v1.19_

ACTUAL_FROM ACTUAL_TO . 1:
- , ACTUAL_TO, , SoftWLC. ACTUAL_FROM .
ACTUAL_FROM, , SoftWLC. ACTUAL_TO 2024.12.31. 23:59:59.

UNSTRUCT_NAME . 1:
HotSpot **« Wi-Fi + »**, « Wi-Fi» - , - HotSpot ( ).
ENTERPRISE, **« + »**, « » - , - Enterprise (– , ,).
VOUCHER **« VOUCHER + »**, « VOUCHER» - , - , .

IDENT_CARD_UNSTRUCT . 1:
HotSpot, SMS, - **« Wi-Fi».**
HotSpot, , - **« Wi-Fi ».**
HotSpot, / , , (). ENTERPRISE , ().
VOUCHER , ().

PHONE . 2:
HotSpot, SMS, , .
HotSpot, , , .
HotSpot, / , , .
ENTERPRISE , .
VOUCHER , .

LOGIN . 2:
HotSpot, SMS, , .
HotSpot, , ESIA .
HotSpot, / , .
ENTERPRISE .
VOUCHER .

E_MAIL . 2:
ENTERPRISE , .

. 1 (ABONENT)_*

	«»						
1	ID	INTEGER(0.. 4294967295)	+		PK – (ABONENT_IDENT, ABONENT_INTERNAL_USER, ABONENT_ADDRESS, ABONENT_SERVICE)	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	ID
2	REGION_ID	INTEGER (0 .. 65535)	+		( )	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	REGION_ID
3	CONTRACT_DATE	UTCTime	+			ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	CONTRACT_DATE
4	CONTRACT	UTF8String (SIZE (1 .. 64)	+			ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	CONTRACT («»)
5	ACTUAL_FROM	UTCTime	+		, (ABONENT + (ABONENT_IDENT, ABONENT_INTERNAL_USER, ABONENT_ADDRESS, ABONENT_SERVICE)	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	ACTUAL_FROM
6	ACTUAL_TO	UTCTime	+		, (ABONENT + (ABONENT_IDENT, ABONENT_INTERNAL_USER, ABONENT_ADDRESS, ABONENT_SERVICE)	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	ACTUAL_TO («2024.12.31 23:59:59»)

7	ABONENT_TYPE	sorm-report-abonent-person OID ::= "42", sorm-report-abonent-organization OID ::= "43"	+		: "**42**" - , "**43**" –	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	ABONENT_TYPE («42»)
8	NAME_INFO_TYPE	UTF8String (SIZE (1))	+	ABONENT_TYPE = "42"	. : , "**0**"- "**1**" -	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	NAME_INFO_TYPE («1»)
<name-info <struct-name> |< unstruct-name>				+	**. :** :		
<struct-name							
9	FAMILY_NAME	UTF8String (SIZE (1 .. 128)	+	ABONENT_TYPE = "42" NAME_INFO_TYPE= "0"			8, «1», ( )
10	GIVEN_NAME	UTF8String (SIZE (1 .. 128)	+	ABONENT_TYPE = "42" NAME_INFO_TYPE= "0"			8, «1», ( )
11	INITIAL_NAME	UTF8String (SIZE (1 .. 128)	+	ABONENT_TYPE = "42" NAME_INFO_TYPE= "0"			8, «1», ( )
struct-name>							
<unstruct-name							
12	UNSTRUCT_NAME	UTF8String(SIZE(1 .. 1024))	+	ABONENT_TYPE = "42" NAME_INFO_TYPE= "1"		ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	UNSTRUCT_NAME **(ENTERPRISE VOUCHER 2017 .)**
unstruct-name>							
name-info>							
13	BIRTH_DATE	GeneralizedTime	+	ABONENT_TYPE = "42"	. :	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	BIRTH_DATE («1970.12.31 23:59:59»)
14	IDENT_CARD_TYPE_ID	INTEGER (0 .. 65535)	+	ABONENT_TYPE = "42"	**. :** , ( )	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	IDENT_CARD_TYPE_ID («0»)
15	IDENT_CARD_TYPE	UTF8String (SIZE (1))	-	ABONENT_TYPE = "42" IDENT_CARD_TYPE	**. :** , "**0**" - "**1**" -	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	IDENT_CARD_TYPE («1»)
<ident-card-info <struct-info> <unstruct-info>				+		**. :** , ,	
<struct-info							

