


3GPP TSG SA Workshop on IP
Nice France
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Requirements for IP Based UMTS

A Consensus View from the Industry

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UMTS Forum - 200 Member Companies World-wide

Operators

Manufacturers

Government/Regulators

Service and Content Providers

The Forum is an active Market Representation Partner (MRP) to 3GPP

Aim - "To Ensure That the Standards Meet Market Needs"

During UMTS Forum GA#18 (Dec.'99) a workshop was conducted to discuss and reach consensus on the Forum's view on Release 2000 (IP Based UMTS), including both radio access and core network aspects. The Results.....

The UMTS Forum recommendations to 3GPP on IP based UMTS are based on some key benefits to the Operators and Vendors community:

- Strong drive towards introducing an architecture that would considerably reduce Operators costs, including equipment, network deployment, maintenance, etc..**
- Flexibility in service creation especially in the area of Internet integration e.g. opportunity to quickly provide value added services and create new service revenue streams**
- An effective way to make available to mobile users integrated services such as multimedia**



The UMTS Forum supports an IP-based solution for the Release 2000 architecture. In this respect, the UMTS Forum would ask the 3GPP to analyse the following issues:

- Quality of services for real-time services: including voice and music**
- IP version to be used in standardisation (IPv4 vs. IPv6)**
- Security aspects**
- Mobility management**
- Global roaming including terminal circulation**

3GPP should clarify what level of IP introduction in the UMTS system, with all the related issues solved, could be achieved in the time frame of Release 2000.

- **Phased introduction of the IP technology in the UMTS system. As an example UMTS Forum has identified four possible phases:**
 - **Phase 1: IP as the technology to be used in the interconnection of 3G networks (i.e., NNI)**
 - **Phase 2: IP introduced within the UMTS Core Network, down to and including the Radio Network Controller**
 - **Phase 3: IP introduced also within the RAN, down to the Node B**
 - **Phase 4: IP down to the terminal, over the radio interface**

- **Smooth evolution from Release 99. The IP solution, which can be seen as a revolutionary approach, should be evolvable from current solutions.**
- **Support of backward compatibility for Release 99 circuit-oriented services.**
- **Compatible solutions across different Releases.**
- **Single global IP solution preferred. The number of options must be minimised both within 3GPP and world-wide.**



- **The UMTS Forum would like to emphasise that stabilisation of Release 99 should be achieved during the Release 2000 work, especially in the Radio Access Network area.**
- **3GPP should clarify the level of interconnection between 2G (GSM/GPRS) and 3G networks that is being specified (at the RAN level or at the Core Network level).**
- **3GPP should consider a system approach including services, applications and network.**



- The UMTS Forum stresses the importance of network management, billing and service provisioning issues.
- 3GPP should develop test requirements for all the standardised modules.
- In developing an IP network, 3GPP should be open to incorporate IETF working methods as appropriate.

Next Step for the UMTS Forum.....

New Market Forecast Study

“Development of the 3G Market”

Study Contract Awarded to Consultants *Yankee Group* of Boston.

Final report in March

Study target

**To enhance understanding of the 3G multimedia services market
by region (NA, E/W EU, Japan)
and indicate service priorities and timing**

**Will be used for the Forum’s MRP process towards 3GPP
To advise on services roll-out.**