3GPP TSG-SA Plenary#10
Bangkok, Thailand
11th – 14th December 2000

Title:	**Work Item Description for Release 4: ODB (Operator Determined Barring) for PS domain**
Source:	**NEC**
Agenda Item:	**6.1**
Purpose:	**For Approval**

This contribution proposes the Work Item Description on ODB for PS domain.

This WID had been reviewed in the CN Plenary #10 meeting in the last week. During the review of this WID in the CN Plenary, there are two major conclusions have been identified.

Firstly, CN plenary has recognised that the contents of this WID are appropriate to proceed its standardisation work for Release 4. It means that CN plenary has endorsed this WID as the Release 4 feature.

Secondly, Since it is detected that the affected existing specifications are not only CN's limits but also SA's limits. (I.e., the 22.041 in SA1 and the 23.060 in SA2 could be affected.) Therefore, this WID has to be reviewed by the SA plenary.

Because of the reasons described above, This WI is urgently submitted to SA plenary #10 seeking for approval.

The reasons why this WID had been submitted in this late period for Release 4 are briefly described below.

Originally, the ODB for PS domain started to be standardised as the release 99 feature and the stage 1 description for ODB (TS 22.041) had been finalised as the release 99 in SA1. However, unfortunately the corresponding stage 2 and stage 3 works for ODB (PS domain) have NOT been standardised in CN4.
The misalignment between stage 1 and stage 2 & 3 description for ODB (PS domain) has just recognised in the last CN4 meeting. This misalignment in the ODB specification was informed from CN4 to SA1 to ask for their guidance how to handle this issue. The following is a summary that has been decided in the last SA1 meeting.

- Remove requirements for ODB of packet based services from release 99 stage 1 specification.
- Add requirements for ODB of packet based services to release 4 stage 1 specification.

NEC respects SA1's appropriate decisions and would like to proceed necessary stage 2 and stage 3 works for ODB (PS domain) as the release 4 feature.

Work Item Description

ODB (Operator Determined Barring) for PS domain

1   3GPP Work Area

	Radio Access
X	Core Network
X	Services

2   Linked work items

None

3   Justification

As stated in the current ODB stage1 specification, the purpose of ODB feature is to be able to limit the service provider's financial exposure to new subscribers, or to those who have not promptly paid their bills.

In order to fulfil this purpose, this network feature has to be effective for both CS domain and PS domain. Currently in release 99, the ODB feature works only for CS domain.

Initially, this ODB enhancement was started for release 99. However, due to lack of correspondence between SA1 and CN4, the stage2 and stage3 works for this feature could not been finalised in time for release 99. Therefore this WI is newly created as the release 4 WI.

4   Objective

Packet Oriented Services, particularly data services, are different in nature to Circuit Oriented Services, and therefore have different requirements for Operator Determined Barring. Currently there is no requirements described in the ODB stage 1 specification for Packet Oriented Services.

5   Service Aspects

As described in the following categories, the Service Provider may at any time activate this feature and this shall terminate any relevant services in progress, and bar future requests for service covered by the barring category:

- It shall be possible to bar subscribers completely from the Packet Oriented Services.
- It shall be possible to bar a subscriber from requesting Packet Oriented Services from access points that are outside the HPLMN whilst the subscriber is in the HPLMN.
- It shall be possible to bar a subscriber from requesting Packet Oriented Services from access points that are within the HPLMN whilst the subscriber is roaming in a VPLMN.
- It shall be possible to bar a subscriber from requesting Packet Oriented Services from access points that are within the roamed to VPLMN.
- Whilst roaming in a VPLMN, it shall be possible to bar a subscriber from requesting Packet Oriented Services from access points that are neither in the HPLMN nor the roamed to VPLMN.

The term 'access point' is used to indicate the GGSN or part of the GGSN that is specified by a particular APN.

6   MMI-Aspects

None

7   **Charging Aspects**

None

8   **Security Aspects**

None

9   **Impacts**

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

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
None						

Affected existing specifications					
Spec No.	CR	Subject	Approved at plenary#	Comments
22.041 (ODB stage1)	S1-00852 S1-00853	• Inclusion of section 5.2 to add requirement for ODB of packet services and to add the definition of the term 'Service Access Point'	TSG SA#10	TSG-SA1 has approved this CR in their #10 meeting (13-17 Nov. 2000).
23.015 (ODB stage 2)		• ODB function needs to be applied for the Packet oriented services as well as CS domain services. • Barring categories for Packet oriented services needs to be introduced.	TSG CN#11	
23.008 (org. of sub. Data)		• The ODB-induced barring data for the packet-oriented services needs to be introduced.	TSG CN#11	
23.016 (sub. data stage 2)		• Barring category for GPRS services needs to be introduced.	TSG CN#11	
23.060 (GPRS stage2)		• Annex A (APN and GGSN selection) in 23.060 needs to be enhanced to describe the barring mechanism. • ODB related data needs to be added to Information storage in SGSN.	TSG SA#11	
29.002 (MAP)		• New IE, "Operator Determined Barring General Data For GPRS" is introduced. • New IE, "Operator Determined Barring General Data For GPRS" can be carried by the MAP-INSERT-SUBSCRIBER-DATA service as the optional IE. • Update relevant descriptions in 29.002. (Ex. ASN.1, SDLs if needed.)	TSG CN#11	

11   **Work item raporteurs**

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12   **Work item leadership**

TSG-CN4

13   **Supporting Companies**

NTT DoCoMo, NTT Comware, NEC, Fujitsu, NTC and Vodafone

14   **Classification of the WI (if known)**

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

ODB (Operator Determined Barring) enhancements

14b   The WI is a Building Block: parent Feature

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