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Title: The Minimum Acceptable Functionality of IMS in Release 5 – An Operator's Perspective

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Agenda Item: 9

Introduction

Following a detailed review of the 3GPP Work Plan, a revised scope and timing of Release 5 is expected to be agreed during this set of TSG meetings (TSG#13). This contribution focuses upon the IP Multi-Media Subsystem (IMS) and highlights the functionality that is seen to be essential for inclusion in Release 5 from an operator's businesses perspective. Here the principle objective is to enable the deployment of attractive, successful and commercially viable services.

General

- **ISC interface.**

The IMS architecture identifies the use of an Application Server (AS), accessed via the ISC interface using a SIP based protocol, in order to perform multimedia session control. The AS is used to process multimedia sessions according to the user's service profile and operator's requirements. From an operator's perspective the ISC interface represents a key service enabling IMS capability for Release 5. The stage 3 specifications for the ISC interface is developed by CN1and specified in TS 23.218. Following review within CN1 the specification is scheduled for completion by March 2002. This specification represents a key aspect of IMS and should therefore be part of Release 5.

- **IMS interworking.**

The ability for IMS users to communicate with users connected to other types of network represents a key requirement for the success of the IMS. The initial population of IMS users (making use of Release 5) will be too small to make IMS an attractive business proposition without interworking with other types of IP (v4 and v6) based networks and the PSTN/CS networks.

In line with the evolution of the internet and corporate intranets customers will require multimedia conversational service between fixed SIP clients (e.g. as supported by Windows XP) to 3GPP IMS compliant terminals.

Interworking with the PSTN will provide IMS users with a coherent set of services, allowing IMS services to interact with equivalent PSTN services and IMS sessions to include PSTN customers.,
Examples include Audio Conferencing involving IMS and PSTN users, and enabling an IMS user to forwards their incoming calls to a PSTN phone at home or work.

CN3 is currently specifying interworking aspects that are mainly based upon endorsing existing work. Following review within CN3 the work is scheduled for completion by March 2002 and should not involve any specific delay. These specifications represent a key aspect of IMS and should therefore be part of Release 5.

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- **End to end QoS.**

A primary goal of the IMS is to control multimedia sessions in order to ensure appropriate end to end QoS. This is a key requirement for real time conversational multimedia services (including voice only) where it is essential for operators to maintain an acceptable QoS. Additionally, ensuring the provision of an appropriate QoS is a key operator requirement for the **optimised use of their network resources within a scarce and expensive radio resource environment**.

The end-end control of QoS is provided via the Go interface that allows authorisation of QoS requests, and is therefore a key IMS capability for Release 5. CN3 is currently specifying the Go interface that is mainly based upon endorsing existing work. Following review within CN3 the work is scheduled for completion by March 2002 and should not involve any specific delay.

Conclusion

The commercial success of the IMS is an essential requirement for both operators and vendors; from an operator's perspective it is essential that the deployment of IMS capabilities result in delivering services to our customers on the basis of a viable business case. This contribution has highlighted key IMS functionality that is believed to be essential for inclusion within the initial set of IMS specifications forming part of Release 5. Following review within the relevant 3GPP Working Groups, the specification of this functionality is now planned for completion in March 2002 and is therefore within an acceptable and realistic time scale for inclusion in Release 5.

Proposal

In order to enable the deployment of attractive, successful and commercially viable IMS based services it is proposed that the following key IMS functionality is specified as part of Release 5:

- the ISC interface;
- end to end QoS mechanisms enabling operator control of network resources;
- interworking with PSTN and non IMS IP networks.

End

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