16	IDENT_CARD_SERIAL	UTF8String (SIZE (1 .. 16)	+	ABONENT_TYPE = "42" IDENT_CARD_TYPE			15 ( )
17	IDENT_CARD_NUMBER	NumericString (SIZE (1 .. 16)	+	ABONENT_TYPE = "42" IDENT_CARD_TYPE			15 ( )
18	IDENT_CARD_DESCRIPTION	UTF8String (SIZE (1 .. 256)	+	ABONENT_TYPE = "42" IDENT_CARD_TYPE			15 ( )
struct-info>							
<unstruct-info							
19	IDENT_CARD_UNSTRUCT	UTF8String (SIZE (1 .. 512)	+	ABONENT_TYPE = "42"		ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	IDENT_CARD_UNSTRUCT **(VOUCHER 2017 .)**
unstruct-info>							
ident-card-info>							
20	BANK	UTF8String (SIZE(1 .. 256))	-		( )		( )
21	BANK_ACCOUNT	UTF8String (SIZE(1 .. 30))	-		( )		( )
22	FULL_NAME	UTF8String (SIZE (1 .. 128))	+	ABONENT_TYPE = "43"	. : .		7, «42», ( )
23	INN	UTF8String (SIZE(1 .. 64))	+	ABONENT_TYPE = "43"	**. :**	ABONENTS_ENTERPRISE_*	7, «42», ( )
24	CONTACT	UTF8String (SIZE (1 .. 128))	-	ABONENT_TYPE = "43"	**. :**	ABONENTS_ENTERPRISE_*	7, «42», ( )
25	PHONE_FAX	UTF8String (SIZE (1 .. 128))	-	ABONENT_TYPE = "43"	**. :** ,		7, «42», ( )
26	STATUS	ENUMERATED { active (0), not-active (1)}	+		"**0**" – () , "**1**" - ()	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	STATUS («0»)
27	ATTACH	UTCTime	-		( )		( )
28	DETACH	UTCTime	-		( )		( )
29	NETWORK_TYPE	ENUMERATED { not-specified(0), mob-gsm(1), mob-cdma(2),fix-pstn (3), data-ip(4),data-srv(5), data-ip-mob(6), data-ip-wifi (7), data-ip-max (8), paging(9), voip(10)}	+		: **0** - , **1** - GSM, **2** - CDMA, **3** - -, **4** - , **5** - -, **6** - , **7** - WiFi, **8** - WiMAX, **9** - , **10** -	ABONENTS_* ABONENTS_ENTERPRISE_* ABONENTS_VOUCHER_*	NETWORK_TYPE («7»)
30	INTERNAL_ID1	UTF8String (SIZE (1 .. 128))	-		(1). , . **ID.**		( )
31	INTERNAL_ID2	UTF8String (SIZE (1 .. 128))	-		(2). , . **ID.**		( )

