
**Information technology —
Telecommunications and information
exchange between systems — ASN.1 for
Computer Supported
Telecommunications Applications (CSTA)
Phase III**

*Technologies de l'information — Téléinformatique — ASN.1 pour
applications en télécommunications supportées par ordinateur (CSTA)
en phase III*

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

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Contents

Page

Foreword	x
Introduction.....	xi
1 Scope	1
2 Conformance	1
2.1 Static Requirements	1
2.2 Dynamic Requirements.....	1
2.3 PICS Requirement	1
3 Normative References.....	2
4 Terms and definitions	2
5 CSTA Service Definition Model.....	2
5.1 CSTA Application Layer Structure	2
5.2 Remote Operations	3
5.3 The CSTA Service Response	3
5.4 Cross Referencing of Event Reports.....	3
5.5 Handling of Private Data	4
6 Interconnection service boundary.....	4
7 Security	4
8 Association Management	4
8.1 Implicit association	4
8.2 Dynamic association management using ACSE.....	4
8.2.1 Encoding of application context name	5
8.2.2 Encoding of application context information	5
9 CSTA parameter types	10
9.1 Switching function objects.....	10
9.2 Device Identifiers	11
9.3 Call and connection identifiers	13
9.4 Connection states	14
9.5 Status reporting.....	15
9.6 Device and feature types and other parameters	18
9.7 Security	24
9.8 Common extensions	25
9.9 Call control	26
9.10 Capability Exchange	30
9.11 Call Detail Record.....	95
9.12 Charge information	98
9.13 Data call types	99
9.14 Escape types.....	100
9.15 Media services	101
9.16 Physical device features.....	104
9.17 Data Collection	106
9.18 Event Cause	107
9.19 Error Value	110
10 Event Report Service	116
11 Capability exchange services	122
11.1 Services	122
11.1.1 Get CSTA-Features.....	122

11.1.2	Get logical device information	124
11.1.3	Get physical device information	126
11.1.4	Get switching function capabilities	127
11.1.5	Get switching function devices	131
11.1.6	Switching function devices	133
12	System services	134
12.1	Registration services	134
12.1.1	Change system status filter	134
12.1.2	System register	135
12.1.3	System register abort	136
12.1.4	System register cancel	137
12.2	Services	138
12.2.1	Request system status	138
12.2.2	System status	139
12.2.3	Switching function capabilities changed	140
12.2.4	Switching function devices changed	141
12.2.5	Get Registrations	142
12.2.6	Registration Info	143
13	Monitoring services	144
13.1	Services	144
13.1.1	Change monitor filter	144
13.1.2	Monitor start	145
13.1.3	Monitor stop	146
13.1.4	Get Monitor	147
13.1.5	Monitor Info	148
14	Snapshot services	149
14.1	Services	149
14.1.1	Snapshot call	149
14.1.2	Snapshot device	151
14.1.3	Snapshot calldata	152
14.1.4	Snapshot devicedata	153
15	Call control services and events	154
15.1	Services	154
15.1.1	Accept call	154
15.1.2	Alternate call	155
15.1.3	Answer call	156
15.1.4	Call back call-related	157
15.1.5	Call back message call-related	158
15.1.6	Camp on call	159
15.1.7	Clear call	160
15.1.8	Clear Connection	161
15.1.9	Conference call	162
15.1.10	Consultation call	163
15.1.11	Deflect call	165
15.1.12	Dial digits	167
15.1.13	Directed pickup call	168
15.1.14	Group pickup call	169
15.1.15	Hold call	170
15.1.16	Intrude call	171
15.1.17	Join call	172
15.1.18	Make call	173
15.1.19	Make connection	175
15.1.20	Make predictive call	177
15.1.21	Park call	179
15.1.22	Reconnect call	180
15.1.23	Retrieve call	181
15.1.24	Single step conference call	182
15.1.25	Send Message	184

15.1.26	Single step transfer call	186
15.1.27	Transfer call	188
15.2	Events	189
15.2.1	Bridged	189
15.2.2	Call cleared	191
15.2.3	Conferenced	192
15.2.4	Connection cleared	194
15.2.5	Delivered	196
15.2.6	Digits dialed	198
15.2.7	Diverted	200
15.2.8	Established	202
15.2.9	Failed	204
15.2.10	Held	206
15.2.11	Network capabilities changed	207
15.2.12	Network reached	209
15.2.13	Offered	211
15.2.14	Originated	213
15.2.15	Queued	215
15.2.16	Retrieved	217
15.2.17	Service initiated	218
15.2.18	Transferred	220
16	Call associated features	222
16.1	Services	222
16.1.1	Associate data	222
16.1.2	Cancel telephony tones	224
16.1.3	Change Connection Information	225
16.1.4	Generate digits	226
16.1.5	Generate telephony tones	227
16.1.6	Send user information	228
16.2	Events	229
16.2.1	Call information	229
16.2.2	Charging	230
16.2.3	Digits generated	231
16.2.4	Telephony tones generated	232
16.2.5	Service completion failure	233
17	Media attachment services and events	234
17.1	Services	234
17.1.1	Attach media service	234
17.1.2	Detach media service	236
17.2	Events	237
17.2.1	Media attached	237
17.2.2	Media detached	238
18	Routing services	239
18.1	Registration services	239
18.1.1	Route register	239
18.1.2	Route register abort	240
18.1.3	Route register cancel	241
18.2	Services	242
18.2.1	Re-Route	242
18.2.2	Route end	243
18.2.3	Route reject	244
18.2.4	Route request	245
18.2.5	Route select	247
18.2.6	Route used	248
19	Physical device features	249
19.1	Services	249
19.1.1	Button press	249
19.1.2	Get auditory apparatus information	250

19.1.3	Get button information	251
19.1.4	Get display	252
19.1.5	Get hookswitch status	253
19.1.6	Get lamp information	254
19.1.7	Get lamp mode	255
19.1.8	Get message waiting indicator	256
19.1.9	Get microphone gain	257
19.1.10	Get microphone mute	258
19.1.11	Get ringer status	259
19.1.12	Get speaker mute	260
19.1.13	Get speaker volume	261
19.1.14	Set button information	262
19.1.15	Set display	263
19.1.16	Set hookswitch status	264
19.1.17	Set lamp mode	265
19.1.18	Set message waiting indicator	266
19.1.19	Set microphone gain	267
19.1.20	Set microphone mute	268
19.1.21	Set ringer status	269
19.1.22	Set speaker mute	270
19.1.23	Set speaker volume	271
19.2	Events	272
19.2.1	Button information	272
19.2.2	Button press	273
19.2.3	Display updated	274
19.2.4	Hookswitch	275
19.2.5	Lamp mode	276
19.2.6	Message waiting	277
19.2.7	Microphone gain	278
19.2.8	Microphone mute	279
19.2.9	Ringer status	280
19.2.10	Speaker mute	281
19.2.11	Speaker volume	282
20	Logical device features	283
20.1	Services	283
20.1.1	Call back non-call-related	283
20.1.2	Call back message non-call-related	284
20.1.3	Cancel call back	285
20.1.4	Cancel call back message	286
20.1.5	Get agent state	287
20.1.6	Get auto answer	288
20.1.7	Get auto work mode	289
20.1.8	Get Call Back	290
20.1.9	Get caller id status	291
20.1.10	Get do not disturb	292
20.1.11	Get forwarding	293
20.1.12	Get last number dialed	294
20.1.13	Get presence state	295
20.1.14	Get routeing mode	296
20.1.15	Set agent state	297
20.1.16	Set auto answer	298
20.1.17	Set auto work mode	299
20.1.18	Set caller id status	300
20.1.19	Set do not disturb	301
20.1.20	Set forwarding	302
20.1.21	Set presence state	303
20.1.22	Set routeing mode	304
20.2	Events	305
20.2.1	Agent busy	305

20.2.2	Agent logged off	306
20.2.3	Agent logged on	307
20.2.4	Agent not ready	308
20.2.5	Agent ready	309
20.2.6	Agent working after call.....	310
20.2.7	Auto answer	311
20.2.8	Auto work mode	312
20.2.9	Call back	313
20.2.10	Call back message	314
20.2.11	Caller id status	315
20.2.12	Do not disturb	316
20.2.13	Forwarding	317
20.2.14	Presence state	318
20.2.15	Routeing mode	319
21	Device maintenance events	320
21.1	Events	320
21.1.1	Back in service	320
21.1.2	Device capabilities changed	321
21.1.3	Out of service.....	322
21.1.4	Partially in Service.....	323
22	I/O services	324
22.1	Registration services	324
22.1.1	I/O register.....	324
22.1.2	I/O register abort.....	325
22.1.3	I/O register cancel	326
22.2	Services	327
22.2.1	Data path resumed	327
22.2.2	Data path suspended	328
22.2.3	Fast data	329
22.2.4	Resume data path.....	330
22.2.5	Send broadcast data	331
22.2.6	Send data	332
22.2.7	Send multicast data.....	333
22.2.8	Start data path	334
22.2.9	Stop data path.....	335
22.2.10	Suspend data path	336
23	Data Collection Services.....	337
23.1	Services	337
23.1.1	Data Collected.....	337
23.1.2	Data Collection Resumed	339
23.1.3	Data Collection Suspended	340
23.1.4	Resume Data Collection	341
23.1.5	Start Data Collection	342
23.1.6	Stop Data Collection	343
23.1.7	Suspend Data Collection	344
24	Voice unit services and events	345
24.1	Services	345
24.1.1	Activate.....	345
24.1.2	Clear	346
24.1.3	Concatenate message.....	347
24.1.4	Deactivate.....	348
24.1.5	Delete message	349
24.1.6	Play message	350
24.1.7	Query voice attribute.....	351
24.1.8	Queue.....	353
24.1.9	Record message.....	354
24.1.10	Reposition	355
24.1.11	Resume.....	356

24.1.12 Review	357
24.1.13 Set voice attribute	358
24.1.14 Start	360
24.1.15 Stop	361
24.1.16 Suspend	362
24.1.17 Synthesize message	363
24.2 Events	364
24.2.1 Bookmark Reached	364
24.2.2 Completed	365
24.2.3 DTMF Detected	366
24.2.4 Emptied	367
24.2.5 Interruption Detected	368
24.2.6 Not Recognized	369
24.2.7 Play	370
24.2.8 Recognized	371
24.2.9 Record	372
24.2.10 Review	373
24.2.11 Silence Timeout Expired	374
24.2.12 Speech Detected	375
24.2.13 Started	376
24.2.14 Stop	377
24.2.15 Suspend play	378
24.2.16 Suspend record	379
24.2.17 Voice attribute changed	380
24.2.18 VoiceErrorOccurred	382
25 Call detail record services	383
25.1 Services	383
25.1.1 Call detail records notification	383
25.1.2 Call detail records report	384
25.1.3 Send stored call detail records	385
25.1.4 Start call detail records transmission	386
25.1.5 Stop call detail records transmission	387
26 Location Services	388
26.1 Services	388
26.1.1 Get Location Information	388
26.1.2 Set Location Information	389
26.1.3 Location tracking session resumed	390
26.1.4 Location tracking session suspended	391
26.1.5 Resume Location tracking session	392
26.1.6 Location Information Report	393
26.1.7 Start Location Tracking Session	394
26.1.8 Stop Location Tracking Session	396
26.1.9 Suspend Location Tracking Session	397
26.1.10 Get Location Tracking Capabilities	398
26.1.11 Get Location Tracking Sessions	400
26.1.12 Location Session Info	401
27 Vendor specific extensions services and events	402
27.1 Registration services	402
27.1.1 Escape register	402
27.1.2 Escape register abort	403
27.1.3 Escape register cancel	404
27.2 Services	405
27.2.1 Escape	405
27.2.2 Private data version selection	406
27.3 Events	407
27.3.1 Private event	407
Annex A (normative) Protocol Implementation Conformance Statement (PICS) Proforma	408

Bibliography.....	578

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 18052 was prepared by Ecma International (as ECMA-285) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

This third edition cancels and replaces the second edition (ISO/IEC 18052:2011), which has been technically revised.

Introduction

This International Standard specifies the ASN.1 for Phase III of Services for Computer Supported Telecommunications Applications (CSTA), ISO/IEC 18051 6th edition. This International Standard is an alternative to the XML Schema Definitions (XSD) in ECMA-323.

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ASN.1 Tools Acknowledgement

The ASN.1 specified in this International Standard has been checked for conformance with the ASN.1 Standard by the OSS Nokalva, Inc. ASN.1 Tools.

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Information technology — Telecommunications and information exchange between systems — ASN.1 for Computer Supported Telecommunications Applications (CSTA) Phase III

1 Scope

This International Standard specifies application protocol data units (APDUs) for the services described in ISO/IEC 18051, Services, for Computer Supported Telecommunications Applications (CSTA) Phase III.

Clause 5 to Clause 7 inclusive describes the concepts underlying the Remote Operations model, notation and service.

Clause 8 to Clause 27 inclusive contains CSTA-specific message templates in ASN.1.

The APDUs are exchanged in the context of an application association.

2 Conformance

Implementations may include any ASN.1 message definition part specified in this International Standard, as long as it satisfies the minimum conformance requirements as specified in Clause 2 of ISO/IEC 18051.

As specified and required in ISO/IEC 18051 a Protocol Implementation Conformance Statement (PICS) shall be made; for implementations of this standard its edition shall be declared as the protocol version in the PICS.

2.1 Static Requirements

To conform to this International Standard, a system shall support the transfer syntax (derived from the encoding rules specified in ISO/IEC 8825-1) named {joint-iso-ccitt asn1(1) basic-encoding(1)}; CSTA APDUs shall be interpreted according to ISO/IEC 8824-1.

2.2 Dynamic Requirements

To conform to this International Standard, a system shall:

- a. follow the procedures as specified in this Standard, and ISO/IEC 18051, relevant to each CSTA operation that the system claims to implement; and
- b. satisfy the definitions, as specified in ISO/IEC 18051, relevant to each CSTA service that the system claims to implement.

2.3 PICS Requirement

To conform to this International Standard, the following shall be stated by the implementer when defining a PICS corresponding to an application or implementation:

- a. which CSTA operations, as defined in ISO/IEC 18051, are supported by the system for the particular implementation; and

b. which optional parameters are supported by the PDUs belonging to the supported operations.

A PICS proforma is given in Annex A of this International Standard.

3 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 18051:2012, *Information technology — Telecommunications and information exchange between systems — Services for Computer Supported Telecommunications Applications (CSTA) Phase III (ECMA-269)*

ISO/IEC TR 18053:2000, *Information technology — Telecommunications and information exchange between systems — Glossary of definitions and terminology for Computer Supported Telecommunications Applications (CSTA) Phase III (ECMA TR/72)*

ISO/IEC 8649:1996, *Information technology — Open Systems Interconnection — Service definition for the Association Control Service Element (this corresponds to ITU-T Rec. X.217, 1995)*

ISO/IEC 9545:1994, *Information technology — Open Systems Interconnection Application Layer structure*

ISO/IEC 13712-1:1995, *Information technology — Remote Operations: Concepts, model, and notation (this corresponds to ITU-T Rec. X.880, 1994)*

ISO/IEC 13712-2:1995, *Information technology — Remote Operations: OSI realisations — Remote Operations Service Element (ROSE) service definition (this corresponds to ITU-T Rec. X.881, 1994)*

ISO/IEC 13712-3:1995, *Information technology — Remote Operations: OSI realisations — Remote Operations Service Element (ROSE) protocol specification (this corresponds to ITU-T Rec. X.882, 1994)*

ISO/IEC 8824-1:2008, *Information technology — Abstract Syntax Notation One (ASN.1): Specification of basic notation (this corresponds to ITU-T X.680, 2008)*

ISO/IEC 8825-1:2008, *Information technology — ASN.1 encoding rules — Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER) (this corresponds to ITU-T Rec. ITU-T X.690, 2008)*

RFC 4119, *A Presence-based GEOPRIV Location Object Format*

4 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC TR 18053 apply. In addition, the following terms defined in other International Standards apply.

- Remote Operations (as per ISO/IEC 13712-1)
- Application Association (as per ISO/IEC 8649)
- Application Context (as per ISO/IEC 8649)

5 CSTA Service Definition Model

5.1 CSTA Application Layer Structure

The CSTA Application Layer structure conforms to the model described in ISO/IEC 9545.

5.2 Remote Operations

The services of CSTA are modeled as Remote Operations as described in ISO/IEC 13712-1. Typically, one entity requests that a particular operation be performed; the other entity attempts to perform the operation and responds to the requestor.

Consequently the operation of the protocol is an elementary request/reply interaction, supported within the OSI Application Layer, and carried out within the context of an application association. The protocol specifications in ISO/IEC 18051 determine the class of the operation.

For some of the CSTA services, the entity to which the request is sent generates a reply which can indicate success or failure.

For these services, implementations shall use the operations Class 2, defined in ISO/IEC 13712-2 as:

- Asynchronous, reporting success or failure (result or error).

For some of the CSTA services, the entity to which the request is sent generates a reply which can only indicate failure.

For these services, implementations shall use the operations Class 3, defined in ISO/IEC 13712-2 as:

- Asynchronous, reporting failure (error) only, if any.

For some of the CSTA services, particularly the ongoing reporting of events, no reply is generated.

For these services, implementations shall use the operations Class 5, defined in ISO/IEC 13712-2 as:

- Asynchronous, outcome not reported.

Implementations shall correlate the single response, denoting success or failure, with the originating request by using the mechanisms within the ROSE protocol.

5.3 The CSTA Service Response

CSTA employs a generic response mechanism which is, in principle, decoupled from the specifics of the switching activity.

