



INTERNATIONAL TELECOMMUNICATION UNION

CCITT

E.202

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

(10/92)

**TELEPHONE NETWORK AND ISDN
OPERATION, NUMBERING, ROUTING
AND MOBILE SERVICE**

**NETWORK OPERATIONAL PRINCIPLES
FOR FUTURE PUBLIC MOBILE SYSTEMS
AND SERVICES**



Recommendation E.202

FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation E.202 was prepared by Study Group II and was approved under the Resolution No. 2 procedure on the 30th of October 1992.

CCITT NOTES

- 1) In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized private operating agency.
- 2) A list of abbreviations used in this Recommendation can be found in Annex A.

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Recommendation E.202**NETWORK OPERATIONAL PRINCIPLES FOR FUTURE
PUBLIC MOBILE SYSTEMS AND SERVICES***(1992)***1 Introduction**

1.1 The active research and interest in future public mobile radio systems and personal communications has meant that mobile systems will have a significant role in the provision of telecommunication services. The anticipated demand for personal mobility has caused the need for guidelines for interconnecting and integrating future public mobile systems with the current and future fixed networks (including PSTN, ISDN and B-ISDN).

1.2 This Recommendation sets out principles, from the network operational point of view, which should be taken into account during the design of new public mobile systems and networks. The objective is to ensure that such future systems can be interconnected to the fixed network with minimal adverse effect on overall Quality of Service and without the need for enhanced functionality in the fixed network.

2 Scope

2.1 Future public mobile systems may result in the convergence of cellular and cordless functionalities, and combination/amalgamation with satellite based systems. This Recommendation focuses on terrestrial based future mobile systems. Satellite based systems are not specifically addressed, and are for further study.

3 Related Recommendations

3.1 Recommendation E.201, reference Recommendation for mobile systems and services, provides a comprehensive guide to related Recommendations in CCITT and CCIR. Of particular relevance to the present Recommendation are

- Recommendation E.220, Interconnection of public land mobile networks (PLMN).
- Recommendation E.750-Series Recommendations dealing with traffic engineering aspects of mobile systems.
- Recommendation G.173, Transmission planning aspects of the speech service in digital public land mobile networks.

4 General principles

4.1 In general, the interconnection of future public mobile systems to the PSTN/ISDN, should not impose any requirement for additional functionality in the current fixed network, nor any restriction in the normal operation of the fixed network (Recommendation E.220). Operational principles for grade of service should conform to the E.750-Series Recommendations. In general, Quality of Service and end-to-end network performance should conform to appropriate CCITT Recommendations.

4.2 The interconnection and integration of future public mobile systems should not result in any impairment to the Quality of Service provided on calls routed across the interconnection or within the integrated network.