Technical Specification Group Services and System Aspects *TSGS#14(01)0716*

Meeting #14, Kyoto, Japan, 17-20 December2001

Source: **TSG SA WG2**
Title: **CR on 23.875**
Agenda Item: **7.2.3**

The Change Request attached has been approved by TSG SA WG2 and is requested to be approved by TSG SA plenary #14.

Tdoc #	Title	Spec	CR #	c a t	Rel	WI
S2-013388	Removing an expected completion date in the conclusion part	23.875	001	F	Rel-5	Push

CR-Form-v5

CHANGE REQUEST

⌘ **23.875** CR **001** ⌘**rev** **-** ⌘ Current version: **5.0.0** ⌘

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☐

Title: ⌘	Removing an expected completion date in the conclusion part	
Source: ⌘	S2	
Work item code: ⌘	PUSH	***Date:*** ⌘ 21-11-2001
Category: ⌘	**F**	***Release:*** ⌘ REL5

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)*

Reason for change: ⌘	As clarified in SA#13 by the TSG SA Chairman that the approval of this report does not imply an explicit approval of the target dates contained in the report and the stage 1 work in SA1 is still undergoing, the target dates should not be specified explicitly at the moment.
Summary of change: ⌘	The texts that implies expected target date in the conclusion part are deleted.
Consequences if not approved: ⌘	Misunderstanding of a completion date of the work might occur.

Clauses affected: ⌘	8

Other specs affected: ⌘	☐ Other core specifications ⌘
	☐ Test specifications
	☐ O&M Specifications
Other comments: ⌘	

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

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

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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   Conclusion and Recommendations

This technical report has analysed a variety of solutions for the implementation of push services architecture.
The recommended architecture for the push service is a proxy based architecture comprising the following elements:

- Push Access protocol between the Push Initiator (Push Application Server) and the Push Proxy.

- A push transfer protocol handling the push content delivery between the Push Proxy and the UE.

- A Push Proxy that might perform functions such as access control, UE presence handling, store and forward, user profile management, content adaptation, etc.
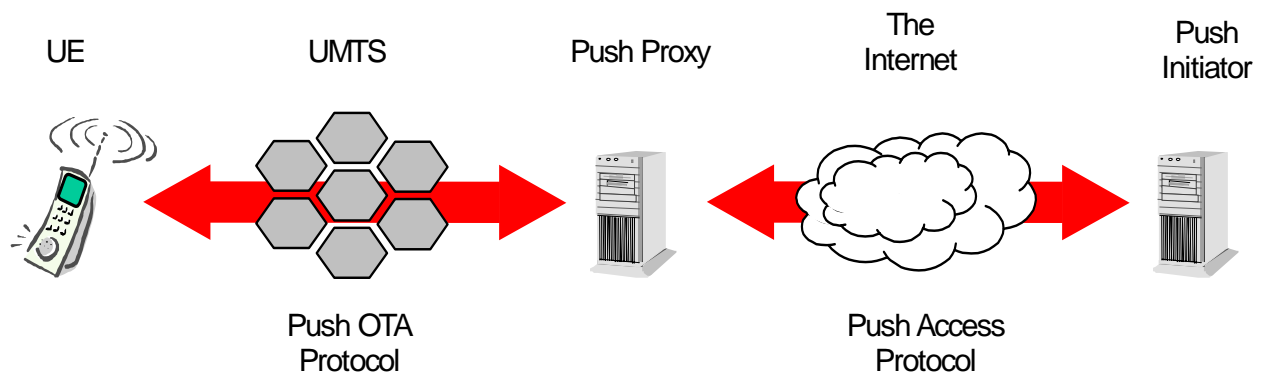

Figure 8.1: Push Proxy Architecture

The push service in this architecture is bearer and subsystem independent and available over both the CS and the PS domain.

One solution that has been proposed which satisfies the push proxy architecture is the solution of the WAP Forum. Facilities provided by this solution include those defined in WAP 2.0 specs (WAP-235-pushOTA, WAP-247-PAP, WAP-249-PPGservice, WAP-251-PushMessage, WAP-167-ServiceInd, WAP-168-ServiceLoad, WAP-175-CacheOp), IETF specifications (RFC 2616 – HTTP 1.1, RFC 2617 - HTTP Authentication) and W3-CC/PP – Composite Capability/Preference Profiles.

Additionally the issue of how to establish the bearer has been presented in the document. There are three potential solutions:

1. Long standing PDP context activation – always-on

2. Session initiation using SMS (via the WAP Forum developed Session Initiation Request SIR)

3. Network requested PDP context activation (NRCA) with dynamic IP address allocation

Beyond this, interaction between the architecture above and the architectures/solutions in the IMS will have to be considered, such as SIP signaling as multimedia session establishment for push services.

At this stage it has not been possible to reach a conclusion on which of these three potential solutions for establishment of the bearer should be adopted as stage 1 requirements have not yet been fully defined. This report recommends that the push services work be placed on hold until SA plenary has agreed the stage 1 requirements (expected December 2001). At that stage, work should recommence on evaluation of the architecture and potential solutions against the stage 1 requirements with the objective of agreeing the way forward and, if necessary, producing a stage 2 specification.

> Note: Note that collocated SA1 and SA2 meetings are scheduled for January 2002 at which these stage 1 requirements can be discussed in detail.

It must be recognised, however, that there is a strong requirement that one or more viable solutions be found that can be implemented with release 5 timeframe and that meet the business requirements of the operators who wish to deploy push services. It is an open issue as to whether one solution will meet all requirements or whether multiple solutions will need to be standardised. This will be reconsidered once stage 1 requirements are defined.

This report has not considered detailed issues on charging and security; these topics will be referred to the relevant groups within 3GPP for their consideration.