. 2 ABONENT_IDENT (ABONENT_ID)_*

1	ABONENT_ID	INTEGER(0.. 4294967295)	+		FK (ABONENT)	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	ID

2	REGION_ID	INTEGER (0 .. 65535)	**+**		( )	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	REGION_ID
4	IDENT_TYPE	UTF8String(SIZE (1 .. 256))	**+**		: "1" – PAGER "2" – PSTN "3" – GSM "4" – CDMA "5" – DATA NETWORK "6" – VOIP	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	IDENT_TYPE («5»)
5	PHONE	UTF8String(SIZE (2 .. 32))	+	IDENT_TYPE = "5"	/	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	PHONE **(ENTERPRISE VOUCHER 2017 .)**
6	INTERNAL_NUMBER	UTF8String (SIZE (1 .. 32))	**-**	IDENT_TYPE = "2"	**pstn:** ,		( )
7	IMSI	NumericString (SIZE (10 .. 18))	**+**	IDENT_TYPE = "3" IDENT_TYPE = "4"	**gsm,cdma:**		4 ( )
8	IMEI	NumericString (SIZE (10 .. 18))	**-**	IDENT_TYPE = "3" IDENT_TYPE = "4"	**gsm,cdma:**		( )
9	ICC	NumericString (SIZE (19 .. 20))	**-**	IDENT_TYPE = "3" IDENT_TYPE = "4"	**gsm,cdma:** SIM-		( )
10	MIN	NumericString (SIZE (10 .. 18))	**-**	IDENT_TYPE = "4"	**cdma:**		( )
11	ESN	NumericString (SIZE (10 .. 18))	**-**	IDENT_TYPE = "4"	**cdma:**		( )
12	EQUIPMENT_TYPE	Integer(SIZE(1))	**-**	IDENT_TYPE = "5"	**data-network:** : **0** – MAC-, **1**- ATM		( )
<user-equipment <mac><atm>			-				
<mac					MAC-		
13	MAC	OCTET STRING (SIZE (6))	**+**	IDENT_TYPE = "5" EQUIPMENT_TYPE=0	MAC- (HEX)		11 ( )
mac>							
<atm					ATM		
14	VPI	OCTET STRING (SIZE (1))	**+**	IDENT_TYPE = "5" EQUIPMENT_TYPE=1	(VCI) (HEX)		11 ( )
15	VCI	OCTET STRING (SIZE (2))	**-**	IDENT_TYPE = "5" EQUIPMENT_TYPE=1	(VCI) (HEX)		11 ( )
atm>							
user-equipment>							
16	LOGIN	UTF8String (SIZE (1 .. 128)) O	-	IDENT_TYPE = "5"	**data-network**: – login	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	LOGIN
17	E_MAIL	UTF8String (SIZE (1 .. 128))	**-**	IDENT_TYPE = "5"	**data-network:**	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	E_MAIL **(ENTERPRISE 2017 .)**
18	PIN	NumericString (SIZE (2 .. 20))	**-**	IDENT_TYPE = "5"	**data-network:** PIN		( )
19	USER_DOMAIN	UTF8String (SIZE (2 .. 128))	-	IDENT_TYPE = "5"	**data-network**:	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	USER_DOMAIN
20	RESERVED	UTF8String (SIZE (1 .. 128))	-	IDENT_TYPE = "5"	data-network:		( )
21	ORIGINATOR_NAME	UTF8String (SIZE (1 .. 32))	**+**	IDENT_TYPE = "6"	**voip:**		( )