The following points describe the operation of the CSTA service response:

- a. Specific services may have an unconfirmed mode where responses to correct requests are not returned.
- b. The server shall check the correctness of the request (e.g. syntactical checks) before issuing the response.
Incorrect requests shall result in an error response, even in the unconfirmed mode.

5.4 Cross Referencing of Event Reports

A computer application process may need to cross reference a CSTAEventReport to one of the following:

- a. a CSTA Object ID (Call ID or Device ID),
- b. an earlier Monitor request; or
- c. one of many Monitor requests (pertaining to the same CSTA Object).

For the above scenarios the necessary cross referencing function may be fulfilled by use of the parameter "MonitorCrossRefID". The content of MonitorCrossRefID depends upon the context and it may be one of the following: Call ID, Device ID or another independently switch managed static identifier.

The independent identifier may have a unique correlation to either: one device, one call, or one monitor request.

The switching system limit on the number of monitor requests on one CSTA Object (Call or Device) is an implementation option. This Standard does not stipulate how many monitor requests on one object are to be supported by the switch. If using Static Device or Call identifiers the limit can only be one.

5.5 Handling of Private Data

If an entity receives the parameter CSTAPrivateData, and it can not recognize the information contained, the parameter shall be discarded, and the rest of the message shall be processed.

6 Interconnection service boundary

The APDUs in this Standard are exchanged in the context of an association and by using the Remote Operations protocol defined in ISO/IEC 13712-3, which assumes that certain services are provided by the underlying layers.

7 Security

The authentication mechanism of ACSE may be used.

8 Association Management

The APDUs in this Standard are exchanged in the context of an application association. This application association can be either:

- an implicit association achieved via off-line agreement; or
- a dynamically negotiated association realized through the use of ACSE.

8.1 Implicit association

An a-priori agreement exists between switching and computing functions: the application context is implicit, dynamic negotiation is not possible.

8.2 Dynamic association management using ACSE

ACSE requires the use of an application context Name (as defined by ISO 8649). This is an object id that uniquely identifies CSTA independently of the different versions.

The CSTA protocol version information is carried within the User Information field of the A-ASSOCIATE request and response PDUs.

An application context is established (using ACSE) as follows:

- the system generating the A-ASSOCIATE request includes the CSTA application context name and a list of all protocol versions that it is prepared to offer in the User Information field;
- on receipt of the A-ASSOCIATE request, the receiving system selects the protocol version to be used by identifying the highest version that is common to both systems;
- the protocol version selected is conveyed to the requestor in the User Information field of the A-ASSOCIATE response.

In addition to negotiating the protocol version, it is necessary for the requesting and responding systems to specify the CSTA services that they support. As with the protocol version information, this is also achieved by carrying additional information in the User Information field of the A-ASSOCIATE request and response PDUs.

The application association requestor shall:

- list the services required from the serving application;
- list the services it can supply.

The responder shall include similar information for the responding application. At this point the association requestor will either accept or reject the association.

8.2.1 Encoding of application context name

```
CSTA-application-context-name
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta( 218) }
-- Common to all CSTA protocol versions
```

8.2.2 Encoding of application context information

```
CSTA-application-context-information-csta3
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) application-context-information( 200) }

DEFINITIONS ::=
BEGIN

IMPORTS
CSTAFunctionality FROM CSTA-application-context-information
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta2( 218) application-context-information( 200) };

ACSEUserInformationForCSTA ::= CHOICE
{
    oldDefinition          OldACSEUserInformationForCSTA,
    newDefinition [0] IMPLICIT NewACSEUserInformationForCSTA }

OldACSEUserInformationForCSTA ::= SEQUENCE
{
    cSTAVersion          CSTAVersion,
    cSTAFunctionsRequiredByApplication CSTAFunctionality,
    cSTAFunctionsThatCanBeSupplied    CSTAFunctionality }

NewACSEUserInformationForCSTA ::= SEQUENCE
{
    cSTAVersion          CSTAVersion,
    --
    -- Note that the following two parameters are defined in ECMA-218 (CSTA Phase II).
    -- They are defined in the context of CSTA Phase II Services and Events for
    -- backward compatibility considerations.
    -- For CSTA Phase III (and later), implementations should use CSTA Capability Exchange
    -- Services to determine the Services and Events supported by a switching function.
    --
    cSTAFunctionsRequiredByApplication [0] IMPLICIT CSTAFunctionality OPTIONAL,
    cSTAFunctionsThatCanBeSupplied     [1] IMPLICIT CSTAFunctionality OPTIONAL,
    cSTAPrivateDataVersionList         [2] IMPLICIT CSTAPrivateDataVersionList
    OPTIONAL }

CSTAPrivateDataVersionList ::= SEQUENCE OF INTEGER
```

CSTAVersion ::= BIT STRING

```
{
    versionOne      ( 0), -- ECMA-180
    versionTwo      ( 1), -- ECMA-218
    versionThree    ( 2), -- ECMA-285, 1st Edition
    versionFour     ( 3), -- ISO/IEC 18052
    versionFive     ( 4), -- ECMA-285, 2nd Edition
    versionSix      ( 5), -- ECMA-323
    versionSeven    ( 6), -- ECMA-323, 2nd Edition
    versionEight    ( 7), -- ECMA-323, 3rd Edition
    versionNine     ( 8), -- ECMA-323, 4th Edition, Tag option
    versionTen      ( 9), -- ECMA-323, 4th Edition, short Tag option
    versionEleven   (10), -- ECMA-323, 4th Edition, dynamic transformation option
    versionTwelve   (11), -- ECMA-323, 5th Edition, Tag option
    versionThirteen (12), -- ECMA-323, 5th Edition, short Tag option
    versionFourteen (13), -- ECMA-323, 5th Edition, dynamic transformation option
    versionFifteen  (14), -- ECMA-285, 3rd Edition
    versionSixteen  (15), -- ECMA-323, 6th Edition, Tag option
    versionSeventeen (16), -- ECMA-323, 6th Edition, short Tag option
    versionEighteen (17), -- ECMA-323, 6th Edition, dynamic transformation option
    versionNineteen (18), -- ECMA-285, 4th Edition
    versionTwenty   (19), -- Reserved for future use
    versionTwentyone (20), -- Reserved for future use
    versionTwentytwo (21), -- Reserved for future use
    versionTwentythree (22), -- Reserved for future use
    versionTwentyfour (23) } -- Reserved for future use
```

CallControlServices ::= BIT STRING

```
{
    acceptCall      ( 0),
    alternateCall   ( 1),
    answerCall      ( 2),
    callBack        ( 3),
    callBackMessage ( 4),
    campOnCall      ( 5),
    clearCall       ( 6),
    clearConnection ( 7),
    conferenceCall  ( 8),
    consultationCall ( 9),
    deflectCall     (10),
    dialDigits      (11),
    directedPickupCall (12),
    groupPickupCall (13),
    holdCall        (14),
    intrudeCall     (15),
    joinCall        (16),
    makeCall        (17),
    makeConnection  (18),
    makePredictiveCall (19),
    parkCall       (20),
    reconnectCall   (21),
    retrieveCall    (22),
    sendMessage     (23),
    singleStepConference (24),
    singleStepTransfer (25),
    transferCall    (26) }
```

CallAssociatedServices ::= BIT STRING

```
{
    associateData      ( 0),
    cancelTelephonyTones ( 1),
    changeConnectionInformation ( 2),
    generateDigits      ( 3),
```

```

        generateTelephonyTones                ( 3),
        sendUserInformation                    ( 4) }

MediaAttachmentServices ::= BIT STRING
{
    attachMediaService                        ( 0),
    detachMediaService                       ( 1) }

RouteingServices ::= BIT STRING
{
    routeRegister                            ( 0),
    routeRegisterCancel                      ( 1),
    routeRegisterAbort                      ( 2),
    reroute                                  ( 3),
    routeEnd                                 ( 4),
    routeReject                             ( 5),
    routeRequest                            ( 6),
    routeSelect                             ( 7),
    routeUsed                               ( 8) }

VoiceUnitServices ::= BIT STRING
{
    activate                                (12),
    clear                                  (13),
    concatenateMessage                     ( 0),
    deactivate                             (14),
    deleteMessage                         ( 1),
    playMessage                           ( 2),
    queryVoiceAttribute                    ( 3),
    recordMessage                         ( 4),
    reposition                             ( 5),
    resume                                 ( 6),
    review                                 ( 7),
    setVoiceAttribute                      ( 8),
    stop                                   ( 9),
    suspend                                (10),
    synthesizeMessage                      (11) }

LocationServices ::= BIT STRING
{
    getLocationInformation                  ( 0),
    setLocationInformation                  ( 1),
    locationTrackingSessionResumed          ( 2),
    locationTrackingSessionSuspended        ( 3),
    resumeLocationTrackingSession           ( 4),
    locationInformationReport               ( 5),
    startLocationTrackingSession            ( 6),
    stopLocationTrackingSession             ( 7),
    suspendLocationTrackingCapabilities      ( 8),
    locationSessionInfo                    ( 9) }

CallControlEvents ::= BIT STRING
{
    bridged                                (15),
    callCleared                            ( 0),
    conferenced                            ( 1),
    connectionCleared                      ( 2),
    delivered                              ( 3),
    digitsDialed                           (14),
    diverted                               ( 4),
    established                            ( 5),
    failed                                 ( 6),
    held                                   ( 7),
    networkCapabilitiesChanged              (16),
    networkReached                         ( 8),

```

```

        offered                                (17),
        originated                             ( 9),
        queued                                 (10),
        retrieved                              (11),
        serviceInitiated                       (12),
        transferred                            (13) }

CallAssociatedEvents ::= BIT STRING
{
    callInformation                            ( 0),
    charging                                  ( 1),
    dtmfdigitsDetected                        ( 2),
    telephonyTonesDetected                   ( 3),
    serviceCompletionFailure                  ( 4) }

MediaAttachmentEvents ::= BIT STRING
{
    mediaAttached                             ( 0),
    mediaDetached                             ( 1) }

PhysicalDeviceFeatureEvents ::= BIT STRING
{
    buttonInformation                         ( 0),
    buttonPress                              ( 1),
    displayUpdated                           ( 2),
    hookswitch                               ( 3),
    lampMode                                 ( 4),
    messageWaiting                           ( 5),
    microphoneGain                           ( 6),
    microphoneMute                           ( 7),
    ringerStatus                             ( 8),
    speakerMute                              ( 9),
    speakerVolume                            (10) }

LogicalDeviceFeatureEvents ::= BIT STRING
{
    agentBusy                                ( 0),
    agentLoggedIn                            ( 1),
    agentLoggedOff                           ( 2),
    agentNotReady                            ( 3),
    agentReady                               ( 4),
    agentWorkingAfterCall                    ( 5),
    autoAnswer                               ( 6),
    autoWorkMode                             ( 7),
    callBack                                 ( 8),
    callBackMessage                          ( 9),
    callerIDStatus                           (10),
    doNotDisturb                             (11),
    forwarding                               (12),
    presenceState                            (14),
    routingMode                              (13) }

DeviceMaintenanceEvents ::= BIT STRING
{
    backInService                            ( 0),
    deviceCapabilityChanged                   ( 2),
    outOfService                             ( 1),
    partiallyInService                       ( 3) }

VoiceUnitEvents ::= BIT STRING
{
    bookmarkReached                          ( 7),
    completed                                ( 8),
    dtmfDetected                             ( 9),
    emptied                                   (10),
    interruptionDetected                     (11),

```

```
notRecognized          (12),
play                   ( 1),
recognized              (13),
record                  ( 3),
review                  ( 5),
started                 (14),
silenceTimeoutExpired  (15),
speechDetected          (16),
stop                    ( 0),
suspendPlay             ( 2),
suspendRecord           ( 4),
voiceAttributesChange   ( 6),
voiceErrorOccured       (17) }

VendorSpecEvents ::= BIT STRING
{
    privateEvent          ( 0) }

END -- of CSTA-application-context-information-csta3
```

9 CSTA parameter types

The major parameters have been assigned distinct application tags to facilitate parsing. The data is defined in logical groups in ascending order of application tag. Application tags used are:

- APPLICATION 1 - 8: Device identifiers
- APPLICATION 11 - 14: Connection identifiers and local connection states
- APPLICATION 21 - 24 : Status reporting
- APPLICATION 29 - 30 : CSTACommonArguments

9.1 Switching function objects

```
CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }

DEFINITIONS ::=
BEGIN

EXPORTS
CSTAObject;

IMPORTS
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) };

CSTAObject ::= CHOICE
{  deviceObject DeviceID,
   callObject ConnectionID }

END -- of CSTA-switching-function-objects
```

9.2 Device Identifiers

```

CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }

DEFINITIONS ::=
BEGIN

EXPORTS
DeviceID, NumberDigits, CallingDeviceID, CalledDeviceID,
SubjectDeviceID, RedirectionDeviceID, AssociatedCallingDeviceID,
AssociatedCalledDeviceID, NetworkCallingDeviceID, NetworkCalledDeviceID;

IMPORTS
MediaCallCharacteristics FROM CSTA-media-services
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) media-services( 136) };

ExtendedDeviceID ::= [APPLICATION 9] CHOICE
{
    deviceIdentifier      DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    restricted            [ 8] IMPLICIT  NULL }

CallingDeviceID ::= [APPLICATION 1] CHOICE
{
    deviceIdentifier      DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    restricted            [ 8] IMPLICIT  NULL }

CallingDevice ::= CallingDeviceID

CalledDeviceID ::= [APPLICATION 2] CHOICE
{
    deviceIdentifier      DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    restricted            [ 8] IMPLICIT  NULL }

CalledDevice ::= CalledDeviceID

SubjectDeviceID ::= [APPLICATION 3] CHOICE
{
    deviceIdentifier      DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    restricted            [ 8] IMPLICIT  NULL }

RedirectionDeviceID ::= [APPLICATION 4] CHOICE
{
    numberDialled         DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    notRequired            [ 8] IMPLICIT  NULL,
    notSpecified          [ 9] IMPLICIT  NULL,
    restricted            [10] IMPLICIT  NULL }

LastRedirectionDevice ::= RedirectionDeviceID

AssociatedCallingDeviceID ::= [APPLICATION 5] CHOICE
{
    deviceIdentifier      DeviceID,
    notKnown              [ 7] IMPLICIT  NULL,
    restricted            [ 8] IMPLICIT  NULL }

AssociatedCallingDevice ::= AssociatedCallingDeviceID

```

```

AssociatedCalledDeviceID ::= [APPLICATION 6] CHOICE
{
    deviceIdentifier          DeviceID,
    notKnown                  [ 7] IMPLICIT   NULL,
    restricted                 [ 8] IMPLICIT   NULL }

AssociatedCalledDevice ::= AssociatedCalledDeviceID

NetworkCallingDeviceID ::= [APPLICATION 7] CHOICE
{
    deviceIdentifier          DeviceID,
    notKnown                  [ 7] IMPLICIT   NULL,
    restricted                 [ 8] IMPLICIT   NULL }

NetworkCallingDevice ::= NetworkCallingDeviceID

NetworkCalledDeviceID ::= [APPLICATION 8] CHOICE
{
    deviceIdentifier          DeviceID,
    notKnown                  [ 7] IMPLICIT   NULL,
    restricted                 [ 8] IMPLICIT   NULL }

NetworkCalledDevice ::= NetworkCalledDeviceID

DeviceID ::= SEQUENCE
{
    deviceIdentifier CHOICE
        {
            dialingNumber      [ 0] IMPLICIT   NumberDigits,
            deviceNumber        [ 1] IMPLICIT   DeviceNumber,
            implicitPublic      [ 2] IMPLICIT   NumberDigits,
            explicitPublic      [ 3] PublicTON,
            implicitPrivate     [ 4] IMPLICIT   NumberDigits,
            explicitPrivate     [ 5] PrivateTON,
            other                [ 6] IMPLICIT   OtherPlan },
    privateNumber              [ 0] NumberDigits OPTIONAL,
    privateName                [ 1] IA5String   OPTIONAL,
    mediaCallCharacteristics   MediaCallCharacteristics OPTIONAL }

PublicTON ::= CHOICE
{
    unknown                    [ 0] IMPLICIT   IA5String,
    international              [ 1] IMPLICIT   IA5String,
    national                   [ 2] IMPLICIT   IA5String,
    networkspecific            [ 3] IMPLICIT   IA5String,
    subscriber                 [ 4] IMPLICIT   IA5String,
    abbreviated                [ 5] IMPLICIT   IA5String }

PrivateTON ::= CHOICE
{
    unknown                    [ 0] IMPLICIT   IA5String,
    level3RegionalNumber       [ 1] IMPLICIT   IA5String,
    level2RegionalNumber       [ 2] IMPLICIT   IA5String,
    level1RegionalNumber       [ 3] IMPLICIT   IA5String,
    pTNSpecificNumber          [ 4] IMPLICIT   IA5String,
    localNumber                [ 5] IMPLICIT   IA5String,
    abbreviated                [ 6] IMPLICIT   IA5String }

OtherPlan ::= OCTET STRING    -- Allows future expansion to cover other numbering
                                -- plans

NumberDigits ::= IA5String

DeviceNumber ::= INTEGER

END -- of CSTA-device-identifier

