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Telekomunikacijsko upravljivo omrežje (TMN) - Funkcijska specifikacija administriranja stranke (CA) na vmesniku obratovalnega sistema/omrežnega elementa (OS/NE) - 1. del: Konfiguracija z enojnim vodom

Telecommunications Management Network (TMN); Functional specification of Customer Administration (CA) on the Operations System/Network Element (OS/NE) interface; Part 1: Single line configurations

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Contents

Intellectual Property Rights.....	10
Foreword	10
Introduction	11
1 Scope.....	12
2 References.....	12
2.1 Normative references	12
2.2 Informative references	15
3 Definitions and abbreviations	15
3.1 Definitions	15
3.2 Abbreviations.....	16
4 Functional requirements.....	16
4.1 Manage service provision	17
4.2 Administer service facilities and supplementary services	17
4.3 Administer customer line	17
5 Information model diagrams	17
5.1 Entity relationship diagrams	17
5.2 Inheritance hierarchy	20
5.3 Naming hierarchy.....	23
6 Information model description.....	24
6.1 Object class descriptions.....	25
6.1.1 Managed element	25
6.1.2 Access port fragment.....	25
6.1.2.1 Access port	25
6.1.2.2 ETSI access port	25
6.1.2.3 ETSI access port analogue.....	25
6.1.2.4 ETSI access port digital.....	26
6.1.2.5 ETSI access port ISDN basic rate.....	26
6.1.2.6 ETSI access port ISDN primary rate	26
6.1.2.7 Access channel	27
6.1.2.8 ETSI access channel	27
6.1.2.9 Access port profile.....	27
6.1.3 V5 interface fragment.....	27
6.1.3.1 Virtual access port	27
6.1.3.2 Virtual analogue access	28
6.1.3.3 Virtual basic rate access	28
6.1.3.4 Virtual Leased Access	29
6.1.3.5 Virtual primary rate access	30
6.1.3.6 Virtual access channel	30
6.1.3.7 V5 bearer channel reservation	30
6.1.3.8 V5 leased line reservation.....	31
6.1.4 Directory number fragment	31
6.1.4.1 Directory number.....	31
6.1.4.2 ETSI directory number E.164.....	31
6.1.4.3 Directory number X.121	32
6.1.5 Customer profile fragment	32
6.1.5.1 Customer profile	32
6.1.5.2 ETSI customer profile	32
6.1.5.3 Analogue customer profile.....	33
6.1.5.4 ISDN customer profile.....	33
6.1.5.5 Customized Resource	33
6.1.5.6 ETSI customized Resource.....	33
6.1.6 Bearer service fragment.....	34

