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SIST ETS 300 655:1998

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## Foreword

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

This ETS was generated using a template provided by TCR-TR 046. The procedures defined there were used to add elements to the library, ensuring that its rules apply to the contents of this ETS.

NOTE: TCR-TR 046 is only available to ETSI members.

An electronic version of the ETSI ASN.1 library is available to all subscribers to the **ETSI Documentation Service** or can also be obtained from the ETSI PEX helpdesk:

### ETSI Documentation Service:

Phone: +33 92 94 42 41  
Fax: +33 93 95 81 33  
email: publication@etsi.fr

### PEX helpdesk:

Phone: +33 92 94 43 18  
Fax: +33 93 65 38 51  
email: pex@etsi.fr

| Transposition dates   |                  |
|---|------------------|
| Date of adoption:   | 8 November 1996  |
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## 1 Scope

This European Telecommunication Standard (ETS) defines the ETSI ASN.1 library. The library has been set up for two reasons:

- capture common application element definitions within ETSI in order to reduce the overall protocol maintenance effort;
- enlarge the reusability of ETSI protocols.

## 2 Normative references

This ETS incorporates by dated and 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.

- [1] CCITT Recommendation X.208 (1988): "Specification of abstract syntax notation one (ASN.1)" (technically aligned with ISO 8824).
- [2] ITU-T Recommendation X.680 (1994): "Information technology - Open System Interconnection - Abstract Syntax Notation One (ASN.1): Specification of Basic Notation" (also published as ISO 8824-1).
- [3] ETS 300 351 (1994): "ETSI object identifier tree; Rules and registration procedures".

## 3 Definitions and abbreviations

### 3.1 Definitions

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

**ASN.1 definition:** A definition resulting from one of the alternatives for an ASN.1 "Assignment" as defined by ITU-T Recommendation X.680 [2].

**Common Application Element (CAE):** An ASN.1 type definition or ASN.1 value definition that can or is commonly used in other ASN.1 modules.

**ETSI-LIB:** The most recent ETS containing the current version of the ASN.1 library, hence this ETS.

**LIB-INDEX:** The most recent ETR containing the current version of index to the ASN.1 library, hence ETR 210.

**Library Maintenance Organization (LMO):** An organization maintaining the ASN.1 library and the ASN.1 library Index.

**library module:** An ASN.1 module containing one or several Common Application Element definitions.

**library procedures:** A set of procedures that modify the ASN.1 library as well as the ASN.1 library Index in terms of contents and structure.

**library rules:** A set of rules applicable to the ASN.1 library that preserves the soundness and structure of the library.

**validated ASN.1:** ASN.1 definitions are valid if they conform with the guidelines defined in ETR 060. For the purpose of this ETS these guidelines are to be considered as binding. Validation is done by the LMO.

### 3.2 Abbreviations

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

ASN.1                      Abstract Syntax Notation One

## 4 ETSI library definition

The module "ETSI-Library" is the main module of the library. Every reference from other standards to definitions contained herein shall be made using the ASN.1 import mechanism and the corresponding object identifier value of this main module. No other module of this standard shall be referenced.

NOTE 1:    ETS 300 351 [3] describes the structure of the ETSI object identifier tree. The ASN.1 library of ETSI is given a dedicated branch unlike other ETSs which have their ETS number incorporated in the object identifier value. However, the current revision of ETS 300 351 [3] does not reflect the existence of the library.

The ASN.1 definitions contained in this ETS can be automatically extracted from its electronic form. The resulting ASN.1 modules should be used in order to verify any other standard or recommendation with references to this ETS.

An index of users of this standard is found in LIB-INDEX, which lists for every definition contained in this ETS the corresponding standards and recommendations that import this definition. Additionally it lists standards and recommendations that do not import these definitions but rather re-define them themselves.

NOTE 2:    In order to achieve its intended use, the index needs to be re-issued whenever a new version of this ETS is created. Furthermore, it has to be re-issued to reflect a changed outside world (e.g. new users).

### 4.1 ASN.1 module definitions of the library version 1.1

This version of the library is the interface to the standards and recommendations listed in LIB-INDEX, no changes shall be applied to any of the definitions contained herein without agreement of all the users (and possibly re-definers) of this definition.

NOTE:    ASN.1 definitions ending with e.g. "-v2-3" are kept for compatibility purposes from an earlier version of this library, in the above example from version 2.3. Any definition without such a suffix is the most recent one, standards using older versions of the library have the choice to register for both, the original and the most recent one.

