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**ITU-T**

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OF ITU

**I.251.10**

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SERIES I: INTEGRATED SERVICES DIGITAL  
NETWORK

Service capabilities – Supplementary services in ISDN

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Number identification supplementary services:

**Calling name identification restriction**

ITU-T Recommendation I.251.10

(Previously CCITT Recommendation)

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## **ITU-T RECOMMENDATION I.251.10**

### **NUMBER IDENTIFICATION SUPPLEMENTARY SERVICES: CALLING NAME IDENTIFICATION RESTRICTION**

#### **Source**

ITU-T Recommendation I.251.10 was prepared by ITU-T Study Group 1 (1993-1996) and was approved under the WTSC Resolution N° 1 procedure on the 19th of July 1996.

## FOREWORD

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In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

## NOTE

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## Recommendation I.251.10

### NUMBER IDENTIFICATION SUPPLEMENTARY SERVICES: CALLING NAME IDENTIFICATION RESTRICTION

*(Geneva, 1996)*

#### 1 Definition

**calling name identification restriction (CNIR):** Is a supplementary service offered to the calling party to restrict presentation of name information associated with the calling party to the called party.

#### 2 Description

Calling name identification restriction is an originating service that allows a user to alter the network stored or subscribed privacy status associated with the user's calling name.

##### 2.1 General description

Calling name identification restriction is an originating service that provides a calling party the means to influence the delivery of the calling party's name. There are three methods of influencing the privacy status of the calling name:

- 1) Subscription to a network stored value of "private" or "public".
- 2) Modification of the network stored value from "private to public" or from "public to private" on a per call basis. Once the call is initiated, the calling name resumes its network stored status for subsequent calls.
- 3) Explicitly stating whether the calling name should be "private" or "public" on a per call basis. Once the call is initiated, the calling name resumes its network stored status for subsequent calls.

If the presentation status of the calling name is "private" through any of the above methods, the called party shall not receive the calling name, but may receive an indication of privacy.

##### 2.2 Specific terminology

For the purposes of this Recommendation, the following definitions apply.

**2.2.1 calling name:** Information associated with a specific calling party number. The maximum length is at least 15 characters and may be up to 50 characters. The exact length, format and character set of the calling name to be delivered is a service provider option.

**2.2.2 calling name identification user:** This is the party who subscribes to the calling name identification restriction service and is the calling party.

**2.2.3 network:** In this description, network refers to all the ISDN telecommunications equipment that has any part in processing a call or a supplementary service for the user referred to. It does not include the ISDN terminal.

**2.2.4 service provider:** This is a company, organization, administration, business, etc. that sells, administers, charges for etc. the service. The service provider may or may not be the provider of the network.

### 3 Procedures

#### 3.1 Provision/withdrawal

The calling name identification restriction service can be provided on a subscription basis, or as a service provider option, can be provided to some or all users without subscription. (This service provider option would allow all users to be given a network stored status of "private".) The calling name identification restriction service can be withdrawn for administrative reasons or at the request of the subscriber.

As a service provider option, the calling name identification restriction service can be offered with several subscription options. The options apply separately to each ISDN number per ISDN number and bearer service, or per interface as listed in Table 1. The service provider may not differentiate between 3.1 kHz audio and speech bearer capabilities for the purpose of assigning subscription options. If the calling name identification restriction service is provided to all users without subscription, the service provider shall assign subscription values.

TABLE 1/I.251.10

**Subscription options for the calling name identification restriction service**

| Subscription options  | Values                |
|---|-----------------------|
| Network stored status   | "Private"<br>"Public" |
| Switch to the opposite of the subscribed or network stored status | No<br>Yes             |
| Force calling name private  | No<br>Yes             |
| Force calling name public   | No<br>Yes             |

#### 3.2 Normal procedures

##### 3.2.1 Activation/deactivation/registration

###### 3.2.1.1 Network stored status of "private" or "public"

When the user subscribes to a network stored status of "private" or "public", the service is active and the network stored status remains as either "private" or "public" until the user makes a change with the service provider.

###### 3.2.1.2 Modification of the network stored value

This service is activated by subscription with the service provider. See below for per call invocation.

###### 3.2.1.3 Force name information private (or public)

This service is activated by subscription with the service provider. See below for per call invocation.

#### 3.2.2 Invocation and operation

The calling party receives no notification when either a calling name or an indication that the calling name is unavailable or restricted is delivered to a called party.



### **3.2.2.1 Network stored status of "private" or "public"**

The user takes no action to invoke this method.