22	IP_TYPE	UTF8String(SIZE (1))	-	IDENT_TYPE = "5" IDENT_TYPE = "6"	**data-network, voip:** IP : **"0"** - 4, **"1"** - 6.	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	( )
<ip-address IPV4|IPV6				+	**data-network:** IP-. **voip:** IP-.		
23	IPV4	OCTET STRING (SIZE (4))	+	IDENT_TYPE = "5" IDENT_TYPE = "6" IP_TYPE = "0"	IP4 (HEX)		21 ( )
24	IPV6	OCTET STRING (SIZE (16))	+	IDENT_TYPE = "5" IDENT_TYPE = "6" IP_TYPE = "1"	IP6 (HEX)		21 ( )
ip-address>							
25	IP_MASK		-	IDENT_TYPE = "5" IDENT_TYPE = "6"			( )
26	IP_RANGE_START	OCTET STRING (SIZE (16))	-	IDENT_TYPE = "5" IDENT_TYPE = "6"	IP (HEX), IPv6 16 byte HEX		( )
26	IP_RANGE_END	OCTET STRING (SIZE (16))	-	IDENT_TYPE = "5" IDENT_TYPE = "6"	IP (HEX), IPv6 16 byte HEX		( )
28	INTERNAL_ID1	UTF8String (SIZE (1 .. 128))	+		(1)		( )
29	INTERNAL_ID2	UTF8String (SIZE (1 .. 128))	+		(2)		( )
30	BEGIN_TIME	UTCTime	-		. .	ABONENTS_ID_* ABONENTS_ENTERPRISE_ID_* ABONENTS_VOUCHER_ID_*	BEGIN_TIME
31	END_TIME	UTCTime	-		. .		( )
<line-data			-		(, , ..)		
32	LINE_OBJECT	UTF8String (SIZE (1 .. 128))	-				( )
33	LINE_CROSS	UTF8String (SIZE (1 .. 128))	-				( )
34	LINE_BLOCK	UTF8String (SIZE (1 .. 128))	-				( )
35	LINE_PAIR	UTF8String (SIZE (1 .. 128))	-				( )
36	LINE_RESERVED	UTF8String (SIZE (1 .. 128))	-				( )
line-data>							
<last-location <mobile-location ><wireless-location> <geo-location>			-		, . ,		
37	LOC_TYPE	INTEGER	-		, **0** - , **1** - , **2** -		( )
<mobile-location							
38	LOC_LAC	INTEGER (0 .. 65535)	+	LOC_TYPE = "0"			36 ( )
39	LOC_CELL	INTEGER (0 .. 4294967295)	+	LOC_TYPE = "0"			36 ( )
40	LOC_TA	INTEGER (0 .. 63)	-	LOC_TYPE = "0"	Timing Advance ( )		36 ( )
mobile-location >							
<wireless-location							
41	LOC_CELL_WIRELESS	UTF8String (SIZE (1 .. 64))	+	LOC_TYPE = "1"			36 ( )

42	LOC_MAC	OCTET STRING (SIZE (6))	+	LOC_TYPE = "1"	MAC-		36 ( )
wireless-location>							
<geo-location							
43	LOC_LATITUDE	REAL	+	LOC_TYPE = "2"	. – .		36 ( )
44	LOC_LONGITUDE	REAL	+	LOC_TYPE = "2"	. – .		36 ( )
45	LOC_PROJECTION_TYPE	ENUMERATED { wgs84 (0), utm (1), sgs85 (2) }	+	LOC_TYPE = "2"	(wgs84 (0), utm (1), sgs85 (2))		36 ( )
geo-location>							
last-location>							

. 3 (BASE_STATION)_*

1	ID		+			BASE_STATION_*		ID
2	BEGIN_TIME	UTCTime	+			BASE_STATION_*		BEGIN_TIME («2000.12.31 23:59:59»)
3	END_TIME	UTCTime	+			BASE_STATION_*		END_TIME («2024.12.31 23:59:59»)
4	STATION_TYPE	ENUMERATED { gsm (0), cdma (1), umts (2), wifi (3), wimax (4)}	+	: **0** - GSM, **1** - CDMA, **2** – UMTS, **3** – WIFI, **4** - WIMAX		BASE_STATION_*		STATION_TYPE («3»)
5	ADDRESS	UTF8String (SIZE (1 .. 256))	+	SECTOR_TYPE = 0		BASE_STATION_*		«»
6	SECTOR_TYPE		+	: **0** - , **1** -		BASE_STATION_*		SECTOR_TYPE («1»)
<BasicStationIdentifiers <telephone>			+	:				
<telepone								
7	LAC	INTEGER (0 .. 65535)	+	:				6, «1», ( )
8	CELL	INTEGER (0 .. 4294967295)	+	- SECTOR_TYPE = 0				6, «1», ( )
9	CELL_SIGN	UTF8String (SIZE (1 .. 18))	-	( ) SECTOR_TYPE = 0				6, «1», ( )
telephone >								
10	ADDRESS_TYPE_ID	ENUMERATED { registered (0), postal (1), invoice (2), device-location (3), reserved (4)}	-	: **0** - **1** - **2** - **3** - **4** -		BASE_STATION_*		ADDRESS_TYPE_ID («3»)
11	ADDRESS_TYPE		-	: **0** - , **1** - .		BASE_STATION_*		ADDRESS_TYPE («0»)
<ReportedAddress <struct-info> |< unstruct-info>				-	:			
<struct-info								
12	ZIP	UTF8String (SIZE (1 .. 32))	-	: , zip-		BASE_STATION_*		ZIP
13	COUNTRY	UTF8String (SIZE (1 .. 128))	-	:		BASE_STATION_*		COUNTRY («Russia»)
14	REGION	UTF8String (SIZE (1 .. 128))	-	:		BASE_STATION_*		REGION
15	ZONE	UTF8String (SIZE (1 .. 128))	-	: ,		BASE_STATION_*		ZONE
16	CITY	UTF8String (SIZE (1 .. 128))	-	: , ,		BASE_STATION_*		CITY
17	STREET	UTF8String (SIZE (1 .. 128))	-	:		BASE_STATION_*		STREET
18	BUILDING	UTF8String (SIZE (1 .. 128))	-	: ,		BASE_STATION_*		BUILDING
19	BUILD_SECT	UTF8String (SIZE (1 .. 128))	-	:		BASE_STATION_*		BUILD_SECT
20	APARTEMENT	UTF8String (SIZE (1 .. 128))	-	: ,		BASE_STATION_*		APARTEMENT