```


9.3 Call and connection identifiers

```

CSTA-call-connection-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-connection-identifiers( 124) }

DEFINITIONS ::=
BEGIN

EXPORTS
    CallID, ConnectionID;

IMPORTS
    DeviceID FROM CSTA-device-identifiers
        { iso( 1) identified-organization( 3) icd-ecma( 12)
          standard( 0) csta3( 285) device-identifiers( 123) };

ConnectionID ::= [APPLICATION 11] CHOICE
{
    callID          [0] IMPLICIT      CallID,
    deviceID        [1]               LocalDeviceID,
    both SEQUENCE
    {
        callID [0] IMPLICIT      CallID,
        deviceID [1]             LocalDeviceID } }

CallID ::= OCTET STRING

LocalDeviceID ::= CHOICE
{
    staticID      DeviceID,
    dynamicID     [3] IMPLICIT      OCTET STRING }

END -- of CSTA-call-connection-identifiers

```

9.4 Connection states

```

CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }

DEFINITIONS ::=
BEGIN

EXPORTS
ConnectionList, LocalConnectionState;

IMPORTS
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ConnectionList ::= SEQUENCE OF SEQUENCE
{   newConnection      [0] ConnectionID          OPTIONAL,
    oldConnection      [1] ConnectionID          OPTIONAL,
    endpoint            [2] CHOICE
      {   deviceID      DeviceID,
          notKnown      NULL,
          restricted     [1] NULL }              OPTIONAL,
    associatedNID       [3] CHOICE
      {   deviceID      DeviceID,
          notKnown      NULL }                  OPTIONAL,
    resultingConnectionInfo ConnectionInformation OPTIONAL }

LocalConnectionState ::= [APPLICATION 14] IMPLICIT ENUMERATED
{   null      (0),
    initiated (1),
    alerting  (2),
    connected (3),
    hold      (4),
    queued    (5),
    fail      (6) }

END -- CSTA-connection-states

```

9.5 Status reporting

```

CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }

DEFINITIONS ::=
BEGIN

EXPORTS
MonitorObject, MonitorCrossRefID, MonitorFilter, MonitorType,
MonitorMediaClass, SnapshotCallData, SnapshotDeviceData, RegistrationTypeList, RegistrationList,
MonitorList, LocationSessionInfoList;

IMPORTS
CallControlEvents, CallAssociatedEvents, MediaAttachmentEvents,
PhysicalDeviceFeatureEvents, LogicalDeviceFeatureEvents,
DeviceMaintenanceEvents, VoiceUnitEvents, VendorSpecEvents
FROM CSTA-application-context-information-csta3
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) application-context-information( 200) }
ServicesPermitted, LocationInfoList, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
ConnectionInformation, MediaCallCharacteristics, MediaServiceType,
MediaServiceInstanceID, MediaStreamID FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

MonitorObject ::= CSTAObject

MonitorCrossRefID ::= [APPLICATION 21] IMPLICIT OCTET STRING

MonitorFilter ::= SEQUENCE-- default is no filter (i.e. all events)
{
  callControl          [0] IMPLICIT CallControlEvents          DEFAULT { },
  callAssociated        [6] IMPLICIT CallAssociatedEvents        DEFAULT { },
  mediaAttachment       [7] IMPLICIT MediaAttachmentEvents       DEFAULT { },
  physicalDeviceFeature [8] IMPLICIT PhysicalDeviceFeatureEvents DEFAULT { },
  logicalDeviceFeature  [9] IMPLICIT LogicalDeviceFeatureEvents  DEFAULT { },
  maintenance           [3] IMPLICIT DeviceMaintenanceEvents     DEFAULT { },
  voiceUnit             [5] IMPLICIT VoiceUnitEvents             DEFAULT { },
  private               [4] IMPLICIT VendorSpecEvents            DEFAULT { } }

-- setting the relevant bit requests the filter for the appropriate events

```

MonitorType ::= ENUMERATED

```
{
    call                (0),
    device              (1) }
```

MonitorList ::= SEQUENCE OF MonitorListEntry

MonitorListEntry ::= SEQUENCE

```
{
    monitorCrossRefID    MonitorCrossRefID,
    monitorObject        DeviceID }
```

RegistrationTypeList ::= SEQUENCE OF RegistrationType

RegistrationType ::= ENUMERATED

```
{
    escapeRegister       (1),
    ioRegister           (2),
    routeRegister        (3),
    sysStatRegister      (4) }
```

RegistrationList ::= SEQUENCE OF RegistrationListEntry

RegistrationListEntry ::= SEQUENCE

```
{
    registrationType      RegistrationType,
    registrationID        IA5String,
    registrationObject    DeviceID OPTIONAL }
```

LocationSessionInfoList ::= SEQUENCE OF LocationSessionListEntry

LocationSessionListEntry ::= SEQUENCE

```
{
    locCrossRefID        LocCrossRefID,
    locDevice            DeviceID }
```

MonitorMediaClass ::= BIT STRING

```
{
    voice                ( 0),
    data                 ( 1),
    image                ( 2),
    audio                ( 4),
    other                ( 3),
    notKnown             ( 5),
    chat                 ( 6),
    email                ( 7),
    message              ( 8),
    im                   ( 9),
    sms                  (10),
    mms                  (11) }
```

SnapshotDeviceData ::= [APPLICATION 22] IMPLICIT SEQUENCE OF SnapshotDeviceResponseInfo

SnapshotDeviceResponseInfo ::= SEQUENCE

```
{
    connectionIdentifier    ConnectionID,
    endpointDevice          [3] IMPLICIT SubjectDeviceID OPTIONAL,
    localCallState          CallState,
    servicesPermitted       [0] IMPLICIT ServicesPermitted OPTIONAL,
    mediaServiceInfoList    [1] IMPLICIT DeviceMediaInfoList OPTIONAL,
    mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
    callLinkageData         [4] IMPLICIT CallLinkageData OPTIONAL }
```

DeviceMediaInfoList ::= SEQUENCE OF SEQUENCE

```
{
    mediaStreamID          MediaStreamID OPTIONAL,
    connectionInformation  ConnectionInformation OPTIONAL }
```

SnapshotCallData ::= [APPLICATION 23] IMPLICIT SEQUENCE OF SnapshotCallResponseInfo

SnapshotCallResponseInfo ::= SEQUENCE

```
{
  deviceOnCall          SubjectDeviceID,
  callIdentifier         ConnectionID
                           OPTIONAL,
  localConnectionState  LocalConnectionState
                           OPTIONAL,
  servicesPermitted     [0] IMPLICIT ServicesPermitted
                           OPTIONAL,
  mediaServiceInfoList  [1] IMPLICIT CallMediaInfoList
                           OPTIONAL,
  locationInfo          [2] IMPLICIT LocationInfoList
                           OPTIONAL }
```

CallMediaInfoList ::= SEQUENCE OF SEQUENCE

```
{
  mediaServiceType      [0] IMPLICIT MediaServiceType,
  mediaServiceVersion   [1] IMPLICIT INTEGER
                           OPTIONAL,
  mediaServiceInstance  [2] IMPLICIT MediaServiceInstanceID
                           OPTIONAL,
  mediaStreamID         [3] IMPLICIT MediaStreamID
                           OPTIONAL,
  connectionInformation [4] IMPLICIT ConnectionInformation
                           OPTIONAL }
```

CallState ::= CHOICE

```
{
  compoundCallState     [0] IMPLICIT CompoundCallState,
  simpleCallState       [1] IMPLICIT SimpleCallState,
  unknown               [2] IMPLICIT NULL }
```

CompoundCallState ::= SEQUENCE OF LocalConnectionState

SimpleCallState ::= ENUMERATED

```
{
  callNull              ( 0), -- '00'H      - null-null
  callPending           ( 1), -- '01'H      - null-initiate
  callOriginated        ( 3), -- '03'H      - null-connect
  callDelivered         (35), -- '23'H      - alerting-connect
  callDeliveredHeld     (36), -- '24'H      - alerting-held
  callReceived          (50), -- '32'H      - connect-alerting
  callEstablished       (51), -- '33'H      - connect-connect
  callEstablishedHeld   (52), -- '34'H      - connected-held
  callReceivedOnHold    (66), -- '42'H      - held-alerting
  callEstablishedOnHold (67), -- '43'H      - held-connect
  callQueued            (83), -- '53'H      - queued-connect
  callQueuedHeld        (84), -- '54'H      - queued-held
  callFailed            (99), -- '63'H      - failed-connect
  callFailedHeld        (100), -- '64'H     - failed-held
  callBlocked           (96) } -- '60'H     - failed-null }
```

-- This represents the main call states in a simplified encoding. The semantics
-- are identical to the sequence of connection states but they are represented by
-- an item from an enumerated list.

END -- of CSTA-status-reporting

9.6 Device and feature types and other parameters

CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

DEFINITIONS ::=

BEGIN

EXPORTS

AccountInfo, AgentID, AgentPassword, AgentState, AuthCode, CallOrigination, CorrelatorData, DataPathType, DisplayAttributeList, ForwardList, IOCrossRefID, IORegisterReqID, MessageID, ParticipationType, PendingAgentState, RetryValue, RouteRegisterReqID, RoutingCrossRefID, SelectValue, SysStatRegisterID, SystemStatus, TerminatingConditions, ForwardingType, ForwardDefault, AttributeInfo, EncodingAlgorithm, ControlData, UserData, TelephonyTone, DeviceHistory, SubjectOfCall, LanguagePreferences, MessageInfo, LocReason, LocCrossRefID, ResourceID, PresenceState;

IMPORTS

DeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) };
```

AccountInfo ::= OCTET STRING

AgentID ::= OCTET STRING

AgentPassword ::= OCTET STRING

AgentState ::= ENUMERATED

```
{ agentNotReady      (0),
  agentNull          (1),
  agentReady         (2),
  agentBusy          (3),
  agentWorkingAfterCall (4) }
```

AuthCode ::= OCTET STRING

CorrelatorData ::= OCTET STRING

IOCrossRefID ::= CHOICE

```
{ switchProvided      [0] OCTET STRING ,
  computerProvided     [1] OCTET STRING }
```

IORegisterReqID ::= OCTET STRING

MessageID ::= OCTET STRING

ParticipationType ::= ENUMERATED

```
{ silent      (0),
  active      (1),
  none        (2) }
```

RouteRegisterReqID ::= OCTET STRING

RouteingCrossRefID ::= [APPLICATION 24] IMPLICIT OCTET STRING

SelectValue ::= ENUMERATED

```
{
  normal          (0),
  leastCost       (1),
  emergency       (2),
  aCD             (3),
  userDefined     (4) }
```

RetryValue ::= CHOICE -- used in RouteSelect Request service

```
{
  noListAvailable [0] IMPLICIT BOOLEAN,
  noCountAvailable [1] IMPLICIT BOOLEAN,
  retryCount      [2] IMPLICIT INTEGER }
```

SysStatRegisterID ::= OCTET STRING

SystemStatus ::= ENUMERATED

```
{
  disabled          (4),
  partiallyDisabled (8),
  enabled           (1),
  initializing       (0),
  messagesLost      (3),
  normal            (2),
  overloadImminent  (5),
  overloadReached    (6),
  overloadRelieved  (7) }
```

CallOrigination ::= BIT STRING

```
{
  internal  (0),
  external  (1) }
```

ForwardList ::= SEQUENCE OF SEQUENCE

```
{
  forwardingType ForwardingType OPTIONAL,
  forwardStatus  BOOLEAN,
  forwardDN      DeviceID OPTIONAL,
  forwardDefault ForwardDefault OPTIONAL,
  ringDuration   [0] IMPLICIT INTEGER OPTIONAL,
  ringCount      INTEGER (1..100) OPTIONAL }
```

ForwardingType ::= ENUMERATED

```
{
  forwardImmediate ( 0),
  forwardBusy      ( 1),
  forwardNoAns     ( 2),
  forwardDND       ( 9),
  forwardBusyInt   ( 3),
  forwardBusyExt   ( 4),
  forwardNoAnsInt  ( 5),
  forwardNoAnsExt  ( 6),
  forwardImmInt    ( 7),
  forwardImmExt    ( 8),
  forwardDNDInt    (10),
  forwardDNDExt    (11) }
```

ForwardDefault ::= ENUMERATED

```
{
  forwardingTypeAndForwardDN ( 0),
  forwardingType             ( 1),
  forwardDN                  ( 2) }
```

PendingAgentState ::= ENUMERATED

```
{
  agentNotReady ( 0),
```

```

agentNull                ( 1),
agentReady                ( 2),
agentWorkingAfterCall    ( 3) }

DataPathType ::= ENUMERATED
{   text                ( 0),
    voice                ( 1) }

DisplayAttributeList ::= SEQUENCE
{   physicalBaseRowNumber    [0] IMPLICIT INTEGER OPTIONAL,
    physicalBaseColumnNumber [1] IMPLICIT INTEGER OPTIONAL,
    offset                   [2] IMPLICIT INTEGER OPTIONAL }

TerminatingConditions ::= BIT STRING
{   durationExceeded        ( 0),
    dtmfdigitDetected       ( 1),
    endOfMessageDetected    ( 2),
    speechDetected          ( 3) }

AttributeInfo ::= CHOICE
{   encodingAlgorithm        [0] IMPLICIT EncodingAlgorithm,
    samplingRate              [1] IMPLICIT INTEGER,
    duration                  [2] IMPLICIT INTEGER,
    filename                  [3] IMPLICIT IA5String,
    currentPosition          [4] IMPLICIT INTEGER,
    currentSpeed              [5] IMPLICIT INTEGER,
    currentVolume             [6] IMPLICIT INTEGER (0 .. 100),
    currentGain               [7] IMPLICIT INTEGER (0 .. 100),
    currentState              [8] IMPLICIT CurrentState }

EncodingAlgorithm ::= ENUMERATED
{   aDPCM6K                 ( 0),
    aDPCM8K                 ( 1),
    muLawPCM6K              ( 2),
    aLawPCM6K               ( 3) }

LocReason ::= ENUMERATED
{   connectionToDeviceOrNetworkRestored    ( 0),
    performanceConditionRelieved           ( 1) }

LocCrossRefID ::= IA5String

CurrentState ::= ENUMERATED
{   dtmfDetected            ( 6),
    formed                  ( 7),
    play                    ( 1),
    playing                  ( 8),
    ready                   ( 9),
    record                  ( 2),
    review                  ( 5),
    speechDetected          (10),
    started                 (11),
    stop                    ( 0),
    suspendPlay             ( 3),
    suspendRecord           ( 4) }

ResourceID ::= IA5String

```



```

MessageInfo ::= SEQUENCE
{
    contents                IA5String,
    contentTypeAndSubtype   IA5String                OPTIONAL,
    contentsLength           INTEGER                  OPTIONAL }

DeviceHistory ::= SEQUENCE
{
    oldDeviceID              DeviceID,
    eventCause                [1] IMPLICIT EventCause    OPTIONAL,
    oldConnectionID          [2] IMPLICIT ConnectionID    OPTIONAL }

SubjectOfCall ::= IA5String

LanguagePreferences ::= IA5String

ControlData ::= SEQUENCE
{
    gender      ENUMERATED
        {
            male      (0),
            female     (1) },
    language     OCTET STRING }

UserData ::= [APPLICATION 29] OCTET STRING

TelephonyTone ::= ENUMERATED
{
    beep          ( 0),
    billing        ( 1),
    busy           ( 2),
    carrier        ( 3),
    confirmation   ( 4),
    dial           ( 5),
    faxCNG         ( 6),
    hold           ( 7),
    howler         ( 8),
    intrusion      ( 9),
    modemCNG       (10),
    park           (11),
    recordWarning  (12),
    reorder        (13),
    ringback       (14),
    silence        (15),
    sitVC          (16),
    sitIC          (17),
    sitRO          (18),
    sitNC          (19),
    switchSpec0    (20),
    switchSpec1    (21),
    switchSpec2    (22),
    switchSpec3    (23),
    switchSpec4    (24),
    switchSpec5    (25),
    switchSpec6    (26),
    switchSpec7    (27),
    switchSpec8    (28),
    switchSpec9    (29),
    switchSpec10   (30),
    switchSpec11   (31),
    switchSpec12   (32),
    switchSpec13   (33),
    switchSpec14   (34),
    switchSpec15   (35),
    switchSpec16   (36),

```

switchSpec17	(37) ,
switchSpec18	(38) ,
switchSpec19	(39) ,
switchSpec20	(40) ,
switchSpec21	(41) ,
switchSpec22	(42) ,
switchSpec23	(43) ,
switchSpec24	(44) ,
switchSpec25	(45) ,
switchSpec26	(46) ,
switchSpec27	(47) ,
switchSpec28	(48) ,
switchSpec29	(49) ,
switchSpec30	(50) ,
switchSpec31	(51) ,
switchSpec32	(52) ,
switchSpec33	(53) ,
switchSpec34	(54) ,
switchSpec35	(55) ,
switchSpec36	(56) ,
switchSpec37	(57) ,
switchSpec38	(58) ,
switchSpec39	(59) ,
switchSpec40	(60) ,
switchSpec41	(61) ,
switchSpec42	(62) ,
switchSpec43	(63) ,
switchSpec44	(64) ,
switchSpec45	(65) ,
switchSpec46	(66) ,
switchSpec47	(67) ,
switchSpec48	(68) ,
switchSpec49	(69) ,
switchSpec50	(70) ,
switchSpec51	(71) ,
switchSpec52	(72) ,
switchSpec53	(73) ,
switchSpec54	(74) ,
switchSpec55	(75) ,
switchSpec56	(76) ,
switchSpec57	(77) ,
switchSpec58	(78) ,
switchSpec59	(79) ,
switchSpec60	(80) ,
switchSpec61	(81) ,
switchSpec62	(82) ,
switchSpec63	(83) ,
switchSpec64	(84) ,
switchSpec65	(85) ,
switchSpec66	(86) ,
switchSpec67	(87) ,
switchSpec68	(88) ,
switchSpec69	(89) ,
switchSpec70	(90) ,
switchSpec71	(91) ,
switchSpec72	(92) ,
switchSpec73	(93) ,
switchSpec74	(94) ,
switchSpec75	(95) ,
switchSpec76	(96) ,

```

switchSpec77      ( 97),
switchSpec78      ( 98),
switchSpec79      ( 99),
switchSpec80      (100),
switchSpec81      (101),
switchSpec82      (102),
switchSpec83      (103),
switchSpec84      (104),
switchSpec85      (105),
switchSpec86      (106),
switchSpec87      (107),
switchSpec88      (108),
switchSpec89      (109),
switchSpec90      (110),
switchSpec91      (111),
switchSpec92      (112),
switchSpec93      (113),
switchSpec94      (114),
switchSpec95      (115),
switchSpec96      (116),
switchSpec97      (117),
switchSpec98      (118),
switchSpec99      (119),
switchSpec100     (120) }

```

```

PresenceState ::= BIT STRING

```

```

{   available          ( 0),
    away                ( 1),
    busy                ( 2),
    calling             ( 3),
    dnd                 ( 4),
    meeting             ( 5),
    offline             ( 6),
    unknown             ( 7),
    vacation            ( 8),
    applicationSpec0    ( 9),
    applicationSpec1    (10),
    applicationSpec2    (11),
    applicationSpec3    (12),
    applicationSpec4    (13),
    applicationSpec5    (14),
    applicationSpec6    (15),
    applicationSpec7    (16),
    applicationSpec8    (17),
    applicationSpec9    (18),
    applicationSpec10   (19) }

```

```

END -- of CSTA-device-feature-types

```

9.7 Security

```

CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }

DEFINITIONS ::=
BEGIN

EXPORTS
CSTASecurityData, TimeInfo;

CSTASecurityData ::= SEQUENCE
{
  messageSequenceNumber  [0] IMPLICIT INTEGER    OPTIONAL,
  timestamp               TimeInfo                OPTIONAL,
  securityInfo            SecurityInfo             OPTIONAL }

SecurityInfo ::= CHOICE
{
  string                 OCTET STRING,
  private                 NULL } -- The actual encoding is added here,
                                -- replacing NULL with another valid ASN.1 type.