### **3.2.2.2 Modification of the network stored value**

The user indicates to the network that their calling name presentation status for this one call is to be the opposite of the network stored value. The user receives an indication from the network that the request has been accepted. The user's request for the opposite of the network stored value becomes part of the call information when the user initiates this one call.

### **3.2.2.3 Force name information private (or public)**

The user indicates to the network that the calling name presentation status is to be "private" or "public" for this one call regardless of the network stored value. The user receives an indication from the network that the request has been accepted. The user's request for a "private" or "public" presentation status becomes part of the call information when the user initiates this one call

## **3.3 Exceptional procedures**

If the user requests the network to force the calling name "private" and the network stored value is "private", no error indication will be given to the user.

If the user requests the network to force the calling name "public" and the network stored value is "public", no error indication will be given to the user.

The user may modify the presentation status of the name once only per call. If the user requests the network to force the calling name to "private" and to "public" for the same call, then the associated call attempt will fail. If the user requests the network to switch the network stored value to its opposite and also requests to force the calling name to "private" or "public" for the same call, then the associated call attempt will fail. If a user attempts to modify the network stored status, to force the calling name "private", or to force the calling name "public" and is not subscribed, then the user will receive an error indication.

If the user requests the network to switch the network stored value to its opposite and then again requests the network to switch the stored value to its opposite prior to making a call, the associated call attempt by the user will be failed by the network.

## **4 Network capabilities for charging**

This Recommendation does not cover charging principles. Future Recommendations in the D-Series are expected to contain that information. It shall be possible for the service provider to charge the subscriber accurately for this service.

## **5 Interworking considerations**

### **5.1 Interworking with non-ISDN networks**

When a call transits or terminates on a non-ISDN network, it cannot be assured that the CNIR privacy status can be carried to the destination network. As a network option, the originating network shall have the possibility to restrict any information concerning the calling party name from being sent to the destination network when CNIR is applicable. If a destination network receives a calling party name without any indication of presentation allowed or restricted, then the destination network will act according to its own rules and regulations.

## **5.2 Interworking with private ISDN networks**

On calls from the public ISDN to a private ISDN, the public ISDN can restrict any calling party name information from being sent to the private ISDN.

On calls from a private ISDN, the private ISDN can indicate that the CNIR supplementary service has been invoked.

## **6 Interactions with other supplementary services**

### **6.1 Advice of charge services**

#### **6.1.1 Charging information at call set-up time (AOC-S)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.1.2 Charging information during the call (AOC-D)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.1.3 Charging information at the end of the call (AOC-E)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.2 Call hold (HOLD)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.3 Call transfer services**

Each call in the context of a call transfer is treated separately for calling name identification presentation.

#### **6.3.1 Explicit Call Transfer (ECT)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.3.2 Normal Call Transfer (NCT)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.4 Call Waiting (CW)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.5 Closed User Group (CUG)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.6 Completion of calls services**

### **6.6.1 Completion of Calls on No Reply (CCNR)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – If user A has calling name identification restriction and user A accepts a CCNR recall, the resulting call is a normal call and destination B will not receive calling name identification presentation.

### **6.6.2 Completion of Calls to Busy Subscriber (CCBS)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

NOTE – If user A has calling name identification restriction and user A accepts a CCBS recall, the resulting call is a normal call and destination B will not receive calling name identification presentation.

## **6.7 Conference services**

Each call in the context of a conference call is treated separately for calling name identification restriction.

### **6.7.1 Conference calling (CONF)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.7.2 Meet-Me Conference (MMC)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.7.3 Preset Conference Calling (PCC)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.7.4 Three-Party Service (3PTY)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.8 Diversion services**

A call that undergoes call forwarding retains the calling user's "private" or "public" presentation status as requested by the calling name identification restriction subscriber.

### **6.8.1 Call Deflection (CD)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.8.2 Call Forwarding Busy (CFB)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.8.3 Call Forwarding No Reply (CFNR)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.8.4 Call Forwarding Unconditional (CFU)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.8.5 Selective Call Forwarding (SCF)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.9 Direct-Dialling-In (DDI)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.10 In-call Modification (IM)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.11 ISDN Freephone Service (IFS)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.12 Line Hunting (LH)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.13 Malicious Call Identification (MCID)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.14 Multi-Level Precedence and Preemption (MLPP)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.15 Multiple Subscriber Number (MSN)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

#### **6.16 Name identification services**

##### **6.16.1 Calling Name Identification Presentation (CNIP)**

The name of the calling party shall not be presented to a CNIP subscriber if the calling user is subscribed to calling name identification restriction and has inhibited presentation of his name (e.g. presentation restricted).

