



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**F.850**

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**OPERATIONS AND QUALITY OF SERVICE  
UNIVERSAL PERSONAL TELECOMMUNICATION  
(UPT)**

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**PRINCIPLES OF UNIVERSAL PERSONAL  
TELECOMMUNICATION (UPT)**

**ITU-T Recommendation F.850**

(Previously "CCITT Recommendation")

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## FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. 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, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation F.850 was prepared by the ITU-T Study Group I (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

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## NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR, or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

2 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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## PRINCIPLES OF UNIVERSAL PERSONAL TELECOMMUNICATION (UPT)

*(Helsinki, 1993)*

### 1 Scope

This Recommendation establishes general principles for Universal Personal Telecommunication (UPT). Detailed provisions may be found in draft Recommendation F.851.

### 2 Definition

**Universal personal telecommunication (UPT):** Enables access to telecommunication services while allowing Personal Mobility. It enables each UPT user to participate in a User-defined set of subscribed services and to initiate and receive calls on the basis of a personal, network-transparent UPT Number across multiple networks at any terminal, fixed or mobile, irrespective of geographic location, limited only by terminal and network capabilities and restrictions imposed by the network operator.

### 3 General description

In fixed telecommunication networks, users/subscribers are associated with the network access point of the terminal, the point of attachment. In some mobile telecommunication networks, users/subscribers are associated with a specific terminal.

For the UPT service, the fixed association between terminal and user identification is removed. In order to offer users the capability of establishing and receiving calls on any terminal and at any location, the identification of UPT Users is treated separately from the addressing of terminals and network access points. This is done by the means of an UPT Number. The UPT Users are personally associated with their own UPT Numbers, which are used as the basis for making and receiving calls.

### 4 Principles

#### 4.1 Main principles

The main principles are:

- a) Personal Mobility, whereby the UPT user may move between terminals to make and receive calls on a global basis, based on the UPT User's Service Profile;
- b) UPT user identification based on a network transparent UPT Number;
- c) charging and billing on the basis of UPT user identity rather than terminal or line identity;
- d) standard access and authentication procedures for UPT facilities on a global basis across multiple networks;
- e) UPT User and Subscriber control and flexibility in the selection of the UPT user's telecommunication services in a personalized UPT service profile;
- f) security and privacy including UPT User authentication and protection for third parties.

## **4.2 Subscription**

To make use of telecommunication services in the flexible ways enabled by UPT, a specific subscription to a UPT Service Provider is required. Subject to national requirements, it is desirable that access to all national and international UPT facilities be obtainable by subscribing to one UPT Service Provider. The UPT Subscriber should preferably be billed by one UPT Service Provider. Other billing methods may still be used. The charging elements may not be limited to telecommunication service usage. UPT service provision may result in split charges between the calling and called parties. The provisions concerning accounting and charging for UPT may be found in the D-Series Recommendations. The method of subscription is a national matter.

Subscription to UPT satisfies the following requirements:

- a) The UPT User will be assigned a personal identification in the form of a UPT Number. The UPT User could have more than one UPT Number for different applications.
- b) The UPT Service Provider offers access to a range of available telecommunication services from which the UPT Subscriber selects a set. The UPT Subscriber then defines the personal usage conditions which form the basis for the UPT User's personal UPT Service Profile.

The UPT Subscriber may request several subscription options, such as:

- i) basic telecommunication services;
- ii) supplementary services applied to each basic telecommunication service;
- iii) roaming restrictions applied to each telecommunication service;
- iv) confidentiality of the UPT User's private information (such as the UPT User's general location).

## **5 Evolution of UPT**

Provision of UPT will occur in phases starting with a simplified set of UPT features and capabilities and progressing into more advanced scenarios.