

#### SLOVENSKI STANDARD SIST ETS 300 091:1997

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Digitalno omrežje z integriranimi storitvami (ISDN) - Dopolnilni storitvi: prikaz razpoznavnosti (identitete) kličočega (CLIP) in omejitev razpoznavanja (identifikacije) kličočega (CLIR) - Funkcijske zmožnosti in informacijski tokovi

Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) and Calling Line Identification Restriction (CLIR) supplementary services; Functional capabilities and information flows

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(ISDN)

Integrated Services Digital

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Functional capabilities and information flows

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#### **Foreword**

This European Telecommunication Standard (ETS) has been produced by the Signalling Protocols & Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI).

In accordance with CCITT Recommendation I.130 [1], the following three level structure is used to describe the supplementary telecommunications services as provided by European public telecommunications operators under the pan-European Integrated Services Digital Network (ISDN):

- Stage 1: is an overall service description, from the user's standpoint;
- Stage 2: identifies the functional capabilities and information flows needed to support the service described in stage 1; and
- Stage 3: defines the signalling system protocols and switching functions needed to implement the service described in stage 1.

This ETS details the stage two aspects (functional capabilities and information flows) needed to support the Calling Line Identification Presentation and Restriction (CLIP and CLIR) supplementary services. The stage 1 aspects are detailed in ETS 300 089 (1992) and ETS 300 090 (1992), and the stage three aspects in ETS 300 092 (1992) and ETS 300 093 (1992), respectively.

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#### 1 Scope

This standard defines the stage two of the pan-European Integrated Services Digital Network (ISDN) as provided by the European public telecommunications operators for the Calling Line Identification Presentation (CLIP) and Calling Line Identification Restriction (CLIR) supplementary services. Stage two identifies the functional capabilities and the information flows needed to support the service description. The stage two description also identifies user operations not directly associated with a call (see CCITT Recommendation I.130 [1]).

This standard is defined according to the methodology specified in CCITT Recommendation Q.65 [2].

This standard does not formally describe the relationship between these supplementary services and the basic call but where possible this information is included for guidance.

In addition this standard does not specify the requirements where the service is provided to the user via a private ISDN. This standard does not specify the requirements for the allocation of defined functional entities within a private ISDN; it does however define which functional entities may be allocated to a private ISDN.

This standard does not specify the additional requirements where the service is provided to the user via a telecommunications network that is not an ISDN.

The CLIP supplementary service provides the called party with the possibility to receive identification of the calling party.

The CLIR supplementary service enables the calling party to prevent presentation of its ISDN number to the called party.

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The CLIP and CLIR supplementary services are applicable to all telecommunication services.

This standard is applicable to the stage three standards for the ISDN CLIP and CLIR supplementary services, as defined in CCITT Recommendation 1.130 [1]. Where the text indicates the status of a requirement, i.e. as a strict command or prohibition as authorisation leaving freedom, as a capability or possibility, this shall be reflected in the text of the relevant stage three standards.

Furthermore, conformance to this standard is met by conforming to the stage three standards with the field of application appropriate to the equipment being implemented. Therefore, no method of testing is provided for this standard.

#### 2 Normative references

[1]

This ETS incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

CCITT Recommendation I.130 (1988): "Method for the characterisation of

Identification Restriction (CLIR) supplementary service; Service description".

	telecommunication services supported by an ISDN and network capabilities of an ISDN".
[2]	CCITT Recommendation Q.65 (1988): "Stage 2 of the method for the characterisation of services supported by an ISDN".
[3]	ETS 300 089 (1992): "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
[4]	ETS 300 090 (1992): "Integrated Services Digital Network (ISDN); Calling Line

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[5]	CCITT Recommendation Q.71 (1988): "ISDN 64 kbit/s circuit mode bearer services".
[6]	CCITT Recommendation I.112 (1988): "Vocabulary of terms for ISDNs".
[7]	CCITT Recommendation I.210 (1988): "principles of telecommunication services supported by an ISDN and the means to describe them".
[8]	CCITT Recommendation E.164 (1988): "Numbering plan for the ISDN era".
[9]	CCITT Recommendation I.330 (1988): "ISDN numbering and addressing principles".
[10]	CCITT Recommendation Z.100 (1988): "Functional Specification Description Language (SDL)".
[11]	ETS 300 062 (1991): "Integrated Services Digital Network (ISDN); Direct Dialling In (DDI) supplementary service; Service description".
[12]	ETS 300 050 (1991): "Integrated Services Digital Network (ISDN); Multiple Subscriber Number (MSN) supplementary service; Service description".

