Technical Specification Group Services and System Aspects Meeting #27, Tokyo, Japan, 14-17 March 2005 *TSGS#27 (05)0~~1~~0940~~0~~*

3GPP TSG-SA4 #34 Meeting 21-25 February, 2005, Lisbon, Portugal *Tdoc S4-050241*

Source: ~~TSG SA WG4~~Streamezzo
Title: New WID for dynamic and interactive multimedia scenes (Release 7)
Document for: Approval
Agenda Item: 7.4.3

Work Item Description

Title

Dynamic and interactive multimedia scenes~~-~~.

1 3GPP Work Area

	Radio Access
	Core Network
X	Services

2 Linked work items

none

3 Justification

The user experience of multimedia on 3G terminals can be enhanced if the selection, control and display of the multimedia scenes are integrated into a single user interface. Also, it should be possible to update animated applications and displays incrementally in order to use bandwidth appropriately.

Scene is understood as a presentation of multimedia content including a service logic (animation, menu, links…).

~~The enabled applications could include but are not limited to:~~

- ~~Browsing, preview, and selection of content (for example, when a content provider has a variety of content available);~~
- ~~Dynamic services such as news updates~~
- ~~Integrated display of ancillary information, advertisements, or side material;~~
- ~~Display of longer time-based graphical scenes, including classic animations, which need incremental update, possibly under user control.~~

There are existing non-standard solutions in this area which are enjoying some adoption into 3G terminals, but the market and 3G community would benefit greatly from a standard, open, stable, multi-vendor and interoperable specification.

Existing capability in 3GPP specifications is limited to download and progressive download; full incremental update is not possible, and interactivity is limited. In addition, existing support for compression and binarization is limited.

An update of a piece of content within a multimedia presentation is not possible without reloading a complete page, eg: changing frequently a quote within a stock-exchange service or adding a voting button in an iTV service.

Work Item in OMA and 3GPP:
OMA has approved a WI on Rich-Media Environment. The goal of this WI is to define Rich-Media use cases and requirements for the OMA service enablers.
The present WI defines tasks of 3GPP SA4 to specify the dynamic and interactive multimedia scenes of PSS, MMS, MBMS services relative to SA4 specifications (bearer dependant aspects of service enablers).

4 Objective

To produce a specification for multimedia scene management, including:

- scene format and scene definition
- container and delivery formats including both file and stream forms
- the compatibility with, integration of, and building upon existing media types and formats in 3GPP specifications, including but not limited to video, audio (including both sampled audio and synthetic audio), images and graphics (SVG Tiny), storage format such as 3GPP file format and stream formats such as RTP.
- management of user interactivity
- incrementally updated scenes and animations
- integration with capabilities for secure/encrypted delivery.
- efficient use of the bandwidth of the radio network.

This work item is proposed for release 7.

5 Service Aspects

This work will provide a media type, which can be delivered using existing services, and integrated with existing media types. It therefore enhances any service using multimedia, including: MBMS, PSS (including progressive download), and MMS. The adoption of this media type into these services is envisaged.

6 MMI-Aspects

This work would enable content owners to build enhanced user experiences. It is not anticipated that any new interface issues will arise as existing capabilities in user input and display can be leveraged, but there might be impact on MMI.

7 Charging Aspects

No impact

8 Security Aspects

This work would leverage capabilities in both delivery (messaging, download, streaming etc.) and security (encryption etc.), and therefore there should be *no impact* on security specifications. A security review of the specification should be considered.

9 Impacts

Affects:	UICC apps	ME	AN	CN	Others
Yes		X			
No	X		X	X	
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
tbd		S4	S1	SA#29	SA#30	

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
26.234		Transparent end-to-end Packet-switched Streaming Service (PSS); Protocols and codecs	SA#30	
26.140		Multimedia Messaging Service (MMS); Media formats and codes	SA#30	
26.346		Multimedia Broadcast/Multicast Service (MBMS); Protocols and codecs	SA#30	
26.244		Transparent end-to-end packet switched streaming service (PSS); 3GPP file format (3GP)	SA#30	

11 Work item rapporteurs

Gaëlle MARTIN-COCHER

12 Work item leadership

3GPP SA4.

13 Supporting Companies

Apple, Orange, Siemens, Streamezzo, "3",T-Mobile International, Vidiator

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

None yet.

14b The WI is a Building Block: parent Feature

n/a

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

n/a