TimeInfo ::= GeneralizedTime

END -- of CSTA-security

```

9.8 Common extensions

```

CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }

DEFINITIONS ::=
BEGIN

EXPORTS
CSTACommonArguments, CSTAPrivateData;

IMPORTS
CSTASecurityData FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) };

CSTACommonArguments ::= [APPLICATION 30] IMPLICIT SEQUENCE
{
    security      [0] IMPLICIT    CSTASecurityData      OPTIONAL,
    privateData   [1] IMPLICIT    SEQUENCE OF CSTAPrivateData OPTIONAL }

CSTAPrivateData ::= CHOICE
{
    string        OCTET STRING,
    private        NULL } -- The actual encoding is added here,
                        -- replacing NULL with another valid ASN.1 type.

END -- of CSTA-extension-types

```

9.9 Call control

```

CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }

DEFINITIONS ::=
BEGIN

EXPORTS
AutoOriginate, CallCharacteristics, CallLinkageData, CallLinkageDataList, CallQualifyingData,
ConsultOptions, NetworkCapability, LocationInfo, LocationInfoList,
ProgressIndicator, ServicesPermitted;

IMPORTS
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CallControlServices, CallAssociatedServices, MediaAttachmentServices, RouteingServices,
VoiceUnitServices FROM CSTA-application-context-information-csta3
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) application-context-information( 200) };

AutoOriginate ::= ENUMERATED
{
  prompt                ( 0),
  doNotPrompt           ( 1) }

CallCharacteristics ::= BIT STRING
{
  acdCall                ( 0),
  lowPriorityCall         (11),
  priorityCall           ( 1),
  highPriorityCall        (12),
  maintainanceCall       ( 2),
  directAgent            ( 3),
  assistCall             ( 4),
  voiceUnitCall          ( 5),
  privateCall            ( 6),
  personalCall           ( 7),
  sensitiveCall          ( 8),
  confidentialCall       ( 9),
  encryptedCall          (10) }

CallQualifyingData ::= OCTET STRING

ConsultOptions ::= ENUMERATED
{
  unrestricted          ( 0),
  consultOnly           ( 1),
  transferOnly          ( 2),
  conferenceOnly        ( 3) }

NetworkCapability ::= SEQUENCE
{
  networkType ENUMERATED
  {
    iSDNPublic          ( 0),
    nonISDNPublic       ( 1),
    iSDNPrivate         ( 2),
    nonISDNPrivate      ( 3),
    other               ( 4) },
  eventsProvided BIT STRING
  {
    bridged             ( 0),
    allCleared          ( 1),

```

conferenced	(2),
connectionCleared	(3),
delivered	(4),
digitsDialed	(5),
diverted	(6),
established	(7),
failed	(8),
held	(9),
networkCapabilitiesChange	(10),
networkReached	(11),
offered	(12),
originated	(13),
queued	(14),
retrieved	(15),
serviceInitiated	(16),
transferred	(17) } OPTIONAL }

ProgressIndicator ::= SEQUENCE

```
{
    progressLocation ENUMERATED
    {
        user ( 0 ),
        privateNetServingLocal ( 1 ),
        publicNetServingLocal ( 2 ),
        transitNetwork ( 3 ),
        publicNetServingRemote ( 4 ),
        privateNetServingRemote ( 5 ),
        localInterface ( 6 ),
        internationalNetwork ( 7 ),
        networkBeyondInterwk ( 8 ),
        other ( 9 ) },
    progressDescription ENUMERATED
    {
        iSDNProgressDesc ( 0 ),
        qSIGProgressDesc ( 1 ),
        other ( 2 ) } }
```

ServicesPermitted ::= SEQUENCE

callControlServices	CallControlServices,
callAssociatedServices	CallAssociatedServices,
mediaAttachmentServices	MediaAttachmentServices,
routeingServices	RouteingServices,
voiceUnitServices	VoiceUnitServices }

CallLinkageDataList ::= SEQUENCE

newCallLinkageData	CallLinkageData,
oldCallLinkageData	CallLinkageData }

CallLinkageData ::= SEQUENCE

globalCallData	GlobalCallData,	
threadData	ThreadData	OPTIONAL }

GlobalCallData ::= SEQUENCE

globalCallSwitchingSubDomainName	IA5String (SIZE(1..64))	OPTIONAL,
globalCallLinkageID	GlobalCallLinkageID,	
callLinkageIDTimestamp	TimeInfo	OPTIONAL }

GlobalCallLinkageID ::= CHOICE

subDomainCallLinkageID	[0] IMPLICIT OCTET STRING (SIZE(1..8)),
globallyUniqueCallLinkageID	[1] IMPLICIT OCTET STRING (SIZE(1..16)) }

ThreadData ::= SEQUENCE

threadSwitchingSubDomainName	IA5String (SIZE(1..64))	OPTIONAL,

```

threadLinkageID          ThreadLinkageID,
threadIDTimeStamp        TimeInfo          OPTIONAL }

ThreadLinkageID ::= CHOICE
{
    subDomainThreadID      [0] IMPLICIT OCTET STRING (SIZE(1..8)),
    globallyUniqueThreadID [1] IMPLICIT OCTET STRING (SIZE(1..16)) }

Method ::= ENUMERATED -- http://www.iana.org/assignments/method-tokens/method-tokens.xhtml
{
    a-GPS          ( 0), -- "Method" defines, what location tracking system has been used
    aOA            ( 1), -- to allocate the presented Location Data
    cell           ( 2),
    derived        ( 3),
    deviceAssistedAGps ( 4),
    deviceBasedAGps ( 5),
    dHCP           ( 6),
    gPS            ( 7),
    handsetAflt    ( 8),
    handsetEflt    ( 9),
    hybridAGps     (10),
    ipdl           (11),
    lldpMed        (12),
    manual         (13),
    mpl            (14),
    nmr            (15),
    otdoa          (16),
    rfid           (17),
    rssi           (18),
    rssiRtt        (19),
    rtt            (20),
    ta             (21),
    taNmr          (22),
    triangulation  (23),
    utdoa          (24),
    wiremap        (25),
    locMet80211    (26) }

NenaCompanyIDType ::= IA5String -- NenaCompanyIds at http://www.nena.org/nena-company-id

TelUri247Type ::= IA5String -- must be a RFC-3966 conform Tel URI

ProvidedBy ::= SEQUENCE -- This DataType contains information about the organization
{
    -- which provided the allocated location data
    dataproviderID NenaCompanyIDType,
    telUri          TelUri247Type, -- Standard Telephone URI,
    uRL             IA5String } -- must be a emergency number, available 24/7

UsageRules ::= SEQUENCE
{
    retransmissionAllowed BOOLEAN,
    retentionExpires       TimeInfo, -- TimeInfo Already defined in CSTA-security
    rulesetReference       IA5String, -- rulesetReference must be a URI
    noteWell               IA5String OPTIONAL }

GpLocationInfo ::= SEQUENCE
{
    civicLocGml SEQUENCE
    {
        gmlFormat OCTET STRING, -- must conform xsd schemas of GML 3.0
        -- http://www.opengeospatial.org/standards/gml#downloads
    }
    civicLoc SEQUENCE
    {
        country IA5String (SIZE(0..2)), -- must conform the ISO 3166 country code
        al      [ 0] IMPLICIT IA5String OPTIONAL, -- NationalSubdivisions
    }
}

```



```

a2      [ 1] IMPLICIT IA5String OPTIONAL,      -- CountryOrParishOrDistrict
a3      [ 2] IMPLICIT IA5String OPTIONAL,      -- City
a4      [ 3] IMPLICIT IA5String OPTIONAL,      -- CityDivision
a5      [ 4] IMPLICIT IA5String OPTIONAL,      -- NeighborhoodOrBlock
a6      [ 5] IMPLICIT IA5String OPTIONAL,      -- Street
prd     [ 6] IMPLICIT IA5String OPTIONAL,      -- LeadingStreetDirection
pod     [ 7] IMPLICIT IA5String OPTIONAL,      -- TrailingStreetSuffix
sts     [ 8] IMPLICIT IA5String OPTIONAL,      -- StreetSuffix
hno     [ 9] IMPLICIT IA5String OPTIONAL,      -- HouseNumber
hns     [10] IMPLICIT IA5String OPTIONAL,      -- HouseNumberSuffix
lmk     [11] IMPLICIT IA5String OPTIONAL,      -- LandmarkVanity
loc     [12] IMPLICIT IA5String OPTIONAL,      -- AdditionalLocationInformation
flr     [13] IMPLICIT IA5String OPTIONAL,      -- Floor
nam     [14] IMPLICIT IA5String OPTIONAL,      -- ResidenceOrOfficeName
pc      [15] IMPLICIT IA5String OPTIONAL } OPTIONAL -- PostalCode
}

GpLocationInfoList ::= SEQUENCE OF GpLocationInfo

--GeoPriv has been defined, regarding the ISO/IEC 18051 respective Definition of LocationInfo
GeoPriv ::= SEQUENCE --Conforming RFC 4119
{
    gpLocationInfo      GpLocationInfoList,
    usageRules          [0] IMPLICIT UsageRules OPTIONAL,
    method              [1] IMPLICIT Method OPTIONAL,
    providedBy          [2] IMPLICIT ProvidedBy OPTIONAL }

LocationInfo ::= SEQUENCE OF GeoPriv

LocationInfoList ::= SEQUENCE OF LocationInfo

END -- of CSTA-call-control

```

9.10 Capability Exchange

CSTA-capability-exchange

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
```

DEFINITIONS ::=

BEGIN

EXPORTS

CapExchangeServList, SystemStatusServList, MonitoringServList, SnapshotServList,
CallControlServList, CallControlEvtsList, CallAssociatedServList,
CallAssociatedEvtsList, MediaServList, MediaEvtsList, RouteingServList, PhysDevEvtsList,
PhysDevServList, LogicalEvtsList, LogicalServList, DeviceMaintEvtsList, IOServicesServList,
DataCollectionServList, VoiceUnitServList, VoiceUnitEvtsList, CDRServList,
VendorSpecificServList, VendorSpecificEvtsList, DeviceIDFormat, SwDomainFeatures,
SwAppearanceAddressability, SwAppearanceTypes, IgnoreUnsupportedParameters, PauseTime,
TimeStampMode, MiscMonitorCaps, MaxLengthParameters, MaxLengthParametersContinued,
FilterThreshold, ServiceCrossRefID, DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes,
ACDModels, AgentLogOnModels, AppearanceType, TransAndConfSetup, MediaServiceCapsList, LogDevServList,
LogDevEvtsList, BookmarkReached, GetLocationTrackingSessions, GetLocationTrackingCapabilities,
LocationSessionInfo, LocationServicesServList;

IMPORTS

MediaServiceType, MediaServiceInstanceID, ConnectionMode, ConnectionModeBMap

FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

ServiceCrossRefID ::= OCTET STRING

-- Capability Bitmaps

LogDevServList ::= SEQUENCE

callControlServList	[0] IMPLICIT CallControlServList	OPTIONAL,
callAssociatedServList	[1] IMPLICIT CallAssociatedServList	OPTIONAL,
logicalServList	[2] IMPLICIT LogicalServList	OPTIONAL,
mediaServList	[3] IMPLICIT MediaServList	OPTIONAL,
iOServicesServList	[4] IMPLICIT IOServicesServList	OPTIONAL,
dataCollectionServList	[5] IMPLICIT DataCollectionServList	OPTIONAL,
voiceUnitServList	[6] IMPLICIT VoiceUnitServList	OPTIONAL,
locationServicesServList	[7] IMPLICIT LocationServicesServList	OPTIONAL }

LogDevEvtsList ::= SEQUENCE

callControlEvtsList	[0] IMPLICIT CallControlEvtsList	OPTIONAL,
callAssociatedEvtsList	[1] IMPLICIT CallAssociatedEvtsList	OPTIONAL,
logicalEvtsList	[2] IMPLICIT LogicalEvtsList	OPTIONAL,
mediaEvtsList	[3] IMPLICIT MediaEvtsList	OPTIONAL,
voiceUnitEvtsList	[4] IMPLICIT VoiceUnitEvtsList	OPTIONAL }

CapExchangeServList ::= SEQUENCE

getCSTAFeatures	[5] IMPLICIT GetCSTAFeatures	OPTIONAL,
getLogicalDeviceInformation	[0] IMPLICIT GetLogicalDeviceInformation	OPTIONAL,
getPhysicalDeviceInformation	[1] IMPLICIT GetPhysicalDeviceInformation	OPTIONAL,
getSwitchingFunctionCaps	[4] IMPLICIT GetSwitchingFunctionCapabilities	OPTIONAL,
getSwitchingFunctionDevices	[2] IMPLICIT GetSwitchingFunctionDevices	OPTIONAL,
switchingFunctionDevices	[3] IMPLICIT SwitchingFunctionDevices	OPTIONAL }

```

GetCSTAFeatures ::= BIT STRING
{
    privateDataInReq          ( 0),
    privateDataInAck          ( 1) }

```

```

GetLogicalDeviceInformation ::= BIT STRING
{
    privateDataInReq          ( 0),
    namedDeviceTypeInAck      ( 1),
    shortFormDeviceIDInAck    ( 2),
    miscMonitorCapsInAck      ( 3),
    maxCallBacksInAck         ( 4),
    maxAutoAnswerRingsInAck   ( 5),
    maxActiveCallsInAck       ( 6),
    maxHeldCallsInAck         ( 7),
    maxFwdSettingsInAck       ( 8),
    maxDevicesInConfInAck     ( 9),
    transAndConfSetupParameter (10),
    transAndConfSetupConsultationInAck (11),
    transAndConfSetupHoldMakeInAck (12),
    transAndConfSetupAlternateInAck (13),
    transAndConfSetupTwoCallsHoldInAck (14),
    transAndConfSetupTwoCallsConnectedInAck (15),
    mediaClassSupportInAck     (16),
    connectionRateListInAck    (17),
    delayToleranceListInAck    (18),
    numberOfChannelsInAck      (19),
    maxChannelBindInAck        (20),
    privateDataInAck          (21) }

```

```

GetPhysicalDeviceInformation ::= BIT STRING
{
    privateDataInReq          ( 0),
    namedDeviceTypesInAck     ( 1),
    otherLogicalDeviceListInAck ( 2),
    deviceModelNameInAck      ( 3),
    maxDisplaysInAck          ( 4),
    maxButtonsInAck           ( 5),
    maxLampsInAck             ( 6),
    maxRingPatternsInAck      ( 7),
    privateDataInAck          ( 8) }

```

```

GetSwitchingFunctionDevices ::= BIT STRING
{
    requestedDeviceID          ( 0),
    requestedDeviceCategoryACD  ( 1),
    requestedDeviceCategoryACDGroup ( 2),
    requestedDeviceCategoryHuntGroup ( 3),
    requestedDeviceCategoryPickGroup ( 4),
    requestedDeviceCategoryUserGroup (14),
    requestedDeviceCategoryOtherGroup ( 5),
    requestedDeviceCategoryNetwInterface ( 6),
    requestedDeviceCategoryPark ( 7),
    requestedDeviceCategoryRouteingDevice ( 8),
    requestedDeviceCategoryStation ( 9),
    requestedDeviceCategoryVoiceUnit (10),
    requestedDeviceCategoryGenericIV (15),
    requestedDeviceCategoryListenerIV (16),
    requestedDeviceCategoryVDTMFIV (17),
    requestedDeviceCategoryPromptIV (18),
    requestedDeviceCategoryPromptQueueIV (19),
    requestedDeviceCategoryMessageIV (20),
    requestedDeviceCategoryConference (21),
    requestedDeviceCategoryOther (11),