6.1.6.1	Bearer service	34
6.1.6.2	ETSI bearer service	34
6.1.6.3	Circuit mode 3,1 kHz audio	34
6.1.6.4	Circuit mode 64 kbit/s unrestricted	35
6.1.6.5	ETSI packet B channel	35
6.1.6.6	ETSI packet D channel	35
6.1.6.7	Layer entity	35
6.1.6.8	Multiple rate unrestricted	36
6.1.6.9	Speech	36
6.1.6.10	Unrestricted digital info with tones / announcements (7 kHz audio)	36
6.1.7	Teleservice fragment	36
6.1.7.1	Teleservice	36
6.1.7.2	ETSI teleservice	37
6.1.7.3	Telefax group 4	37
6.1.7.4	Telephony 3,1 kHz	37
6.1.7.5	Telephony 7 kHz	37
6.1.7.6	Videotelephony	37
6.1.7.7	Videotex	38
6.1.8	Service dependent supplementary service fragment	38
6.1.8.1	Supplementary service - service dependent	38
6.1.8.2	Customized supplementary service	38
6.1.8.3	Absent customer fixed announcement	39
6.1.8.4	Absent customer operator position	39
6.1.8.5	Absent customer predetermined announcement	39
6.1.8.6	Advice of charge: charging information at call set-up time	40
6.1.8.7	Advice of charge: charging information at the end of the call	40
6.1.8.8	Advice of charge: charging information during the call	40
6.1.8.9	Blocking	41
6.1.8.10	Call deflection	41
6.1.8.11	Call forwarding busy	42
6.1.8.12	Call forwarding unconditional	43
6.1.8.13	Call forwarding no reply	44
6.1.8.14	Call hold	44
6.1.8.15	Call waiting	45
6.1.8.16	Calling line identification presentation	45
6.1.8.17	Calling line identification restriction	45
6.1.8.18	Closed user group subscription option	46
6.1.8.19	Completion of call on no reply	46
6.1.8.20	Completion of calls to busy subscriber	46
6.1.8.21	Conference call add-on	46
6.1.8.22	Connected line identification presentation	47
6.1.8.23	Connected line identification restriction	47
6.1.8.24	Explicit call transfer	47
6.1.8.25	Fixed destination call	47
6.1.8.26	Incoming call barring	48
6.1.8.27	Interception of calls	48
6.1.8.28	Malicious call identification	49
6.1.8.29	Outgoing call barring	49
6.1.8.30	Subaddressing	49
6.1.8.31	Terminal portability	49
6.1.8.32	Three party	50
6.1.8.33	User to user signalling	50
6.1.8.34	Voice messaging busy	50
6.1.8.35	Voice messaging no reply	51
6.1.8.36	Voice messaging unconditional	51
6.1.9	Service independent supplementary service fragment	51
6.1.9.1	Supplementary service - service independent	51
6.1.9.2	ETSI supplementary service - service independent	52
6.1.9.3	Abbreviated dialling	52
6.1.9.4	Alarm call	53

6.1.9.5	Closed user group	53
6.1.9.6	Cordless terminal mobility	54
6.1.9.7	Customer observation	54
6.1.9.8	Detailed billing	54
6.1.9.9	Different ringing	55
6.1.9.10	Direct dialling in	55
6.1.9.11	General facility reset	55
6.1.9.12	Home meter	55
6.1.9.13	Message waiting indication controller	56
6.1.9.14	Message waiting indication receiver	56
6.1.9.15	Multiple subscriber number	56
6.1.9.16	Personal Identification Number	57
6.1.9.17	Preselected carrier supplementary service	57
6.1.9.18	Priority	57
6.1.9.19	Remote control of supplementary service	58
6.1.9.20	Semi permanent connection	58
6.1.9.21	Terminating calls not charged	58
6.1.10	General services	58
6.1.10.1	Catalogued supplementary service	59
6.1.10.2	Catalogued teleservice	59
6.1.10.3	General ISDN service container	59
6.1.10.4	General PSTN service container	59
6.1.10.5	Non ISDN service	60
6.1.11	Service provision fragment	60
6.1.11.1	Service manager	60
6.1.11.2	Configuration service manager	60
6.1.11.3	Service package	60
6.1.11.4	Reference service configuration	61
6.2	Attributes description	61
6.2.1	Relative distinguished name	61
6.2.2	Relationship attributes	61
6.2.3	State attributes	61
6.2.4	Counter	61
6.3	Actions description	62
6.4	Notifications description	62
7	Formal object class definitions	62
7.1	Definition of object classes	62
7.1.1	Managed element	62
7.1.2	Access port fragment	62
7.1.2.1	Access port	62
7.1.2.2	ETSI access port	63
7.1.2.3	ETSI access port analogue	63
7.1.2.4	ETSI access port digital	63
7.1.2.5	ETSI access port ISDN basic rate	64
7.1.2.6	ETSI access port ISDN primary rate	64
7.1.2.7	Access channel	64
7.1.2.8	ETSI access channel	64
7.1.2.9	Access port profile	64
7.1.3	V5 interface fragment	65
7.1.3.1	Virtual access port	65
7.1.3.2	Virtual analogue access	66
7.1.3.3	Virtual basic rate access	66
7.1.3.4	Virtual leased access	67
7.1.3.5	Virtual primary rate access	67
7.1.3.6	Virtual access channel	68
7.1.3.7	V5 bearer channel reservation	68
7.1.3.8	V5 leased line reservation	68
7.1.4	Directory number fragment	69
7.1.4.1	Directory number	69
7.1.4.2	ETSI directory number E.164	69

