

Source: TSG_N3
Title: Work Item Sheet for Service Modification without pre-notification
Agenda item: 7.3.3
Document for: APPROVAL

Work Item Description

Title Service Modification without pre-notification

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

TrFO, Multimedia, Service Modification without pre-notification using BICC

3 Justification

It is required that a user is allowed to change current CS service to desired CS service whenever user wants to change. This enhancement can provide more usability of service control to user.

4 Objective

It is possible in current specification to change the speech service to/from the FAX service during an active call, if user specifies the TS61 in a call setup phase(i.e. the ME sends two Bearer Capability IEs to the network. A BC IE indicates TS 11 and another BC IE indicates TS62 in a call set-up phase). It was also possible in old GSM specification to change the speech service to/from Modem service during an active call, if user specified the BS61 in a call setup phase(i.e. the ME sends two BC IEs to the network in a call setup phase. A BC IE indicates the TS11 and another BC IE indicates the BS30 or BS20). However, it is impossible to change the CS service if user specifies TS11 as the teleservice to be used in a call setup phase(i.e. ME sends only a BC IE to the network in a call setup phase. The BC IE indicates TS11). It means, user has to indicate the possible services to be used in a call set-up phase. e.g. If user want to change a speech service to FAX service during an active call, user has to operate the ME in order to send two BC IEs indicating TS61 in a call setup phase. The motivation of this WI is to allow user to change speech to/from FAX or speech to/from Modem without the specification of TS61 or BS61 in a call setup phase, namely the WI aims to remove the user operation to specify the the TS61 or the BS61 in a call setup phase when user want to modify the CS service during an active call

This WI covers not only “Modification without pre-notification between speech and fax” and “Modification without pre-notification between speech and modem” but also “Modification between speech and 3.1kHz multimedia”.

5 Service Aspects

User is allowed to change speech service to other CS service(i.e fax service 3.1kHz multimedia or modem service) even TS11 is specified in a call set-up phase. The features to be introduced will complement the CS bearer service and teleservice specified in R99. This service treats the following two situations;

- 1) Service situation-1; to/from Speech/Fax 3.1kHz Multimedia or Modem without TrFO
- 2) Service situation-2; to/from Speech/Fax 3.1kHz Multimedia or Modem with TrFO

The subscription check has to be considered for the service modification without pre-notification, i.e. It has to be considered when the subscription check for the modified service is performed.

It is not guaranteed that the service modification without pre notification works in the all network environment. In case that the ADPCM is deployed in transit network and user wants to change the CS service from speech to MODEM/FAX/3.1kHz Multimedia -without pre-notification, FAX/Modem/3.1kHz multimedia negotiation might be failed because of communication errors.

6 MMI-Aspects

The MMI has to support the operation of a change between speech service and fax/modem service during an active call.

7 Charging Aspects

Charging for the service modification without pre-notification has to be considered. For example, it is have to be clarified whether the different charging are performed at the speech phase and the modem/fax phase or not.

8 Security Aspects

None/Text

9 Impacts

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

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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	
23.108		Mobile Radio Interface Layer 3 specification Core Network Protocols stage 2 (structured procedures)		TSG CN#9		
23.146		Technical realisation of facsimile Group 3 service - non-transparent		TSG CN#9		
22.153		Out of Band Transcoder Control - Stage 2		TSG CN#10		
23.910		Circuit Switched Data bearer services R99		TSG CN#9		
24.008		Mobile Radio Interface Layer 3 specification (CC/MM)		TSG CN#9		
27.001		General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)		TSG CN#9		
27.007		AT command set for 3G User Equipment (UE)		TSG T#9		
29.007		General requirements on Interworking between the PLMN and the ISDN or PSTN		TSG CN#9		

11 Work item rapporteurs

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12 Work item leadership

N3

13 Supporting Companies

NEC Corporation,
NTT DoCoMo
FUJITSU LIMITED
NIPPON TELECOMMUNICATIONS CONSULTING CO., LTD
Lucent Technologies

14 Classification of the WI (if known)

	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

| (~~list of Work Items identified as building blocks~~)

14b The WI is a Building Block: parent Feature

| Service Modification without pre-notification

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

| (~~one Work Item identified as a building block~~)