```

```

privateData          (12),
privateDataInAck     (13) }

```

GetSwitchingFunctionCapabilities ::= BIT STRING

```

{
    privateData          ( 0),
    mediaClassSupport    ( 1),
    numberOfChannels     ( 2),
    maxChannelBind       ( 3),
    miscMediaCallCharacteristics ( 4),
    connectionRateList  ( 5),
    delayToleranceRateList ( 6),
    pauseTime           ( 7),
    currentTime          ( 8),
    transAndConfSetupParameter ( 9),
    transAndConfSetupConsultation (10),
    transAndConfSetupHoldMake (11),
    transAndConfSetupAlternate (12),
    transAndConfSetupTwoCalls (13),
    transAndConfSetupTwoCallsConnected (14),
    miscMonitor          (15),
    correlatorDataSupported (16),
    dynamicFeatureSupported (17),
    callLinkageOptions    (18),
    acdModels             (19),
    agentLogOnModels      (20),
    agentStateModels      (21),
    privateDataVersionList (22),
    simpleThreshold       (23),
    filterThreshold       (24),
    maxDeviceHistoryEntries (25) }

```

SwitchingFunctionDevices ::= BIT STRING

```

{
    segmentID          ( 0),
    deviceListDeviceCategory ( 1),
    deviceListNamedDeviceTypes ( 2),
    deviceListDeviceAttributes ( 3),
    deviceListDeviceModelName ( 4),
    deviceListNidGroup      ( 6),
    privateData         ( 5) }

```

SystemStatusServList ::= SEQUENCE

```

{
    changeSystemStatusFilter [ 0] IMPLICIT ChangeSystemStatusFilter OPTIONAL,
    systemRegister          [ 1] IMPLICIT SystemRegister          OPTIONAL,
    systemStatusRegisterAbort [ 2] IMPLICIT SystemStatusRegisterAbort OPTIONAL,
    systemStatusRegisterCancel [ 3] IMPLICIT SystemStatusRegisterCancel OPTIONAL,
    requestSystemStatus      [ 4] IMPLICIT RequestSystemStatus      OPTIONAL,
    systemStatus             [ 5] IMPLICIT SystemStatus             OPTIONAL,
    swFunctionCapsChanged    [ 6] IMPLICIT SwFunctionCapsChanged    OPTIONAL,
    swFunctionDevicesChanged [ 7] IMPLICIT SwFunctionDevicesChanged OPTIONAL,
    getRegistrations         [ 8] IMPLICIT GetRegistrations         OPTIONAL,
    registrationInfo         [ 9] IMPLICIT RegistrationInfo         OPTIONAL }

```

ChangeSystemStatusFilter ::= BIT STRING

```

{
    requestedStatusFilterInitializing ( 0), -- optional parameters
    requestedStatusFilterEnabled      ( 1), -- optional parameters
    requestedStatusFilterNormal       ( 2), -- optional parameters
    requestedStatusFilterMessageLost  ( 3), -- optional parameters
    requestedStatusFilterDisabled     ( 4), -- optional parameters
    requestedStatusFilterPartiallyDisabled ( 5), -- optional parameters
    requestedStatusFilterOverloadImminent ( 6), -- optional parameters

```

```

        requestedStatusFilterOverloadReached          ( 7),    -- optional parameters
        requestedStatusFilterOverloadRelieved         ( 8),    -- optional parameters
        privateData                                   ( 9),    -- optional parameters
        privateDataInAck                             (10) }    -- optional parameters

SystemRegister ::= BIT STRING
{
    requestTypesSystemStatus                          ( 0),    -- optional parameters
    requestTypesRequestSystemStatus                   ( 1),    -- optional parameters
    requestTypesSwitchingFunctionCapsChanged          ( 2),    -- optional parameters
    requestTypesSwitchingFunctionDevicesChanged       ( 3),    -- optional parameters
    statusFilterInitializing                          ( 4),    -- optional parameters
    statusFilterEnabled                               ( 5),    -- optional parameters
    statusFilterNormal                                ( 6),    -- optional parameters
    statusFilterMessageLost                           ( 7),    -- optional parameters
    statusFilterDisabled                              ( 8),    -- optional parameters
    statusFilterPartiallyDisabled                     ( 9),    -- optional parameters
    statusFilterOverloadImminent                      (10),    -- optional parameters
    statusFilterOverloadReached                       (11),    -- optional parameters
    statusFilterOverloadRelieved                      (12),    -- optional parameters
    privateDataOctetString                           (13),    -- optional parameters
    privateData                                       (14),    -- optional parameters
    privateDataOctetStringInAck                       (15),    -- optional parameters
    privateDataInAck                                 (16) }    -- optional parameters

SystemStatusRegisterCancel ::= BIT STRING
{
    privateData                                       ( 0),    -- optional parameters
    privateDataInAck                                 ( 1) }    -- optional parameters

SystemStatusRegisterAbort ::= BIT STRING
{
    privateData                                       ( 0),    -- optional parameters
    privateDataInAck                                 ( 1) }    -- optional parameters

RequestSystemStatus ::= BIT STRING
{
    privateDataInReq                                  ( 0),    -- optional parameters
    systemStatusInitializing                          ( 1),    -- optional parameters
    systemStatusEnabled                              ( 2),    -- optional parameters
    systemStatusNormal                                ( 3),    -- optional parameters
    systemStatusMessageLost                           ( 4),    -- optional parameters
    systemStatusDisabled                              ( 5),    -- optional parameters
    systemStatusPartiallyDisabled                     ( 6),    -- optional parameters
    systemStatusOverloadImminent                      ( 7),    -- optional parameters
    systemStatusOverloadReached                       ( 8),    -- optional parameters
    systemStatusOverloadRelieved                      ( 9),    -- optional parameters
    privateDataInAck                                  (10),    -- optional parameters
    switchingFunctionSupportsSending                  (11),    -- misc characteristics
    switchingFunctionSupportsReceiving                 (12) }    -- misc characteristics

SystemStatus ::= BIT STRING
{
    systemStatusInitializing                          ( 0),    -- optional parameters
    systemStatusEnabled                              ( 1),    -- optional parameters
    systemStatusNormal                                ( 2),    -- optional parameters
    systemStatusMessageLost                           ( 3),    -- optional parameters
    systemStatusDisabled                              ( 4),    -- optional parameters
    systemStatusPartiallyDisabled                     ( 5),    -- optional parameters
    systemStatusOverloadImminent                      ( 6),    -- optional parameters
    systemStatusOverloadReached                       ( 7),    -- optional parameters
    systemStatusOverloadRelieved                      ( 8),    -- optional parameters
    privateData                                       ( 9),    -- optional parameters
    privateDataInAck                                 (10),    -- optional parameters

```

```

switchingFunctionSupportsSending          (11),    -- misc characteristics
switchingFunctionSupportsReceiving        (12) }    -- misc characteristics

SwFunctionCapsChanged ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }    -- optional parameters

SwFunctionDevicesChanged ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }    -- optional parameters

GetRegistrations ::= BIT STRING
{
    requestedReqTypes    ( 0),
    privateData          ( 1),
    privateDataInAck     ( 2),
    segmentedResponseProvided ( 3) }

RegistrationInfo ::= BIT STRING
{
    segmentID            ( 0),
    privateData          ( 1) }

MonitoringServList ::= SEQUENCE
{
    changeMonitorFilter    [ 0] IMPLICIT ChangeMonitorFilter    OPTIONAL,
    monitorStart           [ 1] IMPLICIT MonitorStart           OPTIONAL,
    monitorStop            [ 2] IMPLICIT MonitorStop            OPTIONAL,
    getMonitors            [ 3] IMPLICIT GetMonitors            OPTIONAL,
    monitorInfo            [ 4] IMPLICIT MonitorInfo            OPTIONAL }

ChangeMonitorFilter ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }    -- optional parameters

MonitorStart ::= BIT STRING
{
    monitorObjectDevice    ( 0),    -- optional parameters
    monitorObjectCall      ( 1),    -- optional parameters
    requestedMonitorFilter ( 2),    -- optional parameters
    monitorTypeCall        ( 3),    -- optional parameters
    monitorTypeDevice      ( 4),    -- optional parameters
    monitorMediaClassParameter ( 5), -- optional parameters
    monitorMediaClassAudio ( 6),    -- optional parameters
    monitorMediaClassData  ( 7),    -- optional parameters
    monitorMediaClassImage ( 8),    -- optional parameters
    monitorMediaClassVoice ( 9),    -- optional parameters
    monitorMediaClassChat  (15),    -- optional parameters
    monitorMediaClassEmail (16),    -- optional parameters
    monitorMediaClassMessage (17),  -- optional parameters
    monitorMediaClassIM    (18),    -- optional parameters
    monitorMediaClassSMS    (19),    -- optional parameters
    monitorMediaClassMMS    (20),    -- optional parameters
    monitorExistingCallsInAck (10),  -- optional parameters
    privateDataInAck       (11),    -- optional parameters
    callIDOnly             (12),    -- miscellaneous characteristics
    swDomainDefaultForMonitorTypeIsDevice (13), -- miscellaneous characteristics
    acceptsMonitorStartWhileOOS (14) } -- miscellaneous characteristics

MonitorStop ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1),    -- optional parameters
    switchingFunctionSupportsSending ( 2), -- misc characteristics
    switchingFunctionSupportsReceiving ( 3) } -- misc characteristics

```

```

GetMonitors ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1),    -- optional parameters
    segmentedResponseProvided  ( 2) }   -- optional parameters

MonitorInfo ::= BIT STRING
{
    segmentID                  ( 0),    -- optional parameters
    privateData                ( 1) }   -- optional parameters

SnapshotServList ::= SEQUENCE
{
    snapshotCall               [0] IMPLICIT SnapshotCall,
    snapshotDevice             [1] IMPLICIT SnapshotDevice,
    snapshotCallData           [2] IMPLICIT SnapshotCallData,
    snapshotDeviceData         [3] IMPLICIT SnapshotDeviceData }

SnapshotCall ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    locaConnectionStateInAck   ( 1),    -- optional parameters
    mediaServiceInfoListInAck  ( 2),    -- optional parameters
    mediaServiceVersionInAck   ( 3),    -- optional parameters
    mediaServiceInstanceInAck  ( 4),    -- optional parameters
    mediaStreamID              ( 5),    -- optional parameters
    connectionInformation      ( 6),    -- optional parameters
    mediaCallCharacteristicsInAck ( 7), -- optional parameters
    callCharacteristicsInAck    ( 8),    -- optional parameters
    callingDeviceInAck         ( 9),    -- optional parameters
    calledDeviceInAck          (10),    -- optional parameters
    subjectOfCallInAck         (11),    -- optional parameters
    messageInfoInAck           (12),    -- optional parameters
    languagePreferencesInAck   (13),    -- optional parameters
    deviceHistoryInAck         (14),    -- optional parameters
    privateDataInAck           (15),    -- optional parameters
    callIDOnly                 (16),    -- miscellaneous characteristics
    reportsWithSnapsCallData   (17),    -- optional parameters
    locationInfoList           (18) }   -- miscellaneous characteristics

SnapshotDevice ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    localCallStateCompoundCallState ( 1), -- optional parameters
    localCallStateSimpleCallState ( 2), -- optional parameters
    localCallStateUnknown      ( 3),    -- optional parameters
    mediaServiceInfoListInAck  ( 4),    -- optional parameters
    mediaServiceVersionInAck   ( 5),    -- optional parameters
    mediaServiceInstanceInAck  ( 6),    -- optional parameters
    mediaStreamID              ( 7),    -- optional parameters
    connectionInformation      ( 8),    -- optional parameters
    mediaCallCharacteristicsInAck ( 9), -- optional parameters
    privateDataInAck           (10),    -- optional parameters
    reportsWithSnapsDeviceData (11) }   -- miscellaneous characteristics

SnapshotCallData ::= BIT STRING
{
    segmentID                  ( 0),    -- optional parameters
    localConnectionState       ( 1),    -- optional parameters
    mediaServiceInformationList ( 2),    -- optional parameters
    mediaServiceVersion        ( 3),    -- optional parameters
    mediaServiceInstance       ( 4),    -- optional parameters
    mediaStreamID              ( 5),    -- optional parameters
    connectionInformation      ( 6),    -- optional parameters
    privateData                ( 7),    -- optional parameters
    locationInfoList           ( 8) }   -- optional parameters

```

SnapshotDeviceData ::= BIT STRING

{	segmentID	(0),	-- optional parameters
	localCallStateCompoundCallState	(1),	-- optional parameters
	localCallStateSimpleCallState	(2),	-- optional parameters
	localCallStateUnknown	(3),	-- optional parameters
	mediaServiceInformationList	(4),	-- optional parameters
	mediaServiceVersion	(5),	-- optional parameters
	mediaServiceInstance	(6),	-- optional parameters
	mediaStreamID	(7),	-- optional parameters
	connectionInformation	(8),	-- optional parameters
	mediaCallCharacteristics	(9),	-- optional parameters
	endpointDeviceID	(11),	-- optional parameters
	privateData	(10) }	-- optional parameters

CallControlServList ::= SEQUENCE

{	acceptCall	[0] IMPLICIT AcceptCall	OPTIONAL,
	alternateCall	[1] IMPLICIT AlternateCall	OPTIONAL,
	answerCall	[2] IMPLICIT AnswerCall	OPTIONAL,
	callBack	[3] IMPLICIT CallBack	OPTIONAL,
	callBackMessage	[4] IMPLICIT CallBackMessage	OPTIONAL,
	campOnCall	[5] IMPLICIT CampOnCall	OPTIONAL,
	clearCall	[6] IMPLICIT ClearCall	OPTIONAL,
	clearConnection	[7] IMPLICIT ClearConnection	OPTIONAL,
	conferenceCall	[8] IMPLICIT ConferenceCall	OPTIONAL,
	consultationCall	[9] IMPLICIT ConsultationCall	OPTIONAL,
	deflectCall	[10] IMPLICIT DeflectCall	OPTIONAL,
	dialDigits	[11] IMPLICIT DialDigits	OPTIONAL,
	directedPickupCall	[12] IMPLICIT DirectedPickupCall	OPTIONAL,
	groupPickupCall	[13] IMPLICIT GroupPickupCall	OPTIONAL,
	holdCall	[14] IMPLICIT HoldCall	OPTIONAL,
	intrudeCall	[15] IMPLICIT IntrudeCall	OPTIONAL,
	joinCall	[16] IMPLICIT JoinCall	OPTIONAL,
	makeCall	[17] IMPLICIT MakeCall	OPTIONAL,
	makeConnection	[25] IMPLICIT MakeConnection	OPTIONAL,
	makePredictiveCall	[18] IMPLICIT MakePredictiveCall	OPTIONAL,
	parkCall	[19] IMPLICIT ParkCall	OPTIONAL,
	reconnectCall	[20] IMPLICIT ReconnectCall	OPTIONAL,
	retrieveCall	[21] IMPLICIT RetrieveCall	OPTIONAL,
	sendMessage	[26] IMPLICIT SendMessage	OPTIONAL,
	singleStepConference	[22] IMPLICIT SingleStepConference	OPTIONAL,
	singleStepTransfer	[23] IMPLICIT SingleStepTransfer	OPTIONAL,
	transferCall	[24] IMPLICIT TransferCall	OPTIONAL }

AcceptCall ::= BIT STRING

{	correlatorData	(0),	-- optional parameters
	userData	(1),	-- optional parameters
	privateData	(2),	-- optional parameters
	privateDataInAck	(3),	-- optional parameters
	deviceIDOnly	(4),	-- misc characteristics
	ackModelMultiStep	(5) }	-- misc characteristics

AlternateCall ::= BIT STRING

{	alerting	(0),	-- initial states heldCall
	hold	(1),	-- initial states heldCall
	queued	(2),	-- initial states heldCall
	connectionReservation	(3),	-- optional parameters
	consultOptionConsultOnly	(4),	-- optional parameters
	consultOptionTransferOnly	(5),	-- optional parameters
	consultOptionConferenceOnly	(6),	-- optional parameters
	consultOptionUnrestricted	(7),	-- optional parameters


```

privateData                ( 8),    -- optional parameters
privateDataInAck           ( 9),    -- optional parameters
deviceIDOnly               (10),    -- misc characteristics
ackModelMultiStep          (11),    -- misc characteristics
supportsOfferedModeOfAlerting (12) } -- misc characteristics

AnswerCall ::= BIT STRING
{
    alerting                ( 0),    -- initial states
    initiated               ( 1),    -- initial states
    queued                  ( 2),    -- initial states
    correlatorData          ( 3),    -- optional parameters
    userData                ( 4),    -- optional parameters
    privateData             ( 5),    -- optional parameters
    privateDataInAck        ( 6),    -- optional parameters
    deviceIDOnly            ( 7),    -- misc characteristics
    supportsOfferedModeOfAlerting ( 8), -- misc characteristics
    ackModelMultiStep       ( 9) } -- misc characteristics

CallBack ::= BIT STRING
{
    alerting                ( 0),    -- initial states
    null                    ( 1),    -- initial states
    failed                   ( 2),    -- initial states
    queued                   ( 3),    -- initial states
    callCharacteristics      ( 4),    -- optional parameters
    subjectOfCall            (11),    -- optional parameters
    languagePreferences      (12),    -- optional parameters
    privateData             ( 5),    -- optional parameters
    targetDeviceInAck        ( 6),    -- optional parameters
    privateDataInAck        ( 7),    -- optional parameters
    deviceIDOnly            ( 8),    -- misc characteristics
    moreCallBacksNegAck      ( 9),    -- misc characteristics
    ackModelMultiStep       (10) } -- misc characteristics

CallBackMessage ::= BIT STRING
{
    alerting                ( 0),    -- initial states
    null                    ( 1),    -- initial states
    failed                   ( 2),    -- initial states
    queued                   ( 3),    -- initial states
    privateData             ( 4),    -- optional parameters
    targetDeviceInAck        ( 5),    -- optional parameters
    privateDataInAck        ( 6),    -- optional parameters
    deviceIDOnly            ( 7),    -- misc characteristics
    moreCallBacksNegAck      ( 8),    -- misc characteristics
    ackModelMultiStep       ( 9) } -- misc characteristics

CampOnCall ::= BIT STRING
{
    privateData             ( 0),    -- optional parameters
    privateDataInAck        ( 1),    -- optional parameters
    deviceIDOnly            ( 2),    -- misc characteristics
    ackModelMultiStep       ( 3) } -- misc characteristics

ClearCall ::= BIT STRING
{
    alerting                ( 0),    -- initial states
    connected               ( 1),    -- initial states
    failed                   ( 2),    -- initial states
    queued                   ( 3),    -- initial states
    initiated               ( 4),    -- initial states
    hold                    ( 5),    -- initial states
    userData                ( 6),    -- optional parameters
    privateData             ( 7),    -- optional parameters

