
Title: Draft Working Item Description PSS Rel-6 and LS response to:
"Answer to Liaison Statement regarding PSS Release 6 work programme" (S2-022050/ S4 (02)0375) from SA2, and
"LS reply on Packet Switched Streaming (PSS) in Rel-6 Work Programme" (S5-024235/S4(0)0376) from SA5

Source: SA4

To: SA2, SA5

CC: SA1, SA3 and T2

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Attachments: S4-020483, "Draft Work Item Description PSS Rel-6"

1. Overall Description

SA4 wants to thank SA2 and SA5 for the response to our LS [S4-020346](#), "Answer to "Liaison Statement on PSS Release 6 work programme" regarding work item description for PSS Rel-6. As a result from the response a new Draft Work Item description is attached to this LS. SA4 wants to finalize the PSS Rel-6 WID at SA4#23 30.9-4.10. We kindly ask for comments before this date.

2. Answer to SA2 comments

SA4 recognize SA2's responsibility for architectural aspects of the streaming service. SA4 furthermore welcomes the efforts done by SA2 to coordinate the architectural requirements regarding PSS between the features in Rel-6. SA4 is looking forward to a close cooperation with SA2 on the architectural aspects of streaming

The answers to the questions in the SA2 answer follow:

Q1. Is the "rough prioritization order" only made with respect to the work that SA4 has to carry out for R6 or is it also intended to cover the corresponding work to be done in other 3GPP working groups?

The "rough prioritization order" is the SA4 prioritization order. It is not meant to cover the 3GPP overall prioritization or the prioritization done in other groups.

Q2. What aspects are included in the "pre-transport adaptation"?

SA4 hopes that the new Draft WID for PSS Rel-6 is clearer in this respect. "Pre-transport adaptation" refers to service adaptation due to capability exchange and/or user preferences.

Q3. What is the scope of the "PSS QoS Metrics" and "Implications of IPv6" items?

“PSS QoS Metrics” is renamed “Real time monitoring of **application level QoS**” in the Draft WID for PSS Rel-6 (attached). Stream quality is inherently difficult to quantify, and is influenced by many factors such as network conditions, codecs, terminal capabilities, and the perception of the end-user. Despite this complexity, a great deal can be discovered from simple standardized performance data collected in the terminal that could be used for stream quality analysis regardless of the terminal or server platform. Its usage is not defined as this is an operator issue and is beyond the scope of standardizations but principally it would be utilized for gauging customer satisfaction and network performance in delivering streaming services.

“Implications of IPv6” is removed from the Draft WID for PSS Rel-6. The intention of that bullet point was more of ordinary release maintenance. There is a risk that the protocols and formats used in PSS Rel-4 and Rel-5 are not IPv6 “clean”. The intention is to make them so, but SA4 does not regard this as being a part of the new WID.

3. Answers to SA5 comments

SA4 wants to thank SA5 for pointing out the lack of a charging function. Charging is now added to the Draft WID for PSS Rel-6.

SA4 recognizes SA5 expertise and lead in charging related questions. SA4 is looking forward to a fruitful co-operation with SA5 on charging aspects of PSS Rel-6.

4. Required Actions (to all 5 addressed WGs)

To review the attached draft WID and provide comments, if any.

SA4 Meetings:

SA4#23	30.9.-4.10.2002	Canada, Montreal	VoiceAge
SA4#24	11.11-15.11 2002	England, Reading	Microsoft

DRAFT Work Item Description PSS Rel-6

Title

PSS Rel-6

1 3GPP Work Area

	Radio Access
	Core Network
✓	Services

2 **Linked work items**

IMS Phase2(Internet Protocol Multimedia Sub-system)
MMS (Multimedia Messaging Service) (expected to be a part of Rel-6)
End to End QoS (Concept and Architecture) for PS Domain
MBMS
GUP
DRM

3 **Justification**

Following on from the PSS-E specifications developed under Rel-5, there is now a need to address more advanced aspects under Rel-6.

4 **Objective**

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

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

PSS Rel-6 solution will be based on and therefore should provide full backwards compatibility with the Rel5 Extended Streaming solution.

This work item will cover:

- Support for service adaptation
 - Enabling adaptation based on capability exchange, including user preferences.
 - Support adaptation to varying network conditions.
 - Adaptation to network capabilities and characteristics (GERAN, UTRAN and WLAN).
- Consideration of introduction of new codecs and formats.
- Harmonized streaming support for MMS.
- Consideration of introduction of a server file format and a file format for progressive download.

- Real time monitoring of application level QoS.

The following bullets are related to the linked work items (under the responsibility of other working groups):

- DRM specific impacts on PSS, if any.
- IMS specific impacts on PSS, if any.
- MBMS specific impacts on PSS, if any.
- Charging specific impacts on PSS, if any.

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)

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	
26.233		Transparent end-to-end packet switched streaming service; General description (PSS)		SA#	Rel-6	
26.234		Transparent end-to-end packet switched streaming service; Protocol and codecs (PSS)		SA#	Rel-6	
22.233		Stage 1, streaming			SA1 is responsible for this document	
		Stage2, streaming (non-transparent aspects)			SA2 is responsible for this potential document	

11 Work item raporteurs

Olle Franceschi

12 Work item leadership

TSG SA WG 4

13 Supporting Companies

AT&T Wireless, Ericsson, Nokia, NTT DoCoMo, Philips, Emblaze Systems, Orange, Serome Technology, Packet Video, Vimatix, Hutchison 3G, Siemens, Microsoft, Coding Technologies, Fraunhofer

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

(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)