struct-info>								
< unstruct-info								
21	UNSTRUCT_INFO	UTF8String(SIZE (1 .. 1024))	+					11, «0», ( )
unstruct-info> ReportedAddress>								
<GeoLocation			-					
22	LATITUDE	REAL	+	:				LATITUDE
23	LONGITUDE	REAL	+	:				LONGITUDE
24	PROJECTION_TYPE	ENUMERATED {wgs84 (0), utm (1), sgs85 (2) }	+	: . **0** – wgs84, **1** – utm, **2** – sgs85				( )
GeoLocation>								
25	REGION_ID	INTEGER (0 .. 65535)	+			BASE_STATION_*		REGION_ID

. 4 (BASE_STATION_WIFI_ANTENNA)_*

1	base_station_id		+	FK (FOREIGN_KEY to BASE_STATION.ID)	BASE_STATION_WIFI_ANTENNA_*	base_station_id
2	antenna_type		+	: **0** - gsm, **1** - cdma, **2** - wireless	BASE_STATION_WIFI_ANTENNA_*	antenna_type («2»)
3	azimut	INTEGER (-1 .. 359)	+	: + , , -1,	BASE_STATION_WIFI_ANTENNA_*	azimut («-1»)
4	width	INTEGER (-1 .. 359)	+		BASE_STATION_WIFI_ANTENNA_*	width («-1»)
5	horizon_angle	INTEGER (-1 .. 359)	+		BASE_STATION_WIFI_ANTENNA_*	horizon_angle («-1»)
6	power	INTEGER (0 .. 25000)	-	()	BASE_STATION_WIFI_ANTENNA_*	power («1»)
7	frequency_start	INTEGER (0 .. 10000000000)	-	(), cdma - ()	BASE_STATION_WIFI_ANTENNA_*	frequency_start
8	frequency_stop	INTEGER (0 .. 10000000000)	-	cdma - ()	BASE_STATION_WIFI_ANTENNA_*	frequency_stop
9	leaf_level	INTEGER (-45 .. 45)	-	cdma -		( )
10	vertical_lift	INTEGER (0 .. 100)	-			( )
11	gain_factor	INTEGER (-100 .. 100)	-	()	BASE_STATION_WIFI_ANTENNA_*	gain_factor
12	polarization	INTEGER (-45 .. 45)	-			( )
13	REGION_ID	INTEGER (0 .. 65535)	+		BASE_STATION_WIFI_ANTENNA_*	REGION_ID