```

```

privateDataInAck          ( 8),    -- optional parameters
deviceIDOnly              ( 9),    -- misc characteristics
callIDOnly                (10),    -- misc characteristics
ackModelMultiStep         (11),    -- misc characteristics
reason                    (12) }   -- optional parameters

```

ClearConnection ::= BIT STRING

```

{
    alerting                ( 0),    -- initial states
    connected               ( 1),    -- initial states
    fail                    ( 2),    -- initial states
    queued                  ( 3),    -- initial states
    initiated               ( 4),    -- initial states
    hold                    ( 5),    -- initial states
    correlatorData          ( 6),    -- optional parameters
    userData                ( 7),    -- optional parameters
    reason                  (12),    -- optional parameters
    privateData             ( 8),    -- optional parameters
    privateDataInAck        ( 9),    -- optional parameters
    deviceIDOnly            (10),    -- misc characteristics
    ackModelMultiStep       (11) }   -- misc characteristics

```

ConferenceCall ::= BIT STRING

```

{
    activeCallConnected     ( 0),    -- initial states
    activeCallHold          ( 1),    -- initial states
    heldCallConnected       ( 2),    -- initial states
    heldCallHold            ( 3),    -- initial states
    privateData             ( 4),    -- optional parameters
    connectionParameterInAck ( 5),    -- optional parameters
    endpointDeviceID        ( 6),    -- optional parameters
    resultingConnectionInfo ( 7),    -- optional parameters
    conferenceCallOnfoInAck ( 8),    -- optional parameters
    privateDataInAck        ( 9),    -- optional parameters
    protectedAgainstClearing (10),    -- misc characteristics
    deviceIDOnly            (11),    -- misc characteristics
    ackModelMultiStep       (12) }   -- misc characteristics

```

ConsultationCall ::= BIT STRING

```

{
    connectionReservation   ( 0),    -- optional parameters
    accountCode             ( 1),    -- optional parameters
    authCode                ( 2),    -- optional parameters
    correlatorData          ( 3),    -- optional parameters
    userData                ( 4),    -- optional parameters
    callCharacteristics      ( 5),    -- optional parameters
    callCharacteristicsACDCall ( 6),    -- optional parameters
    callCharacteristicsLowPriorityCall (29), -- optional parameters
    callCharacteristicsPriorityCall ( 7),    -- optional parameters
    callCharacteristicsHighPriorityCall (30), -- optional parameters
    callCharacteristicsMaintenanceCall ( 8),    -- optional parameters
    callCharacteristicsDirectAgent ( 9),    -- optional parameters
    callCharacteristicsAssistCall (10),    -- optional parameters
    callCharacteristicsVoiceUnitCall (11),    -- optional parameters
    callCharacteristicsPrivateCall (31),    -- optional parameters
    callCharacteristicsPersonalCall (32),    -- optional parameters
    callCharacteristicsSensitiveCall (33),    -- optional parameters
    callCharacteristicsConfidentialCall (34), -- optional parameters
    callCharacteristicsEncryptedCall (35),    -- optional parameters
    mediaCallCharacteristics (12),    -- optional parameters
    callingConnectionInfo    (13),    -- optional parameters
    flowDirectionTransmit    (14),    -- optional parameters
    flowDirectionReceive     (15),    -- optional parameters

```

flowDirectionTransmitAndReceive (16), -- optional parameters
 flowDirectionNone (36), -- optional parameters
 numberOfChannels (17), -- optional parameters
 mediaSessionInfo (37), -- optional parameters
 consultOptionConsultOnly (18), -- optional parameters
 consultOptionTransferOnly (19), -- optional parameters
 consultOptionConferenceOnly (20), -- optional parameters
 consultOptionUnrestricted (21), -- optional parameters
 subjectOfCall (38), -- optional parameters
 languagePreferences (39), -- optional parameters
 privateData (22), -- optional parameters
 initiatedCallInfoInAck (23), -- optional parameters
 privateDataInAck (24), -- optional parameters
 deviceIDOnly (25), -- misc characteristics
 multiStage (26), -- misc characteristics
 supportsAdjustmentOfMediaCharacteristics (27), -- misc characteristics
 ackModelMultiStep (28) } -- misc characteristics

DeflectCall ::= BIT STRING
 {
 alerting (0), -- initial states
 connected (1), -- initial states
 failed (2), -- initial states
 hold (3), -- initial states
 queued (4), -- initial states
 correlatorData (5), -- optional parameters
 userData (6), -- optional parameters
 subjectOfCall (11), -- optional parameters
 languagePreferences (12), -- optional parameters
 reason (13), -- optional parameters
 privateData (7), -- optional parameters
 privateDataInAck (8), -- optional parameters
 deviceIDOnly (9), -- misc characteristics
 ackModelMultiStep (10), -- misc characteristics
 callCharacteristicsInRequest (14), -- misc characteristics
 multipleDeviceIDsInNewDestination (15) } -- misc characteristics

DialDigits ::= BIT STRING
 {
 correlatorData (0), -- optional parameters
 privateData (1), -- optional parameters
 privateDataInAck (2), -- optional parameters
 deviceIDOnly (3), -- misc characteristics
 ackModelMultiStep (4) } -- misc characteristics

DirectedPickupCall ::= BIT STRING
 {
 alerting (0), -- initial states
 hold (1), -- initial states
 queued (2), -- initial states
 connected (3), -- initial states
 correlatorData (4), -- optional parameters
 userData (5), -- optional parameters
 privateData (6), -- optional parameters
 pickedCallInAck (7), -- optional parameters
 pickedCallInfoInAck (8), -- optional parameters
 privateDataInAck (9), -- optional parameters
 deviceIDOnly (10), -- misc characteristics
 supportsOfferedModeOfAlerting (11), -- misc characteristics
 supportsPrompting (12), -- misc characteristics
 promptingMode (13), -- misc characteristics
 ackModelMultiStep (14) } -- misc characteristics

GroupPickupCall ::= BIT STRING

{	alerting	(0),	-- initial states
	connected	(1),	-- initial states
	hold	(2),	-- initial states
	queued	(3),	-- initial states
	pickGroup	(4),	-- optional parameters
	correlatorData	(5),	-- optional parameters
	userData	(6),	-- optional parameters
	privateData	(7),	-- optional parameters
	pickedCallInAck	(8),	-- optional parameters
	pickedCallInfoInAck	(9),	-- optional parameters
	privateDataInAck	(10),	-- optional parameters
	supportsPrompting	(11),	-- misc characteristics
	promptingMode	(12),	-- misc characteristics
	supportsOfferedModeOfAlerting	(13),	-- misc characteristics
	ackModelMultiStep	(14) }	-- misc characteristics

HoldCall ::= BIT STRING

{	connectionReservation	(0),	-- optional parameters
	privateData	(1),	-- optional parameters
	privateDataInAck	(2),	-- optional parameters
	deviceIDOnly	(3),	-- misc characteristics
	ackModelMultiStep	(4) }	-- misc characteristics

IntrudeCall ::= BIT STRING

{	participationTypeSilent	(0),	-- optional parameters
	participationTypeActive	(1),	-- optional parameters
	userData	(2),	-- optional parameters
	privateData	(3),	-- optional parameters
	conferencedCallInfoInAck	(4),	-- optional parameters
	privateDataInAck	(5),	-- optional parameters
	deviceIDOnly	(6),	-- misc characteristics
	supportsConference	(7),	-- misc characteristics
	supportsAlternate	(8),	-- misc characteristics
	ackModelMultiStep	(9) }	-- misc characteristics

JoinCall ::= BIT STRING

{	autoOriginatePrompt	(0),	-- optional parameters
	autoOriginateDoNotPrompt	(1),	-- optional parameters
	participationTypeSilent	(2),	-- optional parameters
	participationTypeActive	(3),	-- optional parameters
	accountCode	(4),	-- optional parameters
	authCode	(5),	-- optional parameters
	correlatorData	(6),	-- optional parameters
	userData	(7),	-- optional parameters
	conferencedCallInAck	(8),	-- optional parameters
	conferencedCallInfoInAck	(9),	-- optional parameters
	privateDataInAck	(10),	-- optional parameters
	deviceIDOnly	(11),	-- misc characteristics
	supportsPrompting	(12),	-- misc characteristics
	promptingMode	(13),	-- misc characteristics
	ackModelMultiStep	(14) }	-- misc characteristics

MakeCall ::= BIT STRING

{	initiated	(0),	-- initials states
	null	(1),	-- initials states
	accountCode	(2),	-- optional parameters
	authCode	(3),	-- optional parameters
	autoOriginatePrompt	(4),	-- optional parameters
	autoOriginateDoNotPrompt	(5),	-- optional parameters

correlatorData	(6),	-- optional parameters
userData	(7),	-- optional parameters
callCharacteristics	(8),	-- optional parameters
callCharacteristicsACDCall	(9),	-- optional parameters
callCharacteristicsLowPriorityCall	(26),	-- optional parameters
callCharacteristicsPriorityCall	(10),	-- optional parameters
callCharacteristicsHighPriorityCall	(27),	-- optional parameters
callCharacteristicsMaintenanceCall	(11),	-- optional parameters
callCharacteristicsDirectAgent	(12),	-- optional parameters
callCharacteristicsAssistCall	(13),	-- optional parameters
callCharacteristicsVoiceUnitCall	(14),	-- optional parameters
callCharacteristicsPrivateCall	(28),	-- optional parameters
callCharacteristicsPersonalCall	(29),	-- optional parameters
callCharacteristicsSensitiveCall	(30),	-- optional parameters
callCharacteristicsConfidentialCall	(31),	-- optional parameters
callCharacteristicsEncryptedCall	(32),	-- optional parameters
mediaCallCharacteristics	(15),	-- optional parameters
callingConnectionInfo	(16),	-- optional parameters
subjectOfCall	(33),	-- optional parameters
languagePreferences	(34),	-- optional parameters
privateData	(17),	-- optional parameters
initiatedCallInfoInAck	(18),	-- optional parameters
privateDataInAck	(19),	-- optional parameters
multiStage	(20),	-- misc characteristics
supportsPrompting	(21),	-- misc characteristics
promptingMode	(22),	-- misc characteristics
offHook	(23),	-- misc characteristics
mediaCharacteristicsAdjustable	(24),	-- misc characteristics
ackModelMultiStep	(25),	-- misc characteristics
reason	(35) }	-- optional parameters

MakeConnection ::= BIT STRING

{	null	(0),	-- initials states
	accountCode	(1),	-- optional parameters
	authCode	(2),	-- optional parameters
	autoOriginatePrompt	(3),	-- optional parameters
	autoOriginateDoNotPrompt	(4),	-- optional parameters
	correlatorData	(5),	-- optional parameters
	callCharacteristics	(6),	-- optional parameters
	callCharacteristicsACDCall	(7),	-- optional parameters
	callCharacteristicsLowPriorityCall	(8),	-- optional parameters
	callCharacteristicsPriorityCall	(9),	-- optional parameters
	callCharacteristicsHighPriorityCall	(10),	-- optional parameters
	callCharacteristicsMaintenanceCall	(11),	-- optional parameters
	callCharacteristicsDirectAgent	(12),	-- optional parameters
	callCharacteristicsAssistCall	(13),	-- optional parameters
	callCharacteristicsVoiceUnitCall	(14),	-- optional parameters
	callCharacteristicsPrivateCall	(15),	-- optional parameters
	callCharacteristicsPersonalCall	(16),	-- optional parameters
	callCharacteristicsSensitiveCall	(17),	-- optional parameters
	callCharacteristicsConfidentialCall	(18),	-- optional parameters
	callCharacteristicsEncryptedCall	(19),	-- optional parameters
	mediaCallCharacteristics	(20),	-- optional parameters
	connectionInfo	(21),	-- optional parameters
	subjectOfCall	(22),	-- optional parameters
	languagePreferences	(23),	-- optional parameters
	reason	(24),	-- optional parameters
	maxDevices	(25),	-- optional parameters
	startTime	(26),	-- optional parameters
	duration	(27),	-- optional parameters

```

privateData (28), -- optional parameters
mediaCharacteristicsInAck (29), -- optional parameters
initiatedCallInfoInAck (30), -- optional parameters
privateDataInAck (31), -- optional parameters
supportsPrompting (32), -- optional parameters
promptingMode (33), -- optional parameters
mediaCharacteristicsAdjusted (34), -- optional parameters
ackModelMultistep (35) } -- optional parameters

```

MakePredictiveCall ::= BIT STRING

```

{
    signallingDetection ( 0), -- optional parameters
    signallingConditionCallDelivered ( 1), -- optional parameters
    signallingConditionCallEstablished ( 2), -- optional parameters
    signallingConditionActionDestinationDetection ( 3), -- optional parameters
    signallingConditionActionRemainConnected ( 4), -- optional parameters
    destinationDetection ( 5), -- optional parameters
    destinationConditionHumanVoice ( 6), -- optional parameters
    destinationConditionAnsweringMachine ( 7), -- optional parameters
    destinationConditionFax ( 8), -- optional parameters
    destinationActionClearConnection ( 9), -- optional parameters
    destinationActionRemainConnected (10), -- optional parameters
    defaultActionClearConnection (11), -- optional parameters
    defaultActionRemainConnected (12), -- optional parameters
    accountCode (13), -- optional parameters
    authCode (14), -- optional parameters
    autoOriginatePrompt (15), -- optional parameters
    autoOriginateDoNotPrompt (16), -- optional parameters
    alertTime (17), -- optional parameters
    correlatorData (18), -- optional parameters
    callCharacteristics (19), -- optional parameters
    callCharacteristicsACDCall (20), -- optional parameters
    callCharacteristicsLowPriorityCall (35), -- optional parameters
    callCharacteristicsPriorityCall (21), -- optional parameters
    callCharacteristicsHighPriorityCall (36), -- optional parameters
    callCharacteristicsMaintenanceCall (22), -- optional parameters
    callCharacteristicsDirectAgent (23), -- optional parameters
    callCharacteristicsAssistCall (24), -- optional parameters
    callCharacteristicsVoiceUnitCall (25), -- optional parameters
    callCharacteristicsPrivateCall (37), -- optional parameters
    callCharacteristicsPersonalCall (38), -- optional parameters
    callCharacteristicsSensitiveCall (39), -- optional parameters
    callCharacteristicsConfidentialCall (40), -- optional parameters
    callCharacteristicsEncryptedCall (41), -- optional parameters
    subjectOfCall (42), -- optional parameters
    languagePreferences (43), -- optional parameters
    userData (26), -- optional parameters
    privateData (27), -- optional parameters
    initiatedCallInfoInAck (28), -- optional parameters
    privateDataInAck (29), -- optional parameters
    deviceIDOnly (30), -- misc characteristics
    supportsPrompting (31), -- misc characteristics
    promptingMode (32), -- misc characteristics
    reservesCallingDevice (33), -- misc characteristics
    ackModelMultiStep (34) } -- misc characteristics

```

ParkCall ::= BIT STRING

```

{
    hold ( 0), -- initial states
    connected ( 1), -- initial states
    correlatorData ( 2), -- optional parameters
    subjectOfCall ( 8), -- optional parameters

