

PCC.I/RES. 28 (III-03)¹

GMS EVOLVED UMTS CORE NETWORK WITH UTRAN ACCESS NETWORK

The III Meeting of the Permanent Consultative Committee I: Telecommunication Standardization,

CONSIDERING:

- a) That Recommendation Q.1741.2 supports different applications ranging from narrow-band to wide-band communications capability with integrated personal and terminal mobility to meet the user and service requirements, and,
- b) That the core network interfaces identified in Recommendation Q.1741.2 constitute a complete mobile core network system for terrestrial usage based on GSM evolved UMTS core network with UTRAN access network.,

¹. CCP.I-TEL/doc.319/03

RECOGNIZING:

That CITEL Member States and Associate Members consider that the evolution of mobile networks is important, in particular with regard to the deployment of third-generation (3G) wireless systems and beyond,

RESOLVES:

To endorse the ITU-T Recommendation Q.1741.2 – “IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network” with no deletions, additions or modifications to its normative references and Annexes.

RECOMMENDS:

That the Working Group on Standards Coordination continues to monitor and determine the applicability for the Americas of the Recommendation Q.1741 series as it evolves.

ANNEX TO PCC.I/RES. 28 (III-03)

GSM evolved UMTS Core Network with UTRAN Access Network Coordinated Standards Document

1. EXECUTIVE SUMMARY

Mobile telecommunications are becoming very popular. It is anticipated that the number of mobile subscribers will exceed the number of fixed network subscribers within the next few years. This is already the case in some markets. In addition, there is a very strong correlation between mobility and Internet usage: a very high proportion of wireless subscribers are also internet users. This clearly points to the need for and drives the emergence of the wireless Internet.

As interest in mobile services has developed, the industry has seen a number of regional standards emerge. In recognition of the need to avoid proliferation of systems, two key partnership projects were formed involving a number of regional and national standards development bodies. 3GPP is made up of ETSI, CCSA, T1, ARIB, TTC and TTA. It is working on evolution of GSM systems to support the requirements developed in ITU T and expressed in Recommendations Q.1701 (Framework for IMT-2000 Networks) and Q.1702 (Long-term vision of network aspects for systems beyond IMT-2000). 3GPP2 is made up of TTA, CCSA, ARIB, TTC, and TTA. It is working on evolution of CDMA2000 access to ANSI-41-based core network systems to support the requirements developed in ITU T and expressed in Recommendations Q.1701 and Q.1702. The 3GPPs are working on two aspects. One is evolution of existing second generation systems towards support of advanced services, especially higher data rates. The other is more revolutionary: the adoption of IP-based technology within their core networks in order to support all services, including voice, high speed data and multimedia services on a common infrastructure.

2. BACKGROUND

ITU-T Recommendation Q.1741.2 – “IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network” identifies a release of the IMT-2000 Family Member, “GSM evolved UMTS Core Network”. The Core Network for this IMT-2000 family member referred to as “UMTS Release 4”, is based on an evolved Core Network from the 3rd generation release 1999. The technical specifications have been developed in 3GPP and have been transposed by the involved Standards Development Organizations (SDOs) and these are in turn referenced by Recommendation Q.1741.2. The system will support different applications ranging from narrow-band to wide-band communications capability with integrated personal and terminal mobility to meet the user and service requirements.

Q.1741.2 is the second ITU-T release of this 3rd generation of mobile communications technology. The core network interfaces identified in this Recommendation constitute a complete mobile core network system for terrestrial usage based on GSM evolved UMTS core network with UTRAN access network. The core network of UMTS supports both 2nd and 3rd generation radio access networks as options.

3. CONCLUSIONS

The Fixed and Mobile Services and Network Signaling Rapporteur Group recommends the endorsement of the ITU-T Recommendation Q.1741.2 – “IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network” by the Members and Associate Members of CITEL PCC.I. Furthermore, the group recommends that Q.1741.2 be accepted with no deletions, additions or modifications to its normative references and Annexes.

4. FUTURE WORK

Keeping with the intent of recent work, the Rapporteur Group will continue to monitor the work of ITU-T SSG. For example, Q.1741.3 “IMT-2000 References to Release 5 of GSM evolved UMTS Core Network” is currently going through the approval process. The results that benefit for CITEL Member States will be incorporated as appropriate.

5. RESOURCE DOCUMENTS

[1] ITU-T Recommendation Q.1741.2 – “IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network”.

[2] Document PCC.I/doc. 0202/03, Next Generation Networks – Standards Overview (September 2003)

6. ABBREVIATIONS AND ACRONYSM

3GPP	Third Generation Partnership Project
3GPP2	Third Generation Partnership Project 2 (ANSI driven)
ANSI	American National Standards Institute
GSM	Formerly: Group Special Mobile. Now: Global System for Mobile Communications
IMT-2000	International Mobile Telecommunications – 2000
UTRAN	Universal Terrestrial Radio Access Network