7.1.4.3	Directory number X.121	69
7.1.5	Customer profile fragment	69
7.1.5.1	Customer profile	69
7.1.5.2	ETSI customer profile	69
7.1.5.3	Analogue customer profile.....	70
7.1.5.4	ISDN customer profile.....	70
7.1.5.5	Customized resource.....	70
7.1.5.6	ETSI customized resource	70
7.1.6	Bearer service fragment.....	70
7.1.6.1	Bearer service	70
7.1.6.2	ETSI bearer service	71
7.1.6.3	Circuit mode 3,1 kHz audio.....	71
7.1.6.4	Circuit mode 64 kbit/s unrestricted.....	71
7.1.6.5	ETSI packet B channel	71
7.1.6.6	ETSI packet D channel	72
7.1.6.7	Layer entity.....	72
7.1.6.8	Multiple rate unrestricted.....	72
7.1.6.9	Speech	72
7.1.6.10	Unrestricted digital info with tones / announcements (7 kHz audio).....	72
7.1.7	Teleservice fragment	73
7.1.7.1	Teleservice.....	73
7.1.7.2	ETSI teleservice.....	73
7.1.7.3	Telefax group 4.....	73
7.1.7.4	Telephony 3,1 kHz	73
7.1.7.5	Telephony 7 kHz	73
7.1.7.6	Videotelephony.....	74
7.1.7.7	Videotex	74
7.1.8	Service dependent supplementary service fragment.....	74
7.1.8.1	Supplementary service - service dependent	74
7.1.8.2	Customized supplementary service.....	74
7.1.8.3	Absent customer fixed announcement.....	74
7.1.8.4	Absent customer operator position	75
7.1.8.5	Absent customer predetermined announcement.....	75
7.1.8.6	Advice of charge: charging information at call set-up time	75
7.1.8.7	Advice of charge: charging information during the call	75
7.1.8.8	Advice of charge: charging information at the end of the call	76
7.1.8.9	Blocking	76
7.1.8.10	Call deflection	76
7.1.8.11	Call forwarding busy	76
7.1.8.12	Call forwarding no reply.....	77
7.1.8.13	Call forwarding unconditional	77
7.1.8.14	Call hold	77
7.1.8.15	Calling line identification presentation	78
7.1.8.16	Calling line identification restriction	78
7.1.8.17	Call waiting.....	78
7.1.8.18	Closed user group subscription options	78
7.1.8.19	Completion of call on no reply	79
7.1.8.20	Completion of calls to busy subscribers	79
7.1.8.21	Conference call add-on.....	79
7.1.8.22	Connected line identification presentation.....	79
7.1.8.23	Connected line identification restriction	79
7.1.8.24	Explicit call transfer.....	80
7.1.8.25	Fixed destination call.....	80
7.1.8.26	Incoming call barring.....	80
7.1.8.27	Interception of calls	80
7.1.8.28	Malicious call identification	81
7.1.8.29	Outgoing call barring.....	81
7.1.8.30	Subaddressing.....	81
7.1.8.31	Terminal portability	81
7.1.8.32	Three party	81

