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**CHARGING AND ACCOUNTING IN
INTERNATIONAL TELECOMMUNICATION
SERVICES**

**GENERAL ACCOUNTING PRINCIPLES
APPLICABLE TO MESSAGE HANDLING
SERVICES AND ASSOCIATED APPLICATIONS**

ITU-T Recommendation D.36

(Previously "CCITT Recommendation")

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T 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 World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation D.36 was revised by ITU-T Study Group 3 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 20th of March 1995.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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Recommendation D.36**GENERAL ACCOUNTING PRINCIPLES APPLICABLE TO MESSAGE HANDLING SERVICES AND ASSOCIATED APPLICATIONS***(Revised in 1995)***1 Scope**

This Recommendation is intended to provide the general accounting principles applicable to message handling services (as described in the F.400- and X.400-Series of Recommendations) and associated applications between interconnected Administration Management Domains (ADMDs). While the information detailed in this Recommendation provides guidelines for the parties concerned, the specific details of each particular accounting arrangement between ADMDs is the subject of bilateral agreements between those ADMDs and may vary from this Recommendation.

2 Introduction

2.1 This Recommendation is intended for use by ADMDs which provide message handling services and associated applications. It should also be of use to organizations creating software for the accounting and settlement of such services. It strives to strike a balance between simplicity and accuracy in accounting. An additional objective is to aid the provision of cost effective and reliable services between interconnected ADMDs.

2.2 The following subclauses lay out the overall model of ADMD interconnection, accounting principles useful for these interconnections, and formulas for various service interactions from the service providers' point of view. Annexes are provided for abbreviations and a glossary, and proposed account statements.

2.3 This Recommendation should be applied in conjunction with other relevant ITU-T Recommendations.

3 Service aspects

3.1 Message handling services provided via ADMDs comprise the offerings of the public service providers and are based on Recommendations laid down in the F.400- and X.400-Series of the ITU-T. The versions of 1988 are the primary reference, but appropriate attention has been given to the 1984 versions. The F.400-Series of ITU-T Recommendations are to be taken into account as far as applicable.

3.2 Regional profile standards should be used for reference and are applicable as far as their specifications are compatible with this Recommendation.

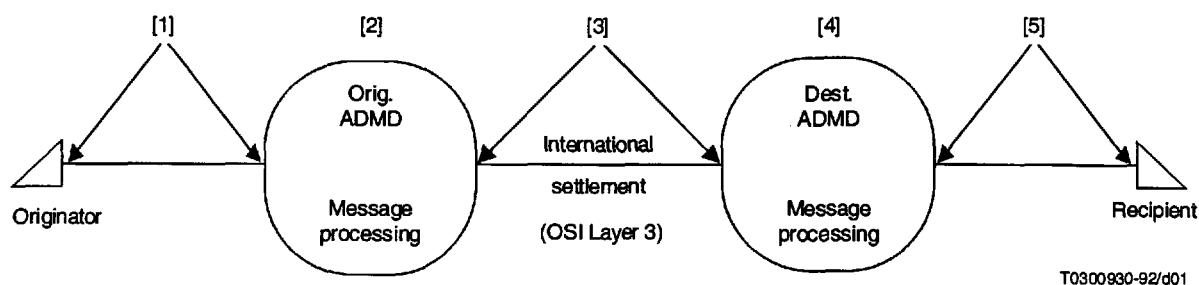
4 General model for accounting**4.1 General definition**

In order to establish a reference basis to permit a clear definition of principles for accounting, this subclause sets out a general model in which the cost elements to be taken into consideration are identified. These cost elements encompass the network features corresponding to OSI layer 3 and features of implementation relating up to and including OSI layer 7.

4.2 Presentation of the model

This model depicts the various interactions and processing involved in message handling.

Each interaction and process is associated with a cost element. These cost elements are identified in Figure 1 and their associated accounting principles in clause 5.



- [1] Service access costs.
- [2] Processing costs at the originating ADMD.
- [3] Network costs between ADMDs.
- [4] Processing costs at the destination ADMD.
- [5] Delivery costs which may involve delivery to UAs, delivery to other telecommunication and physical delivery services, transfer to PRMDs and transfer to other ADMDs.

FIGURE 1/D.36
Cost elements model

5 Principles for accounting

5.1 Assumptions

Accounting principles to be applied internationally are based on the following assumptions.

- 5.1.1 They shall apply for all appropriate situations that face public service providers operating ADMDs.
- 5.1.2 Bilateral agreements are assumed for the component rates (see glossary in Annex B) used for the traffic relation concerned.
- 5.1.3 The principles shall allow for flexibility regarding the range of agreements.

5.2 General principles

- 5.2.1 Due to the adverse impact on the accounting and settlement process, the originating ADMD will not knowingly allow traffic to be passed to the destination ADMD where such traffic is outside the bilateral agreement.
- 5.2.2 Similarly, the destination ADMD may bar traffic from a specific originating ADMD where such traffic is not covered by a bilateral agreement.
- 5.2.3 All messages transferred to the destination ADMD should be subject to accounting, even if a message cannot be delivered to the intended recipient.

Otherwise, accounting and settlement may not be required if the originating and terminating ADMDs have agreed by bilateral agreement that the originator will be charged for originating a message and the recipient will be charged at the destination ADMD for receipt of the message.

- 5.2.4 Delivery service offerings across an ADMD to ADMD interconnection may be different in each direction and have their own outpayment rate.