#### 4.1.1 Interface module

The ASN.1 source lines are preceded by line-numbers at the left margin in order to enable the usage of the cross-reference in annex B.

```

1  ETSI-Library {ccitt identified-organization etsi(0) etsi-library(2)
2      asn1-module(0) tcrtr-version1(1) ets-version1(1)}
3  DEFINITIONS IMPLICIT TAGS
4
5  ::=
6
7  BEGIN
8
9  EXPORTS
10     etsiPrefix,
11
12     -- from Addressing-Data-Elements
13     PresentedAddressScreened,
14     PresentedAddressUnscreened,
15     PresentedNumberScreened,
16     PresentedNumberUnscreened,
17     Address,
18     PartyNumber,
19     PartySubaddress,
20     ScreeningIndicator,
21
```

```

22 -- from Basic-Service-Elements
23 BasicService,
24
25
26 SS-Status,
27
28
29 SS-Code,
30
31 -- from MobileDomainDefinitions
32 mobileDomainId,
33 gsm-NetworkId,
34 gsm-AccessId,
35 gsm-OperationAndMaintenanceId,
36 gsm-MessagingId,
37 CommonComponentId,
38
39 -- from InDomainDefinitions
40 inDomainId,
41 in-NetworkId,
42 in-UptId,
43 IN-CommonComponentId
44 ;
45
46
47 -- BEGIN Addressing-Data-Elements (ETS 300 196-1)
48
49 PresentedAddressScreened ::=
50 CHOICE {
51     presentationAllowedAddress           [0] AddressScreened,
52     presentationRestricted                [1] NULL,
53     numberNotAvailableDueToInterworking [2] NULL,
54     presentationRestrictedAddress        [3] AddressScreened
55 }
56
57 PresentedAddressUnscreened ::=
58 CHOICE {
59     presentationAllowedAddress           [0] Address,
60     presentationRestricted                [1] NULL,
61     numberNotAvailableDueToInterworking [2] NULL,
62     presentationRestrictedAddress        [3] Address
63 }
64
65 PresentedNumberScreened ::=
66 CHOICE {
67     presentationAllowedNumber           [0] NumberScreened,
68     presentationRestricted                [1] NULL,
69     numberNotAvailableDueToInterworking [2] NULL,
70     presentationRestrictedNumber        [3] NumberScreened
71 }
72
73 PresentedNumberUnscreened ::=
74 CHOICE {
75     presentationAllowedNumber           [0] PartyNumber,
76     presentationRestricted                [1] NULL,
77     numberNotAvailableDueToInterworking [2] NULL,
78     presentationRestrictedNumber        [3] PartyNumber
79 }
80
81 AddressScreened ::=
82 SEQUENCE {
83     partyNumber           PartyNumber,
84     screeningIndicator    ScreeningIndicator,
85     partySubaddress       PartySubaddress OPTIONAL
86 }
87
88 NumberScreened ::=
89 SEQUENCE {
90     partyNumber           PartyNumber,
91     screeningIndicator    ScreeningIndicator
92 }
93
94 Address ::=
95 SEQUENCE {
96     partyNumber           PartyNumber,
97     partySubaddress       PartySubaddress OPTIONAL
98 }
99

```

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```

100 PartyNumber ::=
101     CHOICE {
102         unknownPartyNumber           [0] NumberDigits,
103         -- the numbering plan is the default numbering plan of the network.
104         -- It is recommended that this value is used.
105         publicPartyNumber             [1] PublicPartyNumber,
106         -- the numbering plan is according to CCITT Recommendation E.163 and E.164.
107         dataPartyNumber               [3] NumberDigits,
108         telexPartyNumber              [4] NumberDigits,
109         privatePartyNumber           [5] PrivatePartyNumber,
110         nationalStandardPartyNumber  [8] NumberDigits
111     }
112
113 PublicPartyNumber ::=
114     SEQUENCE {
115         publicTypeOfNumber            PublicTypeOfNumber,
116         publicNumberDigits           NumberDigits
117     }
118
119 PrivatePartyNumber ::=
120     SEQUENCE {
121         privateTypeOfNumber           PrivateTypeOfNumber,
122         privateNumberDigits          NumberDigits
123     }
124
125 NumberDigits ::=
126     NumericString (SIZE(1..20))
127
128 PublicTypeOfNumber ::=
129     ENUMERATED {
130         unknown (0),
131         -- if used number digits carry prefix indicating type of number according
132         -- to national recommendations
133         internationalNumber (1),
134         nationalNumber (2),
135         networkSpecificNumber (3),
136         subscriberNumber (4),
137         abbreviatedNumber (6),
138         -- valid only for called party number at the outgoing access, network
139         -- substitutes appropriate number.
140     }
141
142 PrivateTypeOfNumber ::=
143     ENUMERATED {
144         unknown (0),
145         level2RegionalNumber (1),
146         level1RegionalNumber (2),
147         pTNSpecificNumber (3),
148         localNumber (4),
149         abbreviatedNumber (6)
150     }
151
152 PartySubaddress ::=
153     CHOICE {
154         userSpecifiedSubaddress       UserSpecifiedSubaddress,
155         -- not recommended
156         nsapSubaddress                NSAPSubaddress
157         -- according to CCITT Recommendation X.213
158     }
159
160 UserSpecifiedSubaddress ::=
161     SEQUENCE {
162         subaddressInformation          SubaddressInformation,
163         oddCountIndicator             BOOLEAN OPTIONAL
164         -- used when the coding of subaddress is BCD
165     }
166
167 NSAPSubaddress ::=
168     OCTET STRING (SIZE(1..20))
169     -- specified according to CCITT Recommendation X.213. Some networks may
170     -- limit the subaddress value to some other length, e.g. 4 octets
171
172 SubaddressInformation ::=
173     OCTET STRING (SIZE(1..20))
174     -- coded according to user requirements. Some networks may limit the subaddress
175     -- value to some other length, e.g. 4 octets
176

```

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