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Title: Proposal for MM services within UMTS
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Rationale

The 3G mobile System will besides voice focus on multi media applications. These applications will be based mostly on Internet technology and applications themselves. The Internet technology and applications develop and evolve on a very dynamic way in short time frames. Therefore, the creation of service specification today might not fit to the requirements and market within 3 years time. The 3G systems must provide a flexible platform to deploy any type of MM service and application, which will evolve in the future.

The need for flexibility, however, needs to take into account the characteristics of the mobile radio environment; limited resources (bandwidth), and inherently high error rates. In order to provide mass-market users with cost-effective access to multi-media services, solutions specifically designed to cater for the mobile environment may be required. Additionally the requirements for interworking with, and evolving from existing 2nd generation solutions need to be met.

Proposal

The following principles and objectives are proposed as the basis for progressing the specification of Multi-media specifications within the 3GPP:

- The 3G System (including the terminal equipment) should be, as far as possible, transparent to all MM services and applications. The objective is to avoid, as far as practical, 3G specific solutions that require interworking of applications/services within the network.
- The 3G System should provide a general bearer with negotiable attributes and end-to-end QoS as transport channel (e.g: bitrate, delay, BER,...) for MM applications. Specific multi-media bearer channels should be avoided where practical.
- The 3G terminal equipment should provide functions to download, store and execute application specific coders and protocols (e.g browser like API to load applets, plug-ins etc.) as well as functions to negotiate the bearer attributes and to upload information.
- The 3G specifications may need to support basic multimedia service types to maximise quality and minimise capacity impacts on the radio interface. This may require media coding and translation/protection being provided within the specified solutions. In order to decide on this issue, it is proposed to start a study item to analyse the advantage/disadvantage of service specific bearers.
- Operators have a desire to implement intelligent service control to enable their users to receive the service profile which the market needs, whether roaming or in the home network. This will require standardisation of certain aspects of the control plane.

In the very beginning of the Mobile Multimedia market a push from well defined and ready to use applications might be required. Therefore a default MM application should be standardised in such a way, that minimal requirements and interworking for the 3G system is required. From today's market point of view, this application should be based on a packet switched bearer service within the 3G system and IP connectivity without the need of transcoding. Therefore a H.323 based application with coders used commonly in today's internet applications should be defined.