```

```

languagePreferences          ( 9),    -- optional parameters
privateData                  ( 3),    -- optional parameters
parkedToInAck                ( 4),    -- optional parameters
privateDataInAck             ( 5),    -- optional parameters
deviceIDOnly                 ( 6),    -- misc characteristics
ackModelMultiStep            ( 7) }   -- misc characteristics

ReconnectCall ::= BIT STRING
{
    alerting                  ( 0),    -- initial states
    connected                 ( 1),    -- initial states
    fail                      ( 2),    -- initial states
    initiated                 ( 3),    -- initial states
    queued                   ( 4),    -- initial states
    privateData               ( 5),    -- optional parameters
    privateDataInAck          ( 6),    -- optional parameters
    deviceIDOnly              ( 7),    -- misc characteristics
    ackModelMultiStep         ( 8) }   -- misc characteristics

RetrieveCall ::= BIT STRING
{
    privateData               ( 0),    -- optional parameters
    privateDataInAck          ( 1),    -- optional parameters
    deviceIDOnly              ( 2),    -- misc characteristics
    ackModelMultiStep         ( 3) }   -- misc characteristics

SendMessage ::= BIT STRING
{
    accountCode               ( 0),    -- optional parameters
    authCode                  ( 1),    -- optional parameters
    correlatorData            ( 2),    -- optional parameters
    userData                  ( 3),    -- optional parameters
    callCharacteristics        ( 4),    -- optional parameters
    callCharacteristicsACDCall ( 5),    -- optional parameters
    callCharacteristicsLowPriorityCall ( 6), -- optional parameters
    callCharacteristicsPriorityCall ( 7), -- optional parameters
    callCharacteristicsHighPriorityCall ( 8), -- optional parameters
    callCharacteristicsMaintenanceCall ( 9), -- optional parameters
    callCharacteristicsDirectAgent (10), -- optional parameters
    callCharacteristicsAssistCall (11), -- optional parameters
    callCharacteristicsVoiceUnitCall (12), -- optional parameters
    callCharacteristicsPrivateCall (13), -- optional parameters
    callCharacteristicsPersonalCall (14), -- optional parameters
    callCharacteristicsSensitiveCall (15), -- optional parameters
    callCharacteristicsConfidentialCall (16), -- optional parameters
    callCharacteristicsEncryptedCall (17), -- optional parameters
    mediaCallCharacteristics (18), -- optional parameters
    subjectOfCall             (19),    -- optional parameters
    languagePreferences        (20),    -- optional parameters
    privateData                (21),    -- optional parameters
    privateDataInAck           (22) }   -- optional parameters

SingleStepConference ::= BIT STRING
{
    participationTypeActive    ( 0),    -- optional parameters
    participationTypeSilent    ( 1),    -- optional parameters
    accountCode                ( 2),    -- optional parameters
    authCode                   ( 3),    -- optional parameters
    correlatorData             ( 4),    -- optional parameters
    userData                   ( 5),    -- optional parameters
    privateData                ( 6),    -- optional parameters
    conferencedCallInfoInAck   ( 7),    -- optional parameters
    privateDataInAck           ( 8),    -- optional parameters

```

```

deviceIDOnly          ( 9),    -- misc characteristics
ackModelMultiStep     (10) }   -- misc characteristics

```

SingleStepTransfer ::= BIT STRING

```

{
    accountCode          ( 0),    -- optional parameters
    authCode             ( 1),    -- optional parameters
    correlatorData       ( 2),    -- optional parameters
    userData             ( 3),    -- optional parameters
    subjectOfCall        (13),    -- optional parameters
    languagePreferences (14),    -- optional parameters
    reason               (15),    -- optional parameters
    privateData          ( 4),    -- optional parameters
    connectionParameterInAck ( 5), -- optional parameters
    endpointDeviceID     ( 6),    -- optional parameters
    resolutionConnectionInformation ( 7), -- optional parameters
    transferredCollInfoInAck ( 8), -- optional parameters
    privateDataInAck     ( 9),    -- optional parameters
    deviceIDOnly         (10),    -- misc characteristics
    multipleDevices      (11),    -- misc characteristics
    ackModelMultiStep    (12),    -- misc characteristics
    callCharacteristicsInRequest (16) } -- misc characteristics

```

TransferCall ::= BIT STRING

```

{
    activeCallConnected ( 0),    -- initial states
    activeCallHold      ( 1),    -- initial states
    heldCallConnected   ( 2),    -- initial states
    heldCallHold        ( 3),    -- initial states
    privateData         ( 4),    -- optional parameters
    connectionsParameterInAck ( 5), -- optional parameters
    endpointDeviceID    ( 6),    -- optional parameters
    resultingConnectionInformation ( 7), -- optional parameters
    transferredCallInfoInAck ( 8), -- optional parameters
    privateDataInAck    ( 9),    -- optional parameters
    deviceIDOnly        (10),    -- misc characteristics
    multipleDevices      (11),    -- misc characteristics
    ackModelMultiStep   (12) }   -- misc characteristics

```

CallControlEvtsList ::= SEQUENCE

```

{
    bridged          [ 0] IMPLICIT Bridged          OPTIONAL,
    callCleared      [ 1] IMPLICIT CallCleared      OPTIONAL,
    conferenced      [ 2] IMPLICIT Conferenced      OPTIONAL,
    connectionCleared [ 3] IMPLICIT ConnectionCleared OPTIONAL,
    delivered        [ 4] IMPLICIT Delivered        OPTIONAL,
    digitsDialed     [ 5] IMPLICIT DigitsDialed     OPTIONAL,
    diverted         [ 6] IMPLICIT Diverted         OPTIONAL,
    established      [ 7] IMPLICIT Established      OPTIONAL,
    failed           [ 8] IMPLICIT Failed           OPTIONAL,
    held             [ 9] IMPLICIT Held             OPTIONAL,
    netwCapsChanged  [10] IMPLICIT NetwCapsChanged  OPTIONAL,
    netwReached      [11] IMPLICIT NetwReached      OPTIONAL,
    offered          [12] IMPLICIT Offered          OPTIONAL,
    originated       [13] IMPLICIT Originated       OPTIONAL,
    queued           [14] IMPLICIT Queued           OPTIONAL,
    retrieved        [15] IMPLICIT Retrieved        OPTIONAL,
    serviceInitiated [16] IMPLICIT ServiceInitiated OPTIONAL,
    transferred      [17] IMPLICIT Transferred      OPTIONAL }

```

Bridged ::= BIT STRING

```

{
    correlatorData ( 0),    -- optional parameters
    userData       ( 1),    -- optional parameters

```


servicesPermitted (2), -- optional parameters
 mediaCallCharacteristics (3), -- optional parameters
 callCharacteristics (4), -- optional parameters
 bridgedConnectionInfo (5), -- optional parameters
 languagePreferences (8), -- optional parameters
 callLinkageData (7), -- optional parameters
 privateData (6), -- optional parameters
 locationInfoList (9) } -- optional parameters

CallCleared ::= BIT STRING
 {
 correlatorData (0), -- optional parameters
 userData (1), -- optional parameters
 mediaCallCharacteristics (2), -- optional parameters
 callCharacteristics (3), -- optional parameters
 callLinkageData (6), -- optional parameters
 privateData (4), -- optional parameters
 callIDOnly (5) } -- miscellaneous characteristics

Conferenced ::= BIT STRING
 {
 confereceConnectionsEndpointDeviceID (0), -- optional parameters
 confereceConnectionsresultingConnectionInfo (1), -- optional parameters
 userData (2), -- optional parameters
 servicesPermitted (3), -- optional parameters
 mediaCallCharacteristics (4), -- optional parameters
 callCharacteristics (5), -- optional parameters
 bridgedConnectionInfo (6), -- optional parameters
 lannguagePreferences (8), -- optional parameters
 deviceHistory (9), -- optional parameters
 privateData (7), -- optional parameters
 locationInfoList (10) } -- optional parameters

ConnectionCleared ::= BIT STRING
 {
 correlatorData (0), -- optional parameters
 userData (1), -- optional parameters
 chargingInfo (2), -- optional parameters
 numberUnitsNumberOfChargingUnits (3), -- optional parameters
 numberUnitsTypeOfUnits (4), -- optional parameters
 numberUnitsNumberOfCurrencyUnits (5), -- optional parameters
 typeOfChargingInfoSubTotal (6), -- optional parameters
 typeOfChargingInfoTotal (7), -- optional parameters
 chargingMultiplierATHousandth (8), -- optional parameters
 chargingMultiplierAHundredth (9), -- optional parameters
 chargingMultiplierATenth (10), -- optional parameters
 chargingMultiplierOne (11), -- optional parameters
 chargingMultiplierTen (12), -- optional parameters
 chargingMultiplierHundred (13), -- optional parameters
 chargingMultiplierThousand (14), -- optional parameters
 servicesPermitted (15), -- optional parameters
 mediaCallCharacteristics (16), -- optional parameters
 callCharacteristics (17), -- optional parameters
 droppedConnectionInfo (18), -- optional parameters
 callLinkageData (20), -- optional parameters
 languagePreferences (21), -- optional parameters
 deviceHistory (22), -- optional parameters
 privateData (19), -- optional parameters
 locationInfoList (23) } -- optional parameters

Delivered ::= BIT STRING
 {
 originatingNIDConnection (0), -- optional parameters
 userData (1), -- optional parameters
 }

```

    servicesPermitted                ( 2),  -- optional parameters
    netwCallingDevice                ( 3),  -- optional parameters
    netwCalledDevice                 ( 4),  -- optional parameters
    mediaCallCharacteristics          ( 5),  -- optional parameters
    callCharacteristics               ( 6),  -- optional parameters
    connectionInfo                   ( 7),  -- optional parameters
    subjectOfCall                     ( 9),  -- optional parameters
    messageInfo                      (10),  -- optional parameters
    languagePreferences              (11),  -- optional parameters
    deviceHistory                    (12),  -- optional parameters
    privateData                      ( 8),  -- optional parameters
    locationInfoList                 (13) } -- optional parameters

DigitsDialed ::= BIT STRING
{
    servicesPermitted                ( 0),  -- optional parameters
    netwCallingDevice                ( 1),  -- optional parameters
    netwCalledDevice                 ( 2),  -- optional parameters
    diallingConnectionInfo           ( 3),  -- optional parameters
    callCharacteristics              ( 4),  -- optional parameters
    languagePreferences              ( 6),  -- optional parameters
    privateData                     ( 5),  -- optional parameters
    locationInfoList                 ( 7) } -- optional parameters

Diverted ::= BIT STRING
{
    callingDevice                    ( 0),  -- optional parameters
    calledDevice                     ( 1),  -- optional parameters
    userData                         ( 2),  -- optional parameters
    servicesPermitted                ( 3),  -- optional parameters
    mediaCallCharacteristics          ( 4),  -- optional parameters
    callCharacteristics               ( 5),  -- optional parameters
    connectionInfo                   ( 6),  -- optional parameters
    netwCallingDevice                ( 7),  -- optional parameters
    netwCalledDevice                 ( 8),  -- optional parameters
    subjectOfCall                     (11),  -- optional parameters
    messageInfo                      (12),  -- optional parameters
    languagePreferences              (13),  -- optional parameters
    deviceHistory                    (14),  -- optional parameters
    privateData                      ( 9),  -- optional parameters
    sendsDivertedToAll               (10),  -- optional parameters
    locationInfoList                 (15) } -- optional parameters

Established ::= BIT STRING
{
    originatingNIDConnection         ( 0),  -- optional parameters
    userData                         ( 1),  -- optional parameters
    servicesPermitted                ( 2),  -- optional parameters
    netwCallingDevice                ( 3),  -- optional parameters
    netwCalledDevice                 ( 4),  -- optional parameters
    mediaCallCharacteristics          ( 5),  -- optional parameters
    callCharacteristics               ( 6),  -- optional parameters
    establishedConnectionInfo         ( 7),  -- optional parameters
    subjectOfCall                     ( 9),  -- optional parameters
    messageInfo                      (10),  -- optional parameters
    languagePreferences              (11),  -- optional parameters
    deviceHistory                    (12),  -- optional parameters
    privateData                      ( 8),  -- optional parameters
    locationInfoList                 (13) } -- optional parameters

Failed ::= BIT STRING
{
    originatingNIDConnection         ( 0),  -- optional parameters
    userData                         ( 1),  -- optional parameters

```

```

servicesPermitted          ( 2),  -- optional parameters
netwCallingDevice          ( 3),  -- optional parameters
netwCalledDevice           ( 4),  -- optional parameters
mediaCallCharacteristics   ( 5),  -- optional parameters
callCharacteristics        ( 6),  -- optional parameters
failedConnectionInfo       ( 7),  -- optional parameters
subjectOfCall              (10),  -- optional parameters
messageInfo                (11),  -- optional parameters
languagePreferences        (12),  -- optional parameters
deviceHistory              (13),  -- optional parameters
privateData                ( 8),  -- optional parameters
callIDOnly                 ( 9),  -- miscellaneous characteristics
locationInfoList           (14) } -- optional parameters

Held ::= BIT STRING
{
    correlatorData          ( 0),  -- optional parameters
    servicesPermitted       ( 1),  -- optional parameters
    mediaCallCharacteristics ( 2),  -- optional parameters
    callCharacteristics      ( 3),  -- optional parameters
    heldConnectionInfo      ( 4),  -- optional parameters
    callLinkageData         ( 6),  -- optional parameters
    languagePreferences     ( 7),  -- optional parameters
    privateData             ( 5),  -- optional parameters
    locationInfoList        ( 8) } -- optional parameters

NetwCapsChanged ::= BIT STRING
{
    progressLocationUser          ( 0),  -- optional parameters
    progressLocationPrivateServLocal ( 1),  -- optional parameters
    progressLocationPublicServLocal  ( 2),  -- optional parameters
    progressLocationTransit         ( 3),  -- optional parameters
    progressLocationPublicServRemote ( 4),  -- optional parameters
    progressLocationPrivateServRemote ( 5),  -- optional parameters
    progressLocationLocal           ( 6),  -- optional parameters
    progressLocationInternational    ( 7),  -- optional parameters
    progressLocationNetwBeyondInterworking ( 8),  -- optional parameters
    progressLocationOther            ( 9),  -- optional parameters
    progressDescriptionISDN          (10),  -- optional parameters
    progressDescriptionQSIG          (11),  -- optional parameters
    progressDescriptionOther         (12),  -- optional parameters
    userData                        (13),  -- optional parameters
    typeOfNetworkISDNPublic          (14),  -- optional parameters
    typeOfNetworkNonISDNPublic       (15),  -- optional parameters
    typeOfNetworkISDNPrivate         (16),  -- optional parameters
    typeOfNetworkNonISDNPrivate      (17),  -- optional parameters
    typeOfNetworkOther               (18),  -- optional parameters
    eventsProvidedParameter          (19),  -- optional parameters
    eventsProvidedBridged             (20),  -- optional parameters
    eventsProvidedCallCleared         (21),  -- optional parameters
    eventsProvidedConferenced         (22),  -- optional parameters
    eventsProvidedConnectionCleared  (23),  -- optional parameters
    eventsProvidedDelivered           (24),  -- optional parameters
    eventsProvidedDigitsDialed        (25),  -- optional parameters
    eventsProvidedDiverted            (26),  -- optional parameters
    eventsProvidedEstablished         (27),  -- optional parameters
    eventsProvidedFailed              (28),  -- optional parameters
    eventsProvidedHeld                (29),  -- optional parameters
    eventsProvidedNetwCapsChanged     (30),  -- optional parameters
    eventsProvidedNetwReached         (31),  -- optional parameters
    eventsProvidedOffered             (32),  -- optional parameters
    eventsProvidedOriginated          (33),  -- optional parameters

```

eventsProvidedQueued	(34),	-- optional parameters
eventsProvidedRetrieved	(35),	-- optional parameters
eventsProvidedServiceInitiated	(36),	-- optional parameters
eventsProvidedTransferred	(37),	-- optional parameters
servicesPermitted	(38),	-- optional parameters
mediaCallCharacteristics	(39),	-- optional parameters
callCharacteristics	(40),	-- optional parameters
outboundConnectionInfo	(41),	-- optional parameters
languagePreferences	(43),	-- optional parameters
privateData	(42),	-- optional parameters
locationInfoList	(44) }	-- optional parameters

NetwReached ::= BIT STRING

{	originatingNIDConnection	(0),	-- optional parameters
	userData	(1),	-- optional parameters
	typeOfNetworkISDNPublic	(2),	-- optional parameters
	typeOfNetworkNonISDNPublic	(3),	-- optional parameters
	typeOfNetworkISDNPrivate	(4),	-- optional parameters
	typeOfNetworkNonISDNPrivate	(5),	-- optional parameters
	typeOfNetworkOther	(6),	-- optional parameters
	eventsProvidedParameter	(7),	-- optional parameters
	eventsProvidedBridged	(8),	-- optional parameters
	eventsProvidedCallCleared	(9),	-- optional parameters
	eventsProvidedConferenced	(10),	-- optional parameters
	eventsProvidedConnectionCleared	(11),	-- optional parameters
	eventsProvidedDelivered	(12),	-- optional parameters
	eventsProvidedDigitsDialed	(13),	-- optional parameters
	eventsProvidedDiverted	(14),	-- optional parameters
	eventsProvidedEstablished	(15),	-- optional parameters
	eventsProvidedFailed	(16),	-- optional parameters
	eventsProvidedHeld	(17),	-- optional parameters
	eventsProvidedNetwCapsChanged	(18),	-- optional parameters
	eventsProvidedNetwReached	(19),	-- optional parameters
	eventsProvidedOffered	(20),	-- optional parameters
	eventsProvidedOriginated	(21),	-- optional parameters
	eventsProvidedQueued	(22),	-- optional parameters
	eventsProvidedRetrieved	(23),	-- optional parameters
	eventsProvidedServiceInitiated	(24),	-- optional parameters
	eventsProvidedTransferred	(25),	-- optional parameters
	servicesPermitted	(26),	-- optional parameters
	mediaCallCharacteristics	(27),	-- optional parameters
	callCharacteristics	(28),	-- optional parameters
	outboundConnectionInfo	(29),	-- optional parameters
	netwCallingDevice	(30),	-- optional parameters
	netwCalledDevice	(31),	-- optional parameters
	languagePreferences	(33),	-- optional parameters
	deviceHistory	(34),	-- optional parameters
	privateData	(32),	-- optional parameters
	locationInfoList	(35) }	-- optional parameters

