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CCITT

THE INTERNATIONAL
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CONSULTATIVE COMMITTEE

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**MESSAGE HANDLING SERVICE
OPERATIONS AND DEFINITION OF SERVICE**

**MESSAGE HANDLING SERVICES:
THE PUBLIC INTERPERSONAL
MESSAGING SERVICE**



Recommendation F.420



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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 F.420 was revised by Study Group I and was approved under the Resolution No. 2 procedure on the 4th of August 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 F.420**MESSAGE HANDLING SERVICES:
THE PUBLIC INTERPERSONAL MESSAGING SERVICE***(revised, 1992)*

The establishment in various countries of message handling services in association with public networks creates the need to produce Recommendations covering the aspects of public message handling services.

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1 Purpose and scope

1.1 General

This Recommendation specifies the general, operational and quality of service aspects of the public international Interpersonal Messaging service. Interpersonal messaging services provided by Administrations belong to the group of telematic services defined in the F-Series Recommendations.

This type of Message Handling service is an international telecommunication service offered by Administrations, enabling subscribers to send a message to one or more recipients and to receive messages via telecommunication networks using a combination of store-and-forward, and store-and-retrieve techniques.

Locally provided functions, for which communication with other subscribers is not required, are not covered by CCITT Recommendations.

The Interpersonal Messaging (IPM) service enables subscribers to request a variety of features to be performed during the handling and exchange of messages.

Some features are inherent in the basic IPM service. Other non-basic features may be selected by the subscriber, either on a per-message basis or for an agreed contractual period of time, if they are provided by Administrations.

Basic features have to be made available internationally by Administrations. Non-basic features, visible to the subscriber, are classified as either essential or additional. Essential optional features must be made available internationally by Administrations. Additional optional features may be made available by some Administrations for national use and internationally on the basis of bilateral agreement. Non-basic features are called *optional user facilities*.

IPM service may be provided using any physical network. IPM service may be offered separately or in combination with various telematic or data communication services. It can be obtained by making appropriate arrangements.

Technical specifications and protocols, to be used in the IPM service, are defined in the X.400-Series Recommendations, in Recommendation T.330 and in Recommendation U.204.

This service definition is contained in § 2. Requirements for intercommunication between subscribers are described in §§ 3 and 4. Section 5 describes naming and addressing, while §§ 6, 7 and 8 describe the operation of the service, quality of service, tariff and accounting principles. Network requirements are given in § 9. The provision of subscriber information is in § 10, and § 11 contains information on the use of IPM service within CCITT defined telematic services.

1.2 *Message handling systems used in the provision of IPM service*

1.2.1 *1984 and 1992 implementations*

This Recommendation assumes that the message handling systems implemented to provide the service outlined herein are based on the 1992 version of the X.400-Series of technical Recommendations. It is recognized however, that for some time after the publication of this Recommendation, several implementations of Message Transfer (MT) service will still be based on the 1984 X.400-Series of Recommendations.

1.2.2 *1988 and 1992 implementations*

Minor revisions between 1988 and 1992 Message Handling (MH) service Recommendations are referenced in Annex C of Recommendation F.400. All revisions introduced are classified as optional additional user facilities. The Quality of Service time targets should be supported as detailed in Recommendation F.410.

Administrations are encouraged to adopt the latest CCITT Recommendations.

1.2.3 *Interworking*

In order to protect the investment of Administrations who have implemented previous systems for the provision of MH services, 1992 Administration management domain (ADMD) implementations shall be able to interwork to 1984 and 1988 ADMDs (see Note). Interworking from 1992 ADMDs to private management domains (PRMDs), which support previous versions is a local matter.

Note – A future version of this Recommendation will make support for the interworking with 1984 ADMDs optional.

2 **IPM service**

2.1 *General service requirements*

2.1.1 The fundamental ability of the IPM service is to provide a public interface between originators and recipients to enhance their means of communication especially where there is no immediate or convenient direct telecommunication service available between subscriber's equipment or the telecommunication services available are incompatible.

This service may also provide features available for the preparation and the presentation of the messages.

2.1.2 The IPM service will be provided by Administrations using the message transfer service defined in Recommendation F.410, and by systems that conform to the X.400-Series Recommendations.

Management domains (MDs) are defined for the purpose of responsibility boundaries. The MD managed by an Administration is called an Administration management domain (ADMD). The MD managed by an organization is called a private management domain (PRMD).

2.1.3 International exchange of messages are performed between Administration management domains through CCITT-standardized public data transmission services.

2.1.4 Different body part types of messages may be exchanged through this service. The various body part types are listed in § 3.

2.1.5 An Administration may provide subscribers with different methods of access to the IPM service. The possible methods are:

- 1) directly from the user's terminal;
- 2) via a private message handling system.

2.1.6 Each Administration is responsible for the national access to its management domain.

2.1.7 The characteristics of the interfaces and access methods used between terminals and the IPM service are a national matter, although they may follow various CCITT-standardized services such as telex, teletex, facsimile, videotex or data transmission services. However, the IPM service optional user facilities offered are defined and are independent of the access method and user's terminal.

2.1.8 The national implementation of the IPM service may provide intercommunication with existing services such as telex, teletex, facsimile and videotex. When implemented, the interfaces between the IPM and the other services shall be according to relevant CCITT Recommendations.

2.1.9 As the service is providing indirect communication, cases of non-delivery of the message to the intended recipient may occur. The IPM service provides for non-delivery notification and, as optional user facilities, for delivery, receipt and non-receipt notifications.

2.1.10 Due to the intermediate storage of the message, the service may provide conversion optional user facilities: speed, access procedures, networks, and coding of message contents.

2.1.11 The message belongs to the originator until delivery has taken place. After delivery, the message belongs to the recipient.

2.1.12 Where a sender and recipient have different and conflicting requirements, the sender's requirements shall take precedence (e.g., body type conversion or redirection control).

2.2 *IPM service features*

2.2.1 *Introduction*

Recommendation F.400, § 19, defines elements of service which are available in the IPM service and are classified as either belonging to the basic service or as IPM optional user facilities. Elements of service comprising the basic IPM service are inherently part of the service and are always provided and available. The optional user facilities that are classified as essential are always provided and those classified as additional may be available nationally, or internationally on the basis of bilateral agreement.

2.2.2 *Basic IPM service*

A set of elements of service comprises the basic IPM service. This set is defined in Recommendation F.400, and listed in Table 10/F.400. The basic IPM service, which is built upon the MT service, enables a user to send and receive interpersonal (IP) messages. A user prepares IP-messages with the assistance of his user agent (UA). User agents, which are a set of computer application processes, cooperate with each other to facilitate communication