7.1.8.33	User to user signalling	82
7.1.8.34	Voice messaging busy	82
7.1.8.35	Voice messaging no reply	82
7.1.8.36	Voice messaging unconditional	82
7.1.9	Service independent supplementary service fragment	83
7.1.9.1	Supplementary service - service independent	83
7.1.9.2	ETSI supplementary service - service independent	83
7.1.9.3	Abbreviated dialling	83
7.1.9.4	Alarm call	84
7.1.9.5	Closed user group	84
7.1.9.6	Cordless terminal mobility	84
7.1.9.7	Customer observation	84
7.1.9.8	Detailed billing	85
7.1.9.9	Different ringing	85
7.1.9.10	Direct dialling in	85
7.1.9.11	General facility reset	85
7.1.9.12	Home meter	86
7.1.9.13	Message waiting indication controller	86
7.1.9.14	Message waiting indication receiver	86
7.1.9.15	Multiple subscriber number	86
7.1.9.16	PIN	87
7.1.9.17	Preselected carrier supplementary service	87
7.1.9.18	Priority	87
7.1.9.19	Remote control of supplementary service	87
7.1.9.20	Terminating calls not charged	88
7.1.10	General services	88
7.1.10.1	Catalogued supplementary service	88
7.1.10.2	Catalogued teleservice	88
7.1.10.3	General ISDN service container	88
7.1.10.4	General PSTN service container	89
7.1.10.5	Non ISDN service	89
7.1.11	Service provision fragment	89
7.1.11.1	Service manager	89
7.1.11.2	Configuration service manager	89
7.1.11.3	Service package	89
7.1.11.4	Reference service configuration	90
7.2	Name bindings	90
7.2.1	Access channel-service package	90
7.2.2	Access port profile-managed element	90
7.2.3	Access port profile-service package	90
7.2.4	Customer observation-ETSI access port	90
7.2.5	Customer observation-ETSI customized resource	91
7.2.6	Customer observation-ETSI directory number E.164	91
7.2.7	Customer profile-managed element	91
7.2.8	Customer profile-service package	91
7.2.9	Customized supplementary service-general ISDN service container	91
7.2.10	Customized supplementary service-general PSTN service container	91
7.2.11	Customized supplementary service-non ISDN service	92
7.2.12	Customized supplementary service-service package	92
7.2.13	Directory number-managed element	92
7.2.14	ETSI access channel-ETSI access port	92
7.2.15	ETSI access port-managed element	92
7.2.16	ETSI bearer service-customer profile	92
7.2.17	ETSI bearer service- general ISDN service container	93
7.2.18	ETSI bearer service-service package	93
7.2.19	ETSI customized Resource-customer profile	93
7.2.20	ETSI supplementary service - service independent-general ISDN service container	93
7.2.21	ETSI supplementary service - service independent-general PSTN service container	93
7.2.22	ETSI supplementary service - service independent-service package	93
7.2.23	ETSI teleservice-customer profile	94

7.2.24	ETSI teleservice-general ISDN service container	94
7.2.25	ETSI teleservice-service package.....	94
7.2.26	General ISDN service container-managed element	94
7.2.27	General PSTN service container-managed element	94
7.2.28	Non ISDN service-customer profile	94
7.2.29	Service manager-managed element	94
7.2.30	Service package-managed element.....	95
7.3	Definition of packages	95
7.3.1	Administrative state package.....	95
7.3.2	Automatic invocation package	95
7.3.3	Call completion busy recall mode package	95
7.3.4	Call completion no reply recall mode package.....	95
7.3.5	Call diversion restrictions package.....	95
7.3.6	Connection type package.....	95
7.3.7	Customer characteristics package.....	95
7.3.8	Customer control permission package.....	96
7.3.9	Directionality package.....	96
7.3.10	General service list package	96
7.3.11	Local defined number package.....	96
7.3.12	Local packet handler package	97
7.3.13	Maximum number of information channels package.....	97
7.3.14	Maximum number of total calls package.....	97
7.3.15	Message waiting indication controlling user package	97
7.3.16	Message waiting indication receiver pointer package	97
7.3.17	Metering counter package	97
7.3.18	Modification permission package.....	98
7.3.19	Observation mode package	98
7.3.20	Origin for analysis package	98
7.3.21	Origin for charging package	98
7.3.22	Origin for routing package	98
7.3.23	Override package	98
7.3.24	Owned list package	98
7.3.25	Ported directory number package	98
7.3.26	Remotely controlled service package	99
7.3.27	Shared list package.....	99
7.3.28	Semipermanent line package.....	99
7.3.29	Service activated package	99
7.3.30	Voice messaging number package.....	99
7.4	Definition of attributes	99
7.5	Definition of behaviours	108
7.6	Definition of actions	109
7.6.1	Add service to configuration	109
7.6.2	Change access port.....	109
7.6.3	Change directory number	109
7.6.4	Establish customer configuration	110
7.7	Definition of notifications	110
7.7A	Failed alarm call.....	110
7.8	ASN.1 defined types module	111