. 5 (BASE_STATION_WIFI_WRL)_*

1	ID		+	PK	BASE_STATION_WIFI_WRL_*	ID
2	BASE_STATION_ID		+	BASE_STATION.ID SECTOR_TYPE = 1	BASE_STATION_WIFI_WRL_*	BASE_STATION_ID
3	CELL_WIRELESS	UTF8String (SIZE (1 .. 64))	+	:	BASE_STATION_WIFI_WRL_*	CELL_WIRELESS
4	MAC	OCTET STRING (SIZE (6))	-	: MAC-	BASE_STATION_WIFI_WRL_*	MAC
5	REGION_ID	INTEGER (0 .. 65535)	+		BASE_STATION_WIFI_WRL_*	REGION_ID

. 6 IP-/ (BASE_STATION_IP)

1	WRL_ID		+		BASE_STATION_IP_*	WRL_ID

2	IP_TYPE	NUMBER(1)	+	IP-: 0 - IPv4-, 1 - IPv6-	BASE_STATION_IP_*	IP_TYPE («0»)
3	IPV4	OCTET STRING (SIZE (4))	+	IP- , 4 (IP-) IP_TYPE = 0	BASE_STATION_IP_*	IPV4
4	IPV6	OCTET STRING (SIZE (16))	+	IP- , 6 (IP-) IP_TYPE = 1		2, «0», ( )
5	IP_PORT	OCTET STRING (SIZE (2))	-	IP-		( )
6	REGION_ID	INTEGER (0 .. 65535)	+		BASE_STATION_IP_*	REGION_ID

.7 (IP_ACC)_*

1	CONNECTION_TIME	UTCTime	+	/ (UTC)	IP_ACC _*	START_TIME /END_TIME
2	REGION_ID	INTEGER (0 .. 65535)	+		IP_ACC _*	REGION_ID
3	POINT_ID	INTEGER (0 .. 1000)	+	,	IP_ACC _*	POINT_ID («0»)
4	LOGIN_TYPE	ENUMERATED {connect (0) disconnect (1)}	+	**0** - **1** -	IP_ACC _*	0/1 (Start/Alive Stop)
5	SESSION_ID	UTF8String (SIZE (1 .. 64))	+		IP_ACC _*	SESSION_ID
<aaa-allocated-ip ipv4, ipv6		IPAddress	+	IP-		
<ipv4		IPV4Address		IPv4-		
6	ALLOCATED_IPV4	OCTET STRING (SIZE (4))	+	IP- (v4-)	IP_ACC _*	ALLOCATED_IPV4
ipv4>						
<ipv6		IPV6Address		IPv6-		
7	ALLOCATED_IPV6	OCTET STRING (SIZE (16))	+	IP- (v6-)		6 ( )
ipv6>						
aaa-allocated-ip>						
8	USER_NAME	UTF8String SIZE (1 .. 64))	+	()	IP_ACC _*	LOGIN
9	CONNECT_TYPE	INTEGER (0 .. 65535)	+	RFC1700 TCP/UDP	IP_ACC _*	CONNECT_TYPE («0»)
10	CALLING_NUMBER	UTF8String (SIZE (2 .. 18))	+		IP_ACC _*	CALLING_NUMBER («»)
11	CALLED_NUMBER	UTF8String (SIZE (2 .. 18))	+		IP_ACC _*	CALLED_NUMBER («»)
<aaa-nas ipv4, ipv6		NetworkPeerInfo	+	IP-/ NAS-		
<ipv4		IPV4Address		IPv4-		
12	NAS_IPV4	OCTET STRING (SIZE (4))	+	IP-(v4) NAS-	IP_ACC _*	NAS_IPV4
ipv4>						
<ipv6		IPV6Address		IPv6-		
13	NAS_IPV6	OCTET STRING (SIZE (16))	+	IP-(v6) NAS-		12 ( )
ipv6>						
14	NAS_IP_PORT	OCTET STRING (SIZE (2))	-	IP- NAS-		( )

