3GPP TSG SA WG3 Security — S3#18 **S3-010174**

21 - 24 May, 2001

Phoenix, USA

Title:	**Proposed new SA4 Work Item on Extended Streaming Service**
To:	**SA1, SA2, SA3, T2**
Source:	**SA4 Chairman**
Document for:	**Information and comments**

SA4 work on "Transparent End-to-end Packet Switched Streaming" was completed as scheduled at TSG-SA#11 where the following two streaming specifications were approved:

- TS 26.233 Transparent End-to-End Packet-switched Streaming Services (PSS); General Description
- TS 26.234 Transparent End-to-End Packet-switched Streaming Service (PSS); Protocols and codecs

These define a complete basic streaming service for Rel-4 (referred to as Simple Streaming). This includes definition of session set-up and control protocols, data transport protocols, media codecs, scene description, and interchange format with MMS. The definition of more advanced streaming service was left for later releases. (The Rel-4 specifications already refer to extended streaming to be developed for later releases.)

In Rel-5, there is a need to address more advanced streaming aspects than in Rel-4 (e.g., security and charging, rights management, capability exchange, and additional media types). Rel-5 would support all features defined for Rel-4 in a fully backwards compatible manner. As this extended streaming brings new advanced features, the work requires a new Work Item Description (WID). The intention of SA4 is to prepare a WID proposal on Extended Streaming Service for approval at TSG-SA#12 (in June 2001). The Rel-5 work (Extended Streaming) is a continuation of the Rel-4 work (Simple Streaming).

SA4 Packet Switched Multimedia (PSM) sub-working group has prepared a draft WID for the extended streaming service (in the attached document S4-010304). This has not yet been discussed in SA4 but will be presented at the next SA4#17 meeting (4-8 June, 2001). It is expected that SA4 will send the final version of the WID proposal, after discussion with updates and possible modifications, for approval to TSG-SA#12. For the discussion at SA4#17, it would be useful to get comments from the relevant WGs (SA1, SA2, SA3, T2) on the draft WID. These could be taken into account in preparation of the final WID proposal to TSG-SA#12.

The output of the new WI is planned to be included in the Rel-5 versions of existing TSs 26.233 and 26.234 specifications (without creating new specifications). SA4 would have the prime responsibility of both of the Rel-5 specifications, and SA2 a secondary responsibility (similarly as for the Rel-4 streaming). A similar review process than for the Rel-4 streaming specifications could be established between SA2 and SA4 to cover the SA2 relevant aspects and to ensure the completeness of the specifications. SA4 plans to keep the other relevant WGs (SA1, SA3 and T2) informed on the progress of the work as was done during the development of Rel-4 streaming. Both Rel-5 specifications are targeted for approval at TSG-SA#14. (The Expected Output and Time Scale is not yet filled in the draft WID.)

Any comments on the proposed draft WID and on the content of the extended streaming work would be appreciated by the next SA4 meeting (4-8 June, 2001). Especially, comments on secondary responsibilities on the two output TSs (Rel-5 versions of TSs 26.233 and 26.234), and feedback on any linked Work Items and affected specifications in other WGs than SA4 are welcome.

Work Item Description

Title

Extended Streaming Service

1 3GPP Work Area

	Radio Access
	Core Network
✓	Services

2 Linked work items

TBD

3 Justification

Following on from the Simple Streaming specifications developed under Rel4, there is now a need to address more advanced aspects under Rel5. In particular, it is proposed that this work item will cover:

Service optimisation

- **consideration of device capabilities and user preferences in the optimisation of multimedia content delivery**

Enhanced transport aspects

- **improved robustness and flexibility in the delivery of multimedia content**

Multimedia media types

- **consideration of additional and enhanced media types and scene description**

Interworking

- **consideration of the various modes in which PSS (Packet Switched Service) may be utilised and the impact on other services and network elements**

Commercial factors

- **consideration of the importance of rights management, security and charging aspects in the commercial implementation of PSS**

4 Objective

Standardization of the components of a mobile multimedia content delivery service, including streaming protocols, media transport protocols, multimedia codecs.

Harmonization with existing and emerging 3GPP multimedia applications will be considered whenever possible.

The Extended Streaming solution will be based on and therefore should provide full backwards compatibility with the Rel4 Simple Streaming solution.

5 Service Aspects

The WI will define the necessary components for a mobile streaming service.

6 MMI-Aspects

None

7 Charging Aspects

The mobile streaming application will allow various charging models.

8 Security Aspects

Transport and content security aspects will be covered. Possibility for harmonization of security mechanisms between different multimedia applications will be considered.

9 Impacts

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

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

To be updated

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

11 Work item raporteurs

TBD

12 Work item leadership

TSG SA WG 4

13 Supporting Companies

Ericsson, Motorola, Matsushita, Mitsubishi, Nokia, Microsoft, Vodafone, FhG, NTT DoCoMo, Philips, Siemens, Luxxon, Toshiba, Sharp, Emblaze Systems, France Telecom R&D, Expway, Serome Technology, Celvibe

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

(one Work Item identified as a feature)

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

(one Work Item identified as a building block)