Annex A (normative):	References to service description standards	117
Annex B (informative):	Object classes defined in the ITU-T Recommendation Q.824 series which are not used in the context of the present document	120
B.1	ITU-T Recommendation Q.824.0	120
B.2	ITU-T Recommendation Q.824.1	120
B.3	ITU-T Recommendation Q.824.2	121
B.4	ITU-T Recommendation Q.824.3	121
B.5	ITU-T Recommendation Q.824.4	121
Annex C (informative):	Examples for customer configurations.....	122
C.1	PSTN single line configuration.....	122
C.2	ISDN single line configuration	122
Annex D (informative):	Modelling of Centrex.....	123
D.1	Entity relationship diagram.....	123
D.2	Inheritance hierarchy.....	123
D.3	GDMO definitions	124
D.3.1	Object class definitions.....	124
D.3.2	Name bindings	125
D.3.3	Attribute definitions.....	125
D.3.4	ASN.1 types	126
D.4	Further remarks	126
Bibliography	SIST EN 300 291-1 V1.2.1:2003	127
History	https://standards.iteh.ai/catalog/standards/sist/ce91369a-c509-4982-adc0-6414eba5e2b0/sist-en-300-291-1-v1-2-1-2003	128

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Telecommunications Management Network (TMN).

The present document is part 1 of a multi-part EN covering the functional specification of Customer Administration (CA) on the Operations System / Network Element (OS/NE) interface, as identified below:

Part 1: "Single line configurations";

Part 2: "Multi line configurations".

Further parts are under study.

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Introduction

For the present document, the following priorities were assigned for the scope of the customer administration model:

- modelling of analogue, digital and Integrated Services Digital Network (ISDN) customer installation configurations;
- modelling of the most frequently required ETSI ISDN teleservices, bearer services, and supplementary services;
- modelling of the most frequently required CEPT services and non-standardized services;
- re-definition of the V5 interface related object classes as far as they are affected by changes in their superclasses as defined in the recent I-ETS 300 291 when re-defining them in the present document.

Extendibility to cover all ETSI ISDN teleservices, bearer services and supplementary services, Private Branch Exchanges (PBXs), mobile customers, ATM, cordless and Universal Personal Telecommunication (UPT) customers, Centrex, packet switching, the full range of CEPT services, non-standardized services (e.g. hunting, etc.) is foreseen via subclassing (see entity-relationship diagram subclause 5.1, and descriptions in subclause 6.1).

In the present document, the customer administration model is restricted to modelling of semi-permanent customer data. Call processing and dynamic (state) information are no subject of the present document.

The present document is based on the ITU-T Recommendation Q.824 series [46] to [50], from which all relevant object classes were subclassed as far as necessary.

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1 Scope

The present document specifies the management aspects of Customer Administration (CA) for Public Switched Telephone Network (PSTN), and public Integrated Services Digital Network (ISDN), in line with descriptions in ETR 047 [67], and restricted to service provisioning and service configuration only. The aspects of the local exchange part of V5 configuration management influenced by the present document are considered as well.

The model is restricted to the Operations System to Network Element (OS/NE) interface.

Although not included in the present document, the model has been designed to be extendible for Private Branch Exchanges (PBXs), Centrex, mobile, Asynchronous Transfer Mode (ATM), cordless and Universal Personal Telecommunication (UPT) customers.

Since Centrex is no standardized service and implementations vary, no Centrex related definitions are introduced into the normative part of the present document. In the informative annex D, a modelling approach for Centrex is given.