#### 3 **Definitions**

For the purposes of this standard, the following definitions apply:

Integrated Services Digital Network (ISDN):/see CCITT Recommendation/1.112 [6]/§ 2.3 definition 308.

Service; telecommunications service: see CCITT Recommendation 1112 [6] § 2.2 definition 201.

Supplementary service: see CCITT Recommendation 1,210 [7] § 2.4.

https://standards.iteh.ai/catalog/standards/sist/1b37ddde-11fe-4a1f-8344-ISDN number: a number conforming stolk the formula of the standards o Recommendation E.164 [8].

Subaddress: see CCITT Recommendation I.330 [9] § 5.4.

Calling line identity: the address (the ISDN number, and if supplied the subaddress) of the calling line, and the screening indicator. If these are not available the reason is indicated, via the presentation indicator.

Presentation Indicator (PI): the PI provides instructions on whether or not the provided calling line identity is allowed to be presented, or indicates that the number is not available.

Screening Indicator (SI): the SI provides information on the source and the quality of the provided information.

International number: an ISDN number structured as specified in § 3.2 (in the paragraphs relating to international number) of CCITT Recommendation E.164 [8].

National number; National significant number: an ISDN number structured as specified in § 3.2 (in the paragraphs relating to national significant number) of CCITT Recommendation E.164 [8].

Subscriber number: an ISDN number structured as specified in § 3.2 (in the paragraphs relating to subscriber number) of CCITT Recommendation E. 164 [8].

Partial Number: a part of an ISDN number which is significant for distinguishing between addressable entities beyond the network boundary. The partial number digits and the partial number length shall be governed by the requirements of the Direct Dialling In and Multiple Subscriber Number supplementary services (see ETS 300 062 [11] and 300 050 [12]).

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#### 4 Symbols and abbreviations

CC Call Control

CCA Call Control Agent

CLIP Calling Line Identification Presentation

CLIR Calling Line Identification Restriction

FEA Functional Entity Action

INT TR International Transit Exchange

ISDN Integrated Services Digital Network

LE Local Exchange

PI Presentation Indicator

PTNX Private Telecommunications Network Exchange

SDL Specification and Description Language

SI Screening Indicator

TE Termina Equipment RD PREVIEW

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#### 5 Description

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The relationship between the CLIP and the CLIR supplementary services is described in ETS 300 089 [3], subclause 6.3.3, and ETS 300 090 [4], subclause 6.100-091-1997

The provisions for overriding the CLIP supplementary service are described in ETS 300 089 [3], subclause 8.5.4, and ETS 300 090 [4], subclause 5 and subclause 6.2.3.

#### 6 Derivation of a functional model

#### 6.1 Functional model description

The model for the CLIP and CLIR supplementary services is shown in figure 1.



Figure 1: Functional model

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#### 6.2 Description of the functional entities

The functional entities required by the CLIP and CLIR supplementary services above those of the basic call are as follows:

FE1: caller provided information and CLIR requesting entity

FE2: service information checking entity

FE3: handling of calling line identity at international gateway

FE4: service providing entity

FE5: service requesting entity

#### 6.3 Relationship with a basic service

The relationship with a basic service is shown in figure 2.

NOTE: The basic call model is defined in CCITT Recommendation Q.71 [5], § 2.1, with the

exception that r1 represents an outgoing call relationship from a CCA and r3 represents

an incoming call relationship to a CCA.



Figure 2: Example of a mapping of the functional model on a model for the basic call

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#### 7 Information flows

#### 7.1 Information flow diagrams

Figure 3 shows the information flow diagrams for the CLIP and the CLIR supplementary services.

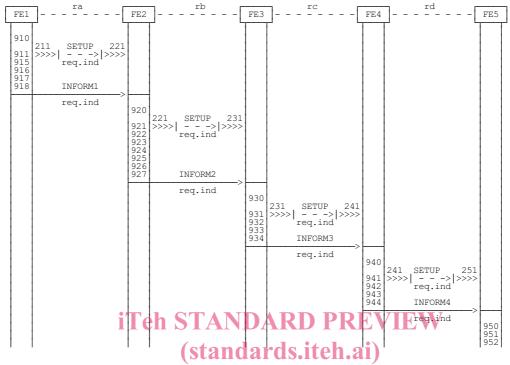


Figure 3

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### **7.2 Definition of individual information flows**ist/1b37ddde-11fe-4a1f-8344-51483c1cf20c/sist-ets-300-091-1997

Within the definitions below, the PI can take one of the following three rules:

- a) presentation allowed; or
- b) presentation restricted; or
- c) number not available.

Within the definitions below the SI can take one of the following three rules:

- a) user provided, verified and passed; or
- b) network provided; or
- c) user provided, not screened.