Technical Specification Group Services and System Aspects ***TSGS#10(00)0600***
Meeting #10, Bangkok, Thailand, 11-14 December 2000

Source: **TSG SA WG2**
Title: **Proposed revisions to approved WI**
Agenda Item: **7.2.3**

Tdoc 3GPP S2-002105

3GPP TSG-SA WG2#15
Makuhari, Japan
13-17th November. 2000

Title: **Proposed change to WI: A feasibility study of an architecture for Push Service**

Source: **S2 Push Service Drafting Group**

Agenda Item:

Purpose: **For Approval**

Work Item Description

Title : Support of Push service

1 3GPP Work Area

	Radio Access
X	Core Network
X	Services

2 Linked work items

Multimedia Messaging Service

3 Justification

TSG-SA2 has already undergone a feasibility study for the support of IP Push services. Several mechanisms have been identified show that it is feasible to support the expected IP push services, and now it is now reasonable to progress the architecture.

4 Objective

A number of current and future services require the capability for an external IP network to "Push" data to 3G terminals in PS Domain. Current R99 specifications allow operators to provide push services by using static IP address (and only when GGSN stores static PDP information for the IP address) or by having long-lasting PDP contexts. However, as mobile application services

in the PS Domain are emerging in the future, the following additional service requirements should be considered.

(1) Push services should be provided whenever networks can reach mobile users. In other words, even though the session between external IP network and MS is not established, users should be able to enjoy push services.

(2) The solution shall support both dynamic and static IP address assignment, hence, in the UE must be identified by another identifier than its IP address.

5 Service Aspects

The level of user/UE control and interaction needs to be defined.

6 MMI-Aspects

FFS, depends upon the level of user/UE control/intervention selected.

7 Charging Aspects

The whole issue of charging for push based services needs study.
e.g. Does the network need to distinguish between push service traffic and other traffic on the same PDP context?

8 Security Aspects

Need to prevent the (UMTS) IP access network from being flooded by denial-of-service attack that might be induced by this service has to be evaluated. The user needs protection from unauthorised push services.

9 Impacts

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

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

Meeting	Date	Activity
SA1#6	Nov 29 - Dec 3, 1999	Start CR process on 22.060
SA1#7	Feb 7-11, 2000	Continue the CR process on 22.060
SA#7	March 15-17, 2000	Finalize the CR process on 22.060
SA2#13	May 22-26, 2000	
S2 WI adhoc	June 14-15, 2000	
SA#8	June 26-28, 2000	WI approved.
SA2#14	September 4-8, 2000	Start the feasibility study for architecture
SA#9	September 25-28, 2000	TR 23.874v1.0.0
SA2#15	November 13-17, 2000	Proposal to change feasibility study to a work item.
SA#10	December 11-14, 2000	New WI approved, TR 23.874v1.3.0
S2#16	January 22-26th 2001	Progress TR.

S2#17	Feb 26th Mar 2nd 2001	Select option based on S1 input, start generation of CRs
SA#11	March 2001	Stage 1 CRs available
S2#18	May 14th 18th 2001	Finalise CRs towards existing specifications
SA#12	June 2001	CRs for approval

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
23.874	Feasibility study of an architecture for push service	S2		SA#9		Changed to 23.9xx
23.9xx	TR on Support of IP Push services	S2			SA#11	Make study public as it contains information on how to support IP Push services over UMTS

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments

11 Work item raporteurs

Yoshinori Kitada (NTT Comware)
Nobuyuki Uda (NTT Comware)

12 Work item leadership

S2

13 Supporting Companies

NTT Communicationware, NTT DoCoMo, Lucent, Motorola

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

The building blocks of this feature still have to be identified. (See table on the last page.)
(list of Work Items identified as building blocks)

Proposal for the Features, Building Blocks and Work Tasks of Push Services

Inter Group Co-ordination	***Feature***	***Building block***	***WG: work task*** **expected completion date**
Call Control and Roaming	**Push Services**	**Capabilities of push service including Network requested PDP context activation with User-ID**	**S2:**