The ISDN teleservices, bearer services and supplementary services included in this issue of the model have been selected from ETR 010 [65], to test the structure of the model and ensure that it is applicable to all services.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

2.1 Normative references

- [1] EN 300 196-1: "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [2] ETS 300 108: "Integrated Services Digital Network (ISDN); Circuit-mode 64 kbit/s unrestricted 8 kHz structured bearer service category; Service description".
- [3] ETS 300 109: "Integrated Services Digital Network (ISDN); Circuit-mode 64 kbit/s 8 kHz structured bearer service category usable for speech information transfer; Service description".
- [4] ETS 300 110: "Integrated Services Digital Network (ISDN); Circuit-mode 64 kbit/s 8 kHz structured bearer service category usable for 3,1 kHz audio information transfer; Service description".
- [5] ETS 300 389: "Integrated Services Digital Network (ISDN); Circuit-mode multiple-rate unrestricted 8 kHz structured bearer service category; Service description".
- [6] ETS 300 048: "Integrated Services Digital Network (ISDN); ISDN Packet Mode Bearer Services (PMBS); ISDN Virtual Call (VC) and Permanent Virtual Call (PVC) bearer services provided by the B-channel of the user access - basic and primary rate".
- [7] ETS 300 049: "Integrated Services Digital Network (ISDN); ISDN Packet Mode Bearer Services (PMBS); ISDN Virtual Call (VC) and Permanent Virtual Call (PVC) bearer services provided by the D-channel of the user access - basic and primary rate".

- [8] ETS 300 111: "Integrated Services Digital Network (ISDN); Telephony 3,1 kHz teleservice; Service description".
- [9] ETS 300 120: "Integrated Services Digital Network (ISDN); Service requirements for telefax group 4".
- [10] ETS 300 262: "Integrated Services Digital Network (ISDN); Syntax-based Videotex teleservice; Service description".
- [11] ETS 300 263: "Integrated Services Digital Network (ISDN); Telephony 7 kHz teleservice; Service description".
- [12] ETS 300 264: "Integrated Services Digital Network (ISDN); Videotelephony teleservice; Service description".
- [13] ETS 300 050: "Integrated Services Digital Network (ISDN); Multiple Subscriber Number (MSN) supplementary service; Service Description".
- [14] ETS 300 053: "Integrated Services Digital Network (ISDN); Terminal Portability (TP) supplementary service; Service Description".
- [15] ETS 300 056: "Integrated Services Digital Network (ISDN); Call Waiting (CW) supplementary service; Service Description".
- [16] ETS 300 059: "Integrated Services Digital Network (ISDN); Subaddressing (SUB) supplementary service; Service Description".
- [17] ETS 300 062: "Integrated Services Digital Network (ISDN); Direct Dialling In (DDI) supplementary service; Service Description".
- [18] ETS 300 089: "Integrated Services Digital Network (ISDN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
- [19] ETS 300 648: "Public Switched Telephone Network (PSTN); Calling Line Identification Presentation (CLIP) supplementary service; Service description".
- [20] ETS 300 090: "Integrated Services Digital Network (ISDN); Calling Line Identification Restriction (CLIR) supplementary service; Service description".
- [21] ETS 300 649: "Public Switched Telephone Network (PSTN); Calling Line Identification Restriction (CLIR) supplementary service; Service description".
- [22] ETS 300 094: "Integrated Services Digital Network (ISDN); Connected Line Identification Presentation (COLP) supplementary service; Service description".
- [23] ETS 300 095: "Integrated Services Digital Network (ISDN); Connected Line Identification Restriction (COLR) supplementary service; Service description".
- [24] ETS 300 128: "Integrated Services Digital Network (ISDN); Malicious Call Identification (MCID) supplementary service; Service description".
- [25] ETS 300 136: "Integrated Services Digital Network (ISDN); Closed User Group (CUG) supplementary service; Service description".
- [26] ETS 300 139: "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Service description".
- [27] ETS 300 178: "Integrated Services Digital Network (ISDN); Advice of Charge: charging information at call set-up time (AOC-S) supplementary service; Service description".
- [28] ETS 300 179: "Integrated Services Digital Network (ISDN); Advice of Charge: charging information during the call (AOC-D) supplementary service; Service description".
- [29] ETS 300 180: "Integrated Services Digital Network (ISDN); Advice of Charge: charging information at the end of the call (AOC-E) supplementary service; Service description".