##### **6.16.2 Calling Name Identification Restriction (CNIR)**

Not applicable.

## **6.17 Number identification services**

### **6.17.1 Calling Line Identification Presentation (CLIP)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.17.2 Calling Line Identification Restriction (CLIR)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

It may be possible as a service provider option to activate both CLIR and calling name identification restriction with a single activation code, as well as to activate the services separately with other activation codes. This would prevent users from having to dial two access codes to activate CLIR and calling name identification restriction for a call.

### **6.17.3 Connected Line Identification Presentation (COLP)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

### **6.17.4 Connected Line Identification Restriction (COLR)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.18 Outgoing Call Barring (OCB)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.19 Reverse charging (REV)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.20 Sub-addressing (SUB)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.21 Support of Private Numbering Plan (SPNP)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.22 Terminal Portability (TP)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **6.23 User-to-User Signalling (UUS)**

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

## **7      SDL description**

See Figure 1.

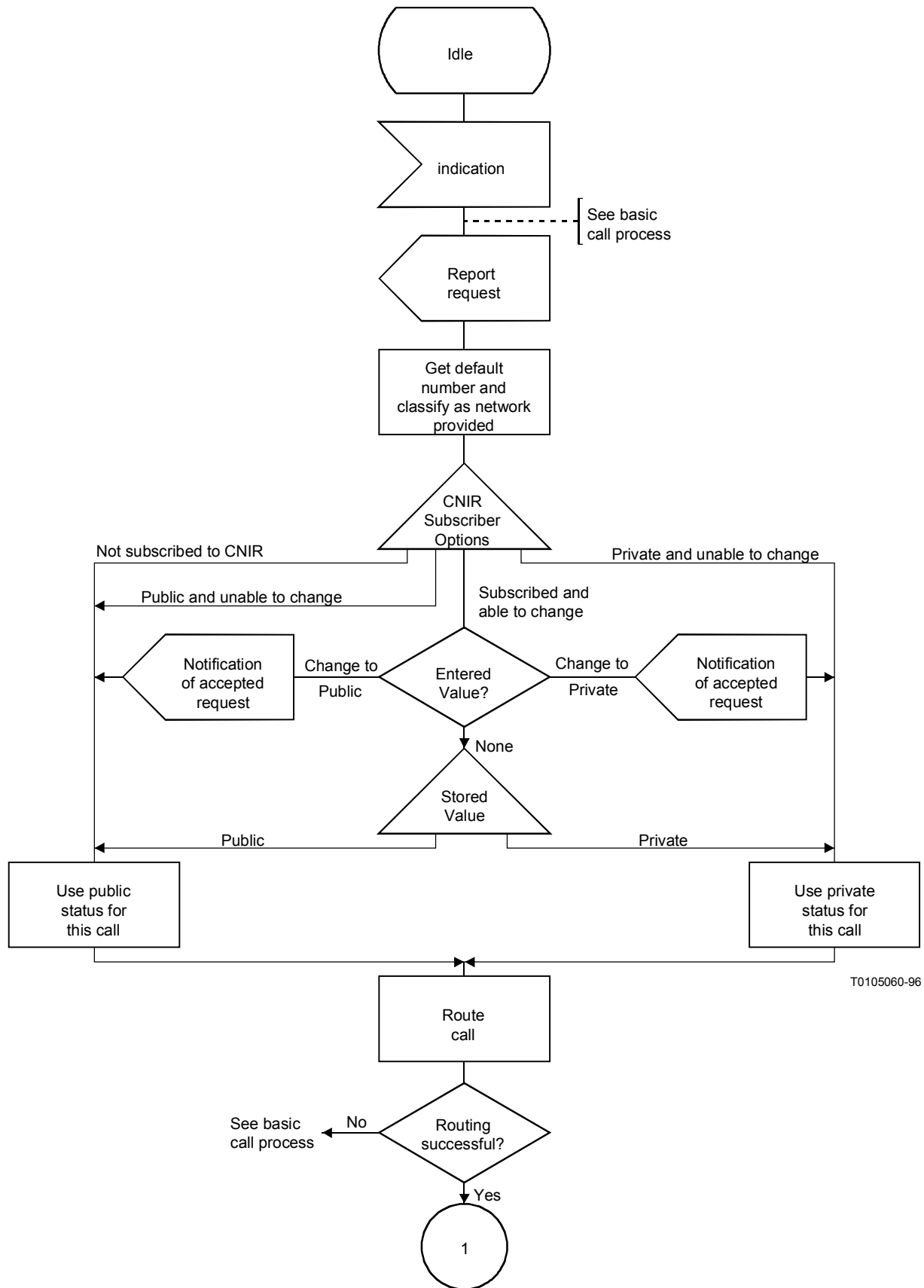


FIGURE 1/I.251.10 (sheet 1 of 2)

