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**Source:** SA1  
**Title:** Release 6 CR to 22.233 on PSS server file format  
**Document for:** Approval  
**Agenda Item:** 7.1.3

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SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020554	22.233	001		Rel-5	B	Requirement for efficient use of transport resources for PS Streaming	5.0.0	6.0.0	S1-021791
SP-020563	22.233	002		Rel-6	B	CR, PSS server file format	5.0.0	6.0.0	S1-021627

TSG-SA WG1 #17  
 Durango, USA, 12-16<sup>th</sup> August 2002

S1-021791  
 Agenda Item: 10.12

CR-Form-v7	
<b>CHANGE REQUEST</b>	
⌘ <b>22.233</b> CR <b>001</b> ⌘ rev <b>-</b> ⌘	Current version: <b>5.0.0</b> ⌘

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Requirement for efficient use of transport resources for PS Streaming.
<b>Source:</b>	⌘ SA1 (SIEMENS AG)
<b>Work item code:</b>	⌘ PSS <span style="float: right;"><b>Date:</b> ⌘ 31.07.2002</span>
<b>Category:</b>	⌘ <b>B</b> <span style="float: right;"><b>Release:</b> ⌘ Rel-6</span>
<p><i>Use <u>one</u> of the following categories:</i></p> <p><b>F</b> (correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (addition of feature),  <b>C</b> (functional modification of feature)  <b>D</b> (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	
<p><i>Use <u>one</u> of the following releases:</i></p> <p><b>2</b> (GSM Phase 2)  <b>R96</b> (Release 1996)  <b>R97</b> (Release 1997)  <b>R98</b> (Release 1998)  <b>R99</b> (Release 1999)  <b>Rel-4</b> (Release 4)  <b>Rel-5</b> (Release 5)  <b>Rel-6</b> (Release 6)</p>	

<b>Reason for change:</b>	⌘ PS Streaming is quite challenging with respect to usage of transport resources, especially over the air. Therefore a requirement to be able to support mechanisms (e.g. compression) that allow to reduce usage of transport resources is required. Such mechanisms should have no or minimal impacts on the core network and access networks e.g. an end to end mechanism.
<b>Summary of change:</b>	⌘ A requirement to be able to support mechanisms (e.g. compression) that allow to reduce usage of transport resources is introduced.
<b>Consequences if not approved:</b>	⌘ Possible inefficient usage of transport resources for PS Streaming.

<b>Clauses affected:</b>	⌘ 5.1									
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	⌘ Other core specifications ⌘ Test specifications ⌘ O&M Specifications
Y	N									
<input type="checkbox"/>	<input checked="" type="checkbox"/>									
<input type="checkbox"/>	<input type="checkbox"/>									
<input type="checkbox"/>	<input type="checkbox"/>									
<b>Other comments:</b>	⌘									

## 5.1 General

- The Release 5 Transparent End-to-End Packet-switched Streaming Service (PSS) shall add enhanced capabilities to the existing Transparent End-to-End Packet-switched Streaming Service (PSS)[TS26.233 and 26.234]
- The PSS uses a Client / Server model. The client controls the server by sending requests to the server, which responds to these commands.
- The PSS shall support downlink streaming.
- The PSS shall maintain backwards compatibility (i.e. a Rel4 client should be able to interoperate with a Rel5 server and vice versa).
- The PSS should consider interoperability with streaming elements (protocols, formats etc) already in use in other industries (e.g. the internet).
- The PSS shall support access to live content in addition to pre-authored content. E.g. ability to listen to domestic radio station whilst abroad.
- The PSS should be able to support mechanisms that allow for efficient usage of transport resources (e.g. by compression of data in PSS ). Such mechanisms should have no or minimal impacts on the core network and access networks.

Note: Such mechanisms may not be available for all streamed content.

- The PSS shall:
  - use open standards where these are available for Streaming service requirements
  - use standard procedures and interfaces to avoid interoperability problems
  - use extensions to existing standards if needed

CR-Form-v7

## CHANGE REQUEST

⌘ **22.233 CR 002** ⌘ 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:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘	Requirement on Server file format	
<b>Source:</b>	⌘	SA1 (Ericsson)	
<b>Work item code:</b>	⌘	PSS	<b>Date:</b> ⌘ 02/08/2002
<b>Category:</b>	⌘	<b>B</b>	<b>Release:</b> ⌘ Rel6
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>Rel-4</b> (Release 4) <b>Rel-5</b> (Release 5) <b>Rel-6</b> (Release 6)

<b>Reason for change:</b>	⌘	Streaming server file format is an important part of PSS and need to be considered in the continuous PSS work.
<b>Summary of change:</b>	⌘	Additional requirement
<b>Consequences if not approved:</b>	⌘	No valid requirement on server file format will exist.

<b>Clauses affected:</b>	⌘	10				
<b>Other specs affected:</b>	⌘	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N		X
Y	N					
	X					
<b>Other comments:</b>	⌘					

**How to create CRs using this form:**

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.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.

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## 10 Service Interaction

- The PSS shall define a common file format (common to all download mechanisms) for easy service interaction with other multimedia delivery services defined in 3GPP (e.g. MMS).
- The PSS shall interact with MMS. Service interaction with MMS is especially important because there are application scenarios where media delivery via a streaming service could be replaced by media delivery via MMS and vice versa.
- The PSS shall define a server file format to provide easy interoperability between Content Creators and Service Providers.