



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.1761

(01/2004)

SERIES Q: SWITCHING AND SIGNALLING

Signalling requirements and protocols for IMT-2000

Principles and requirements for convergence of fixed and existing IMT-2000 systems

ITU-T Recommendation Q.1761

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ITU-T Recommendation Q.1761

Principles and requirements for convergence of fixed and existing IMT-2000 systems

Summary

This Recommendation describes requirements for the use of fixed networks in the role of fixed access networks for IMT-2000 networks. This convergence of fixed networks and IMT-2000 networks enables mobile users to roam outside the serving area of their IMT-2000 network and still have access to the same set of services outside their IMT-2000 network boundaries as they do within those boundaries. This Recommendation also describes the framework for fixed mobile convergence and the capability requirements for enhanced fixed terminals that may be utilized to enhance the roaming IMT-2000 user's experience. This Recommendation also details the mobility management functional requirements in fixed networks in support of roaming IMT-2000 subscribers.

Source

ITU-T Recommendation Q.1761 was approved on 10 January 2004 by ITU-T Study Group SSG (2001-2004) under the ITU-T Recommendation A.8 procedure.

Keywords

Convergence, fixed, IMT-2000, mobile.

FOREWORD

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Introduction

The evolution of individual core network technologies towards common Internet Protocol (IP)-based solutions provides long-term opportunities for the convergence of diverse network technologies. This convergence provides, in turn, opportunities for extending the reach and scope of services that a user of one of these networks may obtain beyond what could be supported in a pre-converged environment.

As these long-term convergence opportunities emerge and stabilize, there are opportunities in the near to medium term that may be enabled by providing capabilities to enable IMT-2000 roamers to access their basic and enhanced services, possibly excluding terminal mobility, in environments where IMT-2000 is not yet deployed.

ITU-T Recommendation Q.1761

Principles and requirements for convergence of fixed and existing IMT-2000 systems

1 Scope

This Recommendation describes the requirements for supporting a mobile IMT-2000 user roaming to a fixed network such that the IMT-2000 user may obtain basic services plus access to the user's services per the subscription profile. A number of service level scenarios are possible. This situation provides personal mobility among fixed network users and may exclude terminal mobility.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

2.1 Normative references

- [1] ITU-T Recommendation Q.1701 (1999), *Framework for IMT-2000 networks*.
- [2] ITU-T Recommendation Q.1702 (2002), *Long-term vision of network aspects for systems beyond IMT-2000*.
- [3] ITU-T Recommendation Q.1711 (1999), *Network functional model for IMT-2000*.
- [4] ITU-T Recommendation Q.1741.1 (2002), *IMT-2000 references to release 1999 of GSM evolved UMTS core network with UTRAN access network*.
- [5] ITU-T Recommendation Q.1741.2 (2002), *IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network*.
- [6] ITU-T Recommendation Q.1742.1 (2002), *IMT-2000 references to ANSI-41 evolved core network with cdma2000 access network*.

2.2 Informative references

- [7] ETSI ES 201 912 V1.1.1 (2002-01), *Access and Terminals (AT); Short Message Service (SMS) for PSTN/ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Centre*.
- [8] ETSI ES 201 986 V1.2.1 (2003-04), *Services and Protocols for Advanced Networks (SPAN); Short Message Service (SMS) for PSTN/ISDN; Service Description*.
- [9] ETSI TS 103 912 V1.2.1 (2003-01), *Access and Terminals (AT); Short Message Service (SMS) for PSTN/ISDN; Short Message Communication between a fixed network Short Message Terminal Equipment and a Short Message Service Centre (Corrections to ES 201 912 V1.1.1)*.
- [10] ITU-T Recommendation Q.1521 (2000), *Requirements on underlying networks and signalling protocols to support UPT*.