**Overall SDL diagram for calling name identification presentation/restriction**

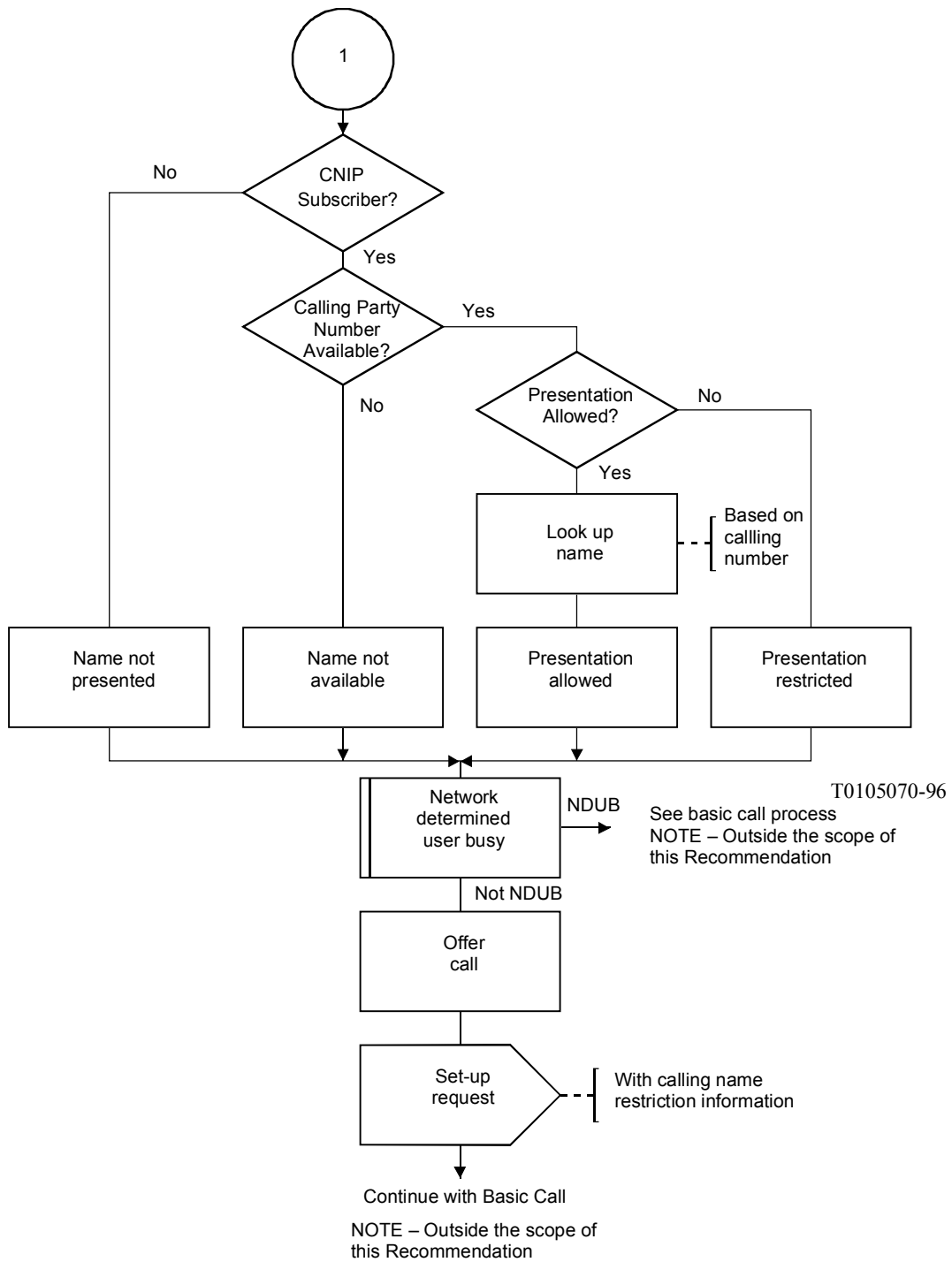


FIGURE 1/I.251.10 (sheet 2 of 2)

**Overall SDL diagram for calling name identification presentation/restriction**



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