OSA gateway.
Consequences if not approved: ⌘		If not approved, the OSA application would have the same degree of inflexibility they have today.

Clauses affected:	⌘	8.3.1

			Y	N		
Other specs	⌘			X	Other core specifications	⌘

affected:		X	Test specifications	
		X	O&M Specifications	

Other comments:	⌘	

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

8.3.1   Method sendInfoReq()

This asynchronous method plays an announcement or sends other information to the user.

Returns: assignmentID

Specifies the ID assigned by the generic user interaction interface for a user interaction request.

Parameters

userInteractionSessionID : in TpSessionID

Specifies the user interaction session ID of the user interaction.

info : in TpUIInfo

Specifies the information to send to the user. This information can be:

- an infoID, identifying pre-defined information to be send (announcement and/or text);

- a string, defining the text to be sent;

- a URL , identifying pre-defined information or data to be sent to or downloaded into the terminal. A URL enables the application to utilize dynamic multi-media content by reference.

- Binary Data, identifying pre-defined information or data to be sent to or downloaded into the terminal. Binary data enables the application to utilize dynamic multi-media content directly.

language : in TpLanguage

Specifies the Language of the information to be send to the user.

variableInfo : in TpUIVariableInfoSet

 Defines the variable part of the information to send to the user.

repeatIndicator : in TpInt32

Defines how many times the information shall be sent to the end-user. A value of zero (0) indicates that the announcement shall be repeated until the call or call leg is released or an abortActionReq() is sent.

responseRequested : in TpUIResponseRequest

Specifies if a response is required from the call user interaction service, and any action the service should take.

Returns

TpAssignmentID

Raises

TpCommonExceptions,P_INVALID_SESSION_ID,P_INVALID_NETWORK_STATE,P_ILLEGAL _ID,P_ID_NOT_FOUND

CR-Form-v7

CHANGE REQUEST

| ⌘ | **29.198-05** CR **037** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.2.0** | ⌘ |

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Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network ☐   Core Network **X**

Title:	⌘	Update TpUIInfo for consistency with GMS capabilities

Source:	⌘	Scott Broussard (IBM, scottjb@us.ibm.com)

Work item code: ⌘	OSA2		***Date:*** ⌘	19/05/2003

Category:	⌘	**F**	***Release:*** ⌘	*REL-5*

Use one of the following categories:
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R99   *(Release 1999)*
Rel-4   *(Release 4)*
Rel-5   *(Release 5)*
Rel-6   *(Release 6)*

Reason for change:	⌘	The Generic User Interaction service is an important service for telecom applications, particularly enhanced services. The specification provides for a lot of flexibility.

The data types that are needed are not specified at the same level of function as the Generic Messaging API. Dynamic application content is important.

The GMS TpMessageFormat includes a few additional types that are useful in GUI TpUIInfo type as well.

It is essential to correct the datatypes used in GUI to be consistent and harmonized with GMS and properly allow the usage of binary data types such as audio and MIME to allow effective usage of this API. Without these changes interoperability between the client and gateway are compromised. |

Summary of change:	⌘	Update the TpUIInfo to specify some additional types, so that there is consistency between GMS and GUI.

```
enum TpUIInfoType {
    P_UI_INFO_ID,
    P_UI_INFO_DATA,
    P_UI_INFO_ADDRESS,
    P_UI_INFO_BIN_DATA,
    P_UI_INFO_UUENCODED,
    P_UI_INFO_MIME,
    P_UI_INFO_WAVE,
    P_UI_INFO_AU
};
``` |

```
union TpUIInfo switch(TpUIInfoType) {
    case P_UI_INFO_ID: TpInt32 InfoID;
    case P_UI_INFO_DATA: TpString InfoData;
    case P_UI_INFO_ADDRESS: TpURL InfoAddress;
    case P_UI_INFO_BIN_DATA: TpOctetSet InfoBinData;
    case P_UI_INFO_UUENCODED: TpString InfoUUEncData;
    case P_UI_INFO_MIME: TpOctetSet InfoMimeData;
    case P_UI_INFO_WAVE: TpOctetSet InfoWaveData;
    case P_UI_INFO_AU: TpOctetSet InfoAUData;
};
```

Additional types, such as PNG, GIF, JPEG can be expressed as a MIME type. Wave and AU types are important since that explicitly allows dynamic audio data types to be sent to the user.

Consequences if not approved:	⌘	Datatype capabilities would differ from GMS.

Clauses affected:	⌘	11.17, 11.18

		Y	**N**		
Other specs affected:	⌘		**X**	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	

Other comments:	⌘	

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11.17 TpUIInfo

Defines the Tagged Choice of Data Elements that specify the information to send to the user.

	Tag Element Type	
	TpUIInfoType	

Tag Element Value	Choice Element Type	Choice Element Name
P_UI_INFO_ID	TpInt32	InfoId
P_UI_INFO_DATA	TpString	InfoData
P_UI_INFO_ADDRESS	TpURL	InfoAddress
P_UI_INFO_BIN_DATA	TpOctetSet	InfoBinData
P_UI_INFO_UUENCODED	TpString	InfoUUEncData
P_UI_INFO_MIME	TpOctetSet	InfoMimeData
P_UI_INFO_WAVE	TpOctetSet	InfoWaveData
P_UI_INFO_AU	TpOctetSet	InfoAuData

The choice elements represent the following:

InfoID:	defines the ID of the user information script or stream to send to an end-user. The values of this data type are operator specific.
InfoData:	defines the data to be sent to an end-user's terminal. The data is free-format and the encoding is depending on the resources being used..
InfoAddress:	defines the URL of the text or stream to be sent to an end-user's terminal.
InfoBinData:	defines the binary data to be sent to an end-user's terminal. The data is a free-format, 8-bit quantity that is guaranteed not to undergo any conversion when transmitted.
InfoUUEncData:	defines the UUEncoded data to be sent to an end-user's terminal.
InfoMimeData:	defines the MIME data to be sent to an end-user's terminal.
InfoWaveData:	defines the WAVE data to be sent to an end-user's terminal.
InfoAuData:	defines the AU data to be sent to an end-user's terminal.

11.18   TpUIInfoType

Defines the type of the information to be sent to the user.

Name	Value	Description
P_UI_INFO_ID	0	The information to be send to an end-user consists of an ID
P_UI_INFO_DATA	1	The information to be send to an end-user consists of a data string
P_UI_INFO_ADDRESS	2	The information to be send to an end-user consists of a URL.
P_UI_INFO_BIN_DATA	3	The information to be sent to an end-user consists of a 8 bit binary data set
P_UI_INFO_UUENCODED	4	The information to be sent to an end-user consists of UUEncoded data
P_UI_INFO_MIME	5	The information to be sent to the end-user consists of MIME encoded data
P_UI_INFO_WAVE	6	The information to be sent to the end-user is .wav waveform data
P_UI_INFO_AU	7	The information to be sent to the end-user is .au audio data