



INTERNATIONAL TELECOMMUNICATION UNION

# CCITT

THE INTERNATIONAL  
TELEGRAPH AND TELEPHONE  
CONSULTATIVE COMMITTEE

## E.116

(08/92)

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

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**INTERNATIONAL TELECOMMUNICATION  
CHARGE CARD SERVICE**

**Recommendation E.116**

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Geneva, 1992

## 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.116 was revised by Study Group I and was approved under the Resolution No. 2 procedure on the 4th of August 1992.

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## 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.116<sup>1)</sup>

### INTERNATIONAL TELECOMMUNICATION CHARGE CARD SERVICE

(revised 1992)

#### 1 Preamble

The International Telecommunication Charge Card service and particularly its automated use throughout the world will provide benefits to both users and Administrations. This is based on a recognition of:

- 1) the need by Administrations for security against fraudulent use, simplified billing procedures and a reduction in the requirement for operator assistance when telephone calls are made other than on a direct payment basis;
- 2) the current and anticipated charge card technology which could provide increased security and enhanced service to users;
- 3) the growing requirement for charge cards to pay for a variety of telecommunications services.

As a result, Administrations are encouraged to prepare for, and introduce, the International Telecommunication Charge Card service using the guidance of this Recommendation.

#### 2 Service definition and general description

##### 2.1 Service definition

The **International Telecommunication Charge Card service** allows the holder of a telecommunication charge card<sup>2)</sup> to make use of a variety of telecommunications services provided by the card acceptor and have the charges billed to the customer's account by the card issuer.

##### 2.2 General description

- a) The scope of services<sup>3)</sup> for which the card applies, will be subject to agreements between the card issuer and card acceptor.
- b) The service may use either full or limited validation of the card.
- c) Subject to agreement between card acceptor and card issuer, the service may enable the card holder (user) to communicate:
  - back to the country of the card issuer;
  - within the country of the card acceptor;
  - between the country of the card acceptor and a third country.

Use of the card within the country of issue is a national matter.

- d) International telecommunication charge cards will conform to the relevant CCITT standards.
- e) The use of pre-paid or debit cards is not covered by this Recommendation.

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<sup>1)</sup> This Recommendation replaces existing Recommendations E.116 and E.118 in Fascicle II.2, *Blue Book*.

<sup>2)</sup> This Recommendation specifically entails the use of a telecommunication charge card issued by an Administration in compliance with Recommendation E.118 [1]. The acceptance of cards issued by banks or other companies is a national matter.

<sup>3)</sup> It is not the intention of this Recommendation to limit the charge card service to telephony.

### **3 Definitions**

#### **3.1 card issuer**

The Administration that issues the card. The card issuer is responsible for the collection of charges from the card holder and for making the appropriate payments for the service concerned to the card acceptor.

#### **3.2 card acceptor**

The Administration that accepts the use of the card as payment for the provision of certain telecommunication services.

#### **3.3 full validation**

A procedure by which the card information is checked in a comprehensive way either against a complete data base containing all valid cards for a particular card issuer or using the processing capability available on some types of cards in their dialogue with the system or in the system itself.

#### **3.4 limited validation**

One or more procedures to gain some assurance of the validity of the card. These procedures may include, but are not limited to, checks against a list of unacceptable cards and use of additional checking procedures which are based on the card number.

#### **3.5 unbillable calls**

Calls for which insufficient or incorrect billing information is conveyed to the card issuer such that the billing information cannot be associated with any particular customer account.

#### **3.6 uncollectible calls**

Calls for which billing is made to a particular customer account, but, for any of a variety of potential reasons, collection of the charges was not possible.

### **4 Service agreements between the card acceptor and card issuer**

The International Telecommunication Charge Card service depends on agreements between card acceptors and card issuers. Major items to be covered may include:

- a) basis for settlement of service charges and surcharges;
- b) exchange of billing and other information;
- c) responsibility for fraudulent use of cards, and for uncollectible and unbillable calls;
- d) validation procedures and any potential associated costs;
- e) types of services for which cards may be used.

### **5 Types of cards which may be used**

The integrated circuit (IC) card (a card containing a microprocessor and memory in an IC chip), cards using the magnetic stripe technology and printed cards may be used. (The cards are described/defined in Recommendation E.118 [1].)

### **6 Operational procedures for the use of cards**

To derive the maximum benefit from the charge card, the card holder should not be required to show the card and should be able to invoke the service by simply providing the card information to the operator or associate system. The number on the card along with any additional validation checks should provide sufficient guarantee of the card's validity.

## 6.1 *Basic procedures for use of the card*

There are four basic steps in the procedure involved in using the charge card service. The steps listed below do not imply a specific order and some steps may, in fact, be combined.

### 6.1.1 *Service invocation*

The customer will select the appropriate service access number.

### 6.1.2 *Presentation of card or of card information*

One or more possibilities are envisaged concerning the transfer of the relevant information to the service provider, depending on the type of terminal available to the customer. These include, but are not limited to:

- verbally;
- manually, via a key pad;
- automatically, via a card reader.

### 6.1.3 *Validation of card*

The system checks the card information according to bilateral agreements and accepts or denies access to the service.

### 6.1.4 *Request for service*

The customer enters the desired number and other information, if required, to enable the system to provide the service.

## 6.2 *Service functions*

The major functions of the service should be as follows:

### 6.2.1 *Card acceptance and reading*

To accept, read and, if required, write information on one or more types of cards (IC, magnetic stripe, etc.) intended for use with the service.

### 6.2.2 *Card validation and user identification*

To determine whether a card or billing number is valid and ideally whether the user is the actual owner of the card or billing number. These procedures should comply with Recommendation E.113 [2].

### 6.2.3 *Acceptance of other information*

To accept other discretionary information supplied by the user or the card including for example call destination, other options and other personal identification, etc.

### 6.2.4 *Information transfer*

To accept user information for immediate or later transfer to other equipment.

### 6.2.5 *Call records*

To record accurate and complete call data (including validation indication) required for billing, accounting and administrative purposes.

### 6.2.6 *User feedback*

To provide guidance and error feedback to the user to make the system easy and convenient to use.

### 6.2.7 *Information security*

To take all reasonable precautions to protect user information from disclosure to unauthorized parties.

## 7 Operational procedures for charging, accounting and billing

### 7.1 *Charging and accounting*

Charging and accounting principles are contained in the appropriate D-Series Recommendations.

### 7.2 *Assessment of charges*

The assessment of charges will be that applicable to the telecommunication service being used together with any service charges and/or surcharges that might be applicable to the International Telecommunication Charge Card service.

### 7.3 *Billing information*

Billing information will provide sufficient data to identify the customer (i.e., the card number<sup>4</sup>) and charges to be levied. In the case of telephony, it may include the following:

- a) chargeable duration, chargeable number of units and/or charges as appropriate;
- b) calling and called number, including country codes where appropriate;
- c) time of day (hour and minutes), date (day, month, year); and
- d) other information as agreed between the Administrations concerned.

Billing information required for other services is a matter for further study.

## ANNEX A

(to Recommendation E.116)

### **Alphabetical list of abbreviations used in this Recommendation**

IC	Integrated circuit
PIN	Personal identification number

### **References**

- [1] CCITT Recommendation *The international telecommunication charge cards*, Rec. E.118, ITU, Geneva, 1992.
- [2] CCITT Recommendation *Validation procedures for an automated international telephone credit card system*, Rec. E.113, *Blue Book*, ITU, Geneva, 1988.

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<sup>4</sup> The personal identification number (PIN) (or secret code) should not be provided to, nor should it appear in, the billing information.