aaa-nas>						
15	IN_BYTES_COUNT	INTEGER (0 .. 18446744073709551615)	+		IP_ACC _*	IN_BYTES_COUNT
16	OUT_BYTES_COUNT	INTEGER (0 .. 18446744073709551615)	+		IP_ACC _*	OUT_BYTES_COUNT
17	USER_PASSWORD	UTF8String (SIZE (1 .. 16))	-			( )
<aaa-user-equipment mac, atm		DataNetworkEquipment	-			
<mac				MAC-		
18	USER_EQ_MAC	OCTET STRING (SIZE (6))	+	MAC-	IP_ACC _*	USER_EQ_MAC
mac>						
<atm		DataNetworkATM		(SDH/PDH)		
19	USER_EQ_VPI	OCTET STRING (SIZE (1))	+	(VPI)		18 ( )
20	USER_EQ_VCI	OCTET STRING (SIZE (2))	-	(VCI)		18 ( )
atm>						
aaa-user-equipment>						
21	APN	UTF8String (SIZE (1 .. 32))	-	(Access Point Name)		( )
<aaa-sgsn-ip ipv4, ipv6		IPAddress	-	IP- GPRS/EDGE SGSN		
<ipv4		IPV4Address		IPv4-		
22	SGSN_IPV4	OCTET STRING (SIZE (4))	+	IP- (v4) GPRS/EDGE SGSN		( )
ipv4>						
<ipv6		IPV6Address	IPv6-			
23	SGSN_IPV6	OCTET STRING (SIZE (16))	+	IP- (v6) GPRS/EDGE SGSN		( )
ipv6>						
aaa-sgsn-ip>						
<aaa-ggsn-ip ipv4, ipv6		IPAddress	-	IP- GPRS/EDGE GGSN		
<ipv4		IPV4Address		IPv4-		
24	GGSN_IPV4	OCTET STRING (SIZE (4))	+	IP- (v4) GPRS/EDGE GGSN		( )
ipv4>						
<ipv6		IPV6Address	IPv6-			
25	GGSN_IPV6	OCTET STRING (SIZE (16))	+	IP- (v6) GPRS/EDGE GGSN		( )
ipv6>						
aaa-ggsn-ip>						
26	SERVICE_AREA_CODE	INTEGER (0 .. 65535)	-	(SAC) GPRS/EDGE		( )
<aaa-location-start mobile-location, wireless-location		Location	-	, ( )		
<mobile-location		MobileLocation				
27	LAC_START	INTEGER (0 .. 65535)	+	, ( ) ( )		( )
28	CELL_START	INTEGER (0 .. 4294967295)	+	, ( ) ( )		( )
29	TA_START	INTEGER (0 .. 63)	-	, ( ) ( )		( )
mobile-location>						
<wireless-location		WirelessLocation				
30	WL_CELL_START	UTF8String (SIZE (1 .. 64))	+	(WirelessLocation)	IP_ACC _*	WL_CELL_START
31	WL_MAC_START	OCTET STRING (SIZE (6))	+	MAC- (WirelessLocation)	IP_ACC _*	WL_MAC_START
wireless-location>						
aaa-location-start>						

<aaa-location-end mobile-location, wireless-location		Location	-	, ( )		
<mobile-location		MobileLocation				
32	LAC_END	INTEGER (0 .. 65535)	+	, ( )		( )
33	CELL_END	INTEGER (0 .. 4294967295)	+	, ( ) ( )		( )
34	TA_END	INTEGER (0 .. 63)	-	, ( ) ( )		( )
mobile-location>						
<wireless-location		WirelessLocation				
35	WL_CELL_END	UTF8String (SIZE (1 .. 64))	+	(WirelessLocation)	IP_ACC _*	WL_CELL_END
36	WL_MAC_END	OCTET STRING (SIZE (6))	+	MAC- (WirelessLocation)	IP_ACC _*	WL_MAC_END
wireless-location>						
aaa-location-end>						
37	PHONE_CARD_NUMBER	NumericString (SIZE (20))	-			( )
38	IMSI	NumericString (SIZE (10 .. 18))	-	IMSI		( )
39	IMEI	NumericString (SIZE (10 .. 18))	-	(GSM)		( )
40	ESN	NumericString (SIZE (10 .. 18))	-	(CDMA)		( )
41	POOL_NUMBER	UTF8String (SIZE (2 .. 18))	-			( )