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Newbury, UK

3GPP TSG-SA WG4 #17
Naantali, Finland
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S4-010431

Title: Reply to “LS on Extended Streaming Service” and “LS regarding User Profile”
Source: TSG-SA WG4
To: TSG-SA WG1, TSG-T WG2, TSG-SA WG2, TSG-SA WG3
Cc: TSG-SA, TSG-SA WG5
Attachments: S4-010428, WI description “Extended Transparent End-to-End Packet Switched Streaming Service (PSS-E)”

Contact Person:

Name: Olle Franceschi
Company: Nippon Ericsson K.K.
E-mail Address: olle.franceschi@nrj.ericson.se
Tel. Number: +81 3 3830 2355

SA4 would like to thank SA1 for the LS on Extended Streaming Service (S4-010323/ TSG S1 (01) 501) and the LS regarding User Profiles (S4-010425/TSG S1 (01) 591)

The WI description for “Extended Transparent End-to-End Packet Switched Streaming Service (PSS-E)” has been updated as a result of the comments from SA1. Each bullet point has now some specific example of features that are under consideration for inclusion in release 5.

Some additional comments on the bullet point “Service Optimization” is included below:

SA4 fully supports SA1 in the work to coordinate all work regarding user profiles/capability exchange in 3GPP. SA4 is happy that SA1 takes the lead in this work. SA4 will follow the work closely and contribute to it by, for example, supplying requirements specific to our applications.

The purpose of the capability exchange work described in the WI description is thus to define the application specific part of a capability exchange mechanism. This includes capability attributes relevant for PSS-E and the protocols to be used for conveying capability information to the streaming server. The intention of the work is that it shall interwork with the overall user profile mechanism defined in 3GPP.

Work Item Description

Title

Extended Transparent End-to-End Packet Switched Streaming Service (PSS-E)

1 3GPP Work Area

| | |
|---|--------------|
| | Radio Access |
| | Core Network |
| ✓ | Services |

2 Linked work items

IMS (Internet Protocol Multimedia Sub-system)
MMS (Multimedia Messaging Service)
End to End QoS (Concept and Architecture) for PS Domain

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

consideration of improved robustness and flexibility in the delivery of multimedia content:

- **Adaptation to network conditions**
- **Adaptation to network type (GERAN, UTRAN)**
- **Enhanced streaming transport mechanisms**
- **Up-streaming**

Multimedia media types

consideration of additional and enhanced media types and scene description:

- **Graphics (2D, 3D)**
- **Synthetic Audio (eg MIDI)**
- **Enhanced audio and video codecs (eg higher levels and profiles and/or new codecs)**
- **Enhanced scene description (eg new features and/or functionality)**
- **Metadata**

Interworking with MMS

consideration of the various modes in which PSS-E may be utilised and the impact on other services and network elements:

- File download
- Up-streaming
- File formats

Interoperability

consideration of interoperating with the Internet:

- File Formats
- Codecs

Commercial factors

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

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)**

| 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 | | | | SA#14 | Rel-5 | |
| 26.234 | | | | SA#14 | Rel-5 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

11 **Work item rapporteurs**

Olle Franceschi

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, Expway, Serome Technology, Celvibe

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)