Offered ::= BIT STRING

{	originatingNIDConnection	(0),	-- optional parameters
	userData	(1),	-- optional parameters
	servicesPermitted	(2),	-- optional parameters
	netwCallingDevice	(3),	-- optional parameters
	netwCalledDevice	(4),	-- optional parameters
	mediaCallCharacteristics	(5),	-- optional parameters
	callCharacteristics	(6),	-- optional parameters
	offeredConnectionInfo	(7),	-- optional parameters
	subjectOfCall	(9),	-- optional parameters

messageInfo (10), -- optional parameters
languagePreferences (11), -- optional parameters
deviceHistory (12), -- optional parameters
privateData (8), -- optional parameters
locationInfoList (13) } -- optional parameters

Originated ::= BIT STRING
{
originatingDevice (0), -- optional parameters
servicesPermitted (1), -- optional parameters
netwCallingDevice (2), -- optional parameters
netwCalledDevice (3), -- optional parameters
mediaCallCharacteristics (4), -- optional parameters
callCharacteristics (5), -- optional parameters
originatedConnectionInfo (6), -- optional parameters
subjectOfCall (8), -- optional parameters
messageInfo (9), -- optional parameters
languagePreferences (10), -- optional parameters
privateData (7), -- optional parameters
locationInfoList (11) } -- optional parameters

Queued ::= BIT STRING
{
numberQueued (0), -- optional parameters
callsInFront (1), -- optional parameters
userData (2), -- optional parameters
servicesPermitted (3), -- optional parameters
netwCallingDevice (4), -- optional parameters
netwCalledDevice (5), -- optional parameters
mediaCallCharacteristics (6), -- optional parameters
callCharacteristics (7), -- optional parameters
queuedConnectionInfo (8), -- optional parameters
subjectOfCall (10), -- optional parameters
messageInfo (11), -- optional parameters
languagePreferences (12), -- optional parameters
deviceHistory (13), -- optional parameters
privateData (9), -- optional parameters
locationInfoList (14) } -- optional parameters

Retrieved ::= BIT STRING
{
correlatorData (0), -- optional parameters
servicesPermitted (1), -- optional parameters
mediaCallCharacteristics (2), -- optional parameters
callCharacteristics (3), -- optional parameters
retrievedConnectionInfo (4), -- optional parameters
callLinkageData (6), -- optional parameters
languagePreferences (7), -- optional parameters
deviceHistory (8), -- optional parameters
privateData (5), -- optional parameters
locationInfoList (9) } -- optional parameters

ServiceInitiated ::= BIT STRING
{
servicesPermitted (0), -- optional parameters
mediaCallCharacteristics (1), -- optional parameters
callCharacteristics (2), -- optional parameters
initiatedConnectionInfo (3), -- optional parameters
netwCallingDevice (4), -- optional parameters
netwCalledDevice (5), -- optional parameters
subjectOfCall (7), -- optional parameters
messageInfo (8), -- optional parameters
languagePreferences (9), -- optional parameters
privateData (6), -- optional parameters

```

calledDevice          (10),    -- optional parameters
locationInfoList      (11) }  -- optional parameters

```

Transferred ::= BIT STRING

```

{
    transferredConnectionsEndpointDeviceID      ( 0),    -- optional parameters
    transferredConnectionsResultingConnectionInfo ( 1),    -- optional parameters
    userData                                    ( 2),    -- optional parameters
    chargingInfo                                ( 3),    -- optional parameters
    numberUnitsNumberOfChargingUnits            ( 4),    -- optional parameters
    numberUnitsTypeOfUnits                      ( 5),    -- optional parameters
    numberUnitsNumberOfCurrencyUnits            ( 6),    -- optional parameters
    typeOfChargingInfoSubTotal                  ( 7),    -- optional parameters
    typeOfChargingInfoTotal                    ( 8),    -- optional parameters
    chargingMultiplierAThousandth              ( 9),    -- optional parameters
    chargingMultiplierAHundredth               (10),    -- optional parameters
    chargingMultiplierATenth                   (11),    -- optional parameters
    chargingMultiplierOne                      (12),    -- optional parameters
    chargingMultiplierTen                      (13),    -- optional parameters
    chargingMultiplierHundred                  (14),    -- optional parameters
    chargingMultiplierThousand                 (15),    -- optional parameters
    servicesPermitted                          (16),    -- optional parameters
    mediaCallCharacteristics                   (17),    -- optional parameters
    callCharacteristics                        (18),    -- optional parameters
    connectionInfo                            (19),    -- optional parameters
    languagePreferences                        (21),    -- optional parameters
    deviceHistory                             (22),    -- optional parameters
    privateData                               (20) }    -- optional parameters

```

CallAssociatedServList ::= SEQUENCE

```

{
    associateData          [0] IMPLICIT AssociateData          OPTIONAL,
    cancelTelephonyTones   [1] IMPLICIT CancelTelephonyTones   OPTIONAL,
    changeConnectionInformation [5] IMPLICIT ChangeConnectionInformation OPTIONAL,
    generateDigits          [2] IMPLICIT GenerateDigits          OPTIONAL,
    generateTelephonyTones  [3] IMPLICIT GenerateTelephonyTones  OPTIONAL,
    sendUserInformation     [4] IMPLICIT SendUserInformation     OPTIONAL }

```

AssociateData ::= BIT STRING

```

{
    accountCode          ( 0),    -- optional parameters
    authCode             ( 1),    -- optional parameters
    correlatorData        ( 2),    -- optional parameters
    callQualifyingData    ( 3),    -- optional parameters
    callCharacteristics    ( 9),    -- optional parameters
    subjectOfCall         (10),    -- optional parameters
    languagePreferences    (11),    -- optional parameters
    privateData           ( 4),    -- optional parameters
    privateDataInAck       ( 5),    -- optional parameters
    deviceIDOnly           ( 6),    -- misc characteristics
    rejectsRequestsWithOldConnectionID ( 7),    -- misc characteristics
    ackModelMultiStep      ( 8),    -- misc characteristics
    deviceInfo             (12) }  -- misc characteristics

```

CancelTelephonyTones ::= BIT STRING

```

{
    privateData          ( 0),    -- optional parameters
    privateDataInAck      ( 1),    -- optional parameters
    ackModelMultiStep     ( 2) }  -- misc characteristics

```

ChangeConnectionInformation ::= BIT STRING

```

{
    privateData          ( 0),    -- optional parameters
    privateDataInAck      ( 1) }  -- optional parameters

```

GenerateDigits ::= BIT STRING

{	digitModeDTMF	(0),	-- optional parameters
	digitModePulse	(1),	-- optional parameters
	toneDuration	(2),	-- optional parameters
	pulseRate	(3),	-- optional parameters
	pauseDuration	(4),	-- optional parameters
	privateData	(5),	-- optional parameters
	privateDataInAck	(6),	-- optional parameters
	deviceIDOnly	(7),	-- misc characteristics
	supportsDTMFTonesABCD	(8),	-- misc characteristics
	supportsPauseToneChar	(9),	-- misc characteristics
	ackModelMultiStep	(10) }	-- misc characteristics

GenerateTelephonyTones ::= BIT STRING

{	toneToSendBeep	(0),	-- optional parameters
	toneToSendBilling	(1),	-- optional parameters
	toneToSendBusy	(2),	-- optional parameters
	toneToSendCarrier	(3),	-- optional parameters
	toneToSendConfirmation	(4),	-- optional parameters
	toneToSendDial	(5),	-- optional parameters
	toneToSendFaxCNG	(6),	-- optional parameters
	toneToSendHold	(7),	-- optional parameters
	toneToSendHowler	(8),	-- optional parameters
	toneToSendIntrusion	(9),	-- optional parameters
	toneToSendModemCNG	(10),	-- optional parameters
	toneToSendPark	(11),	-- optional parameters
	toneToSendRecordWarning	(12),	-- optional parameters
	toneToSendReorder	(13),	-- optional parameters
	toneToSendRingback	(14),	-- optional parameters
	toneToSendSilence	(15),	-- optional parameters
	toneToSendSitVC	(16),	-- optional parameters
	toneToSendSitIC	(17),	-- optional parameters
	toneToSendSitRO	(18),	-- optional parameters
	toneToSendSitNC	(19),	-- optional parameters
	toneToSendSf0	(20),	-- optional parameters
	toneToSendSf1	(21),	-- optional parameters
	toneToSendSf2	(22),	-- optional parameters
	toneToSendSf3	(23),	-- optional parameters
	toneToSendSf4	(24),	-- optional parameters
	toneToSendSf5	(25),	-- optional parameters
	toneToSendSf6	(26),	-- optional parameters
	toneToSendSf7	(27),	-- optional parameters
	toneToSendSf8	(28),	-- optional parameters
	toneToSendSf9	(29),	-- optional parameters
	toneToSendSf10	(30),	-- optional parameters
	toneToSendSf11	(31),	-- optional parameters
	toneToSendSf12	(32),	-- optional parameters
	toneToSendSf13	(33),	-- optional parameters
	toneToSendSf14	(34),	-- optional parameters
	toneToSendSf15	(35),	-- optional parameters
	toneToSendSf16	(36),	-- optional parameters
	toneToSendSf17	(37),	-- optional parameters
	toneToSendSf18	(38),	-- optional parameters
	toneToSendSf19	(39),	-- optional parameters
	toneToSendSf20	(40),	-- optional parameters
	toneToSendSf21	(41),	-- optional parameters
	toneToSendSf22	(42),	-- optional parameters
	toneToSendSf23	(43),	-- optional parameters
	toneToSendSf24	(44),	-- optional parameters
	toneToSendSf25	(45),	-- optional parameters

toneToSendSf26	(46),	-- optional parameters
toneToSendSf27	(47),	-- optional parameters
toneToSendSf28	(48),	-- optional parameters
toneToSendSf29	(49),	-- optional parameters
toneToSendSf30	(50),	-- optional parameters
toneToSendSf31	(51),	-- optional parameters
toneToSendSf32	(52),	-- optional parameters
toneToSendSf33	(53),	-- optional parameters
toneToSendSf34	(54),	-- optional parameters
toneToSendSf35	(55),	-- optional parameters
toneToSendSf36	(56),	-- optional parameters
toneToSendSf37	(57),	-- optional parameters
toneToSendSf38	(58),	-- optional parameters
toneToSendSf39	(59),	-- optional parameters
toneToSendSf40	(60),	-- optional parameters
toneToSendSf41	(61),	-- optional parameters
toneToSendSf42	(62),	-- optional parameters
toneToSendSf43	(63),	-- optional parameters
toneToSendSf44	(64),	-- optional parameters
toneToSendSf45	(65),	-- optional parameters
toneToSendSf46	(66),	-- optional parameters
toneToSendSf47	(67),	-- optional parameters
toneToSendSf48	(68),	-- optional parameters
toneToSendSf49	(69),	-- optional parameters
toneToSendSf50	(70),	-- optional parameters
toneToSendSf51	(71),	-- optional parameters
toneToSendSf52	(72),	-- optional parameters
toneToSendSf53	(73),	-- optional parameters
toneToSendSf54	(74),	-- optional parameters
toneToSendSf55	(75),	-- optional parameters
toneToSendSf56	(76),	-- optional parameters
toneToSendSf57	(77),	-- optional parameters
toneToSendSf58	(78),	-- optional parameters
toneToSendSf59	(79),	-- optional parameters
toneToSendSf60	(80),	-- optional parameters
toneToSendSf61	(81),	-- optional parameters
toneToSendSf62	(82),	-- optional parameters
toneToSendSf63	(83),	-- optional parameters
toneToSendSf64	(84),	-- optional parameters
toneToSendSf65	(85),	-- optional parameters
toneToSendSf66	(86),	-- optional parameters
toneToSendSf67	(87),	-- optional parameters
toneToSendSf68	(88),	-- optional parameters
toneToSendSf69	(89),	-- optional parameters
toneToSendSf70	(90),	-- optional parameters
toneToSendSf71	(91),	-- optional parameters
toneToSendSf72	(92),	-- optional parameters
toneToSendSf73	(93),	-- optional parameters
toneToSendSf74	(94),	-- optional parameters
toneToSendSf75	(95),	-- optional parameters
toneToSendSf76	(96),	-- optional parameters
toneToSendSf77	(97),	-- optional parameters
toneToSendSf78	(98),	-- optional parameters
toneToSendSf79	(99),	-- optional parameters
toneToSendSf80	(100),	-- optional parameters
toneToSendSf81	(101),	-- optional parameters
toneToSendSf82	(102),	-- optional parameters
toneToSendSf83	(103),	-- optional parameters
toneToSendSf84	(104),	-- optional parameters
toneToSendSf85	(105),	-- optional parameters

toneToSendSf86 (106), -- optional parameters
toneToSendSf87 (107), -- optional parameters
toneToSendSf88 (108), -- optional parameters
toneToSendSf89 (109), -- optional parameters
toneToSendSf90 (110), -- optional parameters
toneToSendSf91 (111), -- optional parameters
toneToSendSf92 (112), -- optional parameters
toneToSendSf93 (113), -- optional parameters
toneToSendSf94 (114), -- optional parameters
toneToSendSf95 (115), -- optional parameters
toneToSendSf96 (116), -- optional parameters
toneToSendSf97 (117), -- optional parameters
toneToSendSf98 (118), -- optional parameters
toneToSendSf99 (119), -- optional parameters
toneToSendSf100 (120), -- optional parameters
toneDuration (121), -- optional parameters
privateData (122), -- optional parameters
privateDataInAck (123), -- optional parameters
deviceIDOnly (124), -- misc characteristics
ackModelMultiStep (125) } -- misc characteristics

SendUserInformation ::= BIT STRING
{ privateData (0), -- optional parameters
 privateDataInAck (1), -- optional parameters
 deviceIDOnly (2), -- misc characteristics
 ackModelMultiStep (3) } -- misc characteristics

CallAssociatedEvtsList ::= SEQUENCE
{ callInformation [0] IMPLICIT CallInformation OPTIONAL,
 charging [1] IMPLICIT Charging OPTIONAL,
 digitsGenerated [2] IMPLICIT DigitsGenerated OPTIONAL,
 telephonyTonesGenerated [3] IMPLICIT TelephonyTonesGenerated OPTIONAL,
 serviceCompletionFailure [4] IMPLICIT ServiceCompletionFailure OPTIONAL }

CallInformation ::= BIT STRING
{ callingDevice (0), -- optional parameters
 accountInfo (1), -- optional parameters
 authorisationCode (2), -- optional parameters
 correlatorData (3), -- optional parameters
 servicesPermitted (4), -- optional parameters
 userData (5), -- optional parameters
 callQualifyingData (6), -- optional parameters
 connectionInfo (7), -- optional parameters
 callLinkageData (10), -- optional parameters
 callCharacteristics (11), -- optional parameters
 subjectOfCall (12), -- optional parameters
 languagePreferences (13), -- optional parameters
 privateData (8), -- optional parameters
 genCallInfoForOutdatedConnID (9), -- misc characteristics
 deviceInfo (14) } -- optional parameters

Charging ::= BIT STRING
{ numberUnitsNumberOfChargingUnits (0), -- optional parameters
 numberUnitsTypeOfUnits (1), -- optional parameters
 numberUnitsNumberOfCurrencyUnits (2), -- optional parameters
 typeOfChargingInfoSubTotal (3), -- optional parameters
 typeOfChargingInfoTotal (4), -- optional parameters
 chargingMultiplierAThousandth (5), -- optional parameters
 chargingMultiplierAHundredth (6), -- optional parameters
 chargingMultiplierATenth (7), -- optional parameters

```

chargingMultiplierOne           ( 8),  -- optional parameters
chargingMultiplierTen           ( 9),  -- optional parameters
chargingMultiplierHundred       (10),  -- optional parameters
chargingMultiplierThousand      (11),  -- optional parameters
privateData                     (12) } -- optional parameters

DigitsGenerated ::= BIT STRING
{
    digitsDurationList           ( 0),  -- optional parameters
    pauseDurationList           ( 1),  -- optional parameters
    connectionInfo               ( 2),  -- optional parameters
    privateData                  ( 3) } -- optional parameters

TelephonyTonesGenerated ::= BIT STRING
{
    toneToSendBeep               ( 0),  -- optional parameters
    toneToSendBilling             ( 1),  -- optional parameters
    toneToSendBusy               ( 2),  -- optional parameters
    toneToSendCarrier            ( 3),  -- optional parameters
    toneToSendConfirmation       ( 4),  -- optional parameters
    toneToSendDial               ( 5),  -- optional parameters
    toneToSendFaxCNG             ( 6),  -- optional parameters
    toneToSendHold               ( 7),  -- optional parameters
    toneToSendHowler             ( 8),  -- optional parameters
    toneToSendIntrusion          ( 9),  -- optional parameters
    toneToSendModemCNG           (10),  -- optional parameters
    toneToSendPark               (11),  -- optional parameters
    toneToSendRecordWarning      (12),  -- optional parameters
    toneToSendReorder            (13),  -- optional parameters
    toneToSendRingback           (14),  -- optional parameters
    toneToSendSilence            (15),  -- optional parameters
    toneToSendSitVC              (16),  -- optional parameters
    toneToSendSitIC              (17),  -- optional parameters
    toneToSendSitRO              (18),  -- optional parameters
    toneToSendSitNC              (19),  -- optional parameters
    toneToSendSf0                (20),  -- optional parameters
    toneToSendSf1                (21),  -- optional parameters
    toneToSendSf2                (22),  -- optional parameters
    toneToSendSf3                (23),  -- optional parameters
    toneToSendSf4                (24),  -- optional parameters
    toneToSendSf5                (25),  -- optional parameters
    toneToSendSf6                (26),  -- optional parameters
    toneToSendSf7                (27),  -- optional parameters
    toneToSendSf8                (28),  -- optional parameters
    toneToSendSf9                (29),  -- optional parameters
    toneToSendSf10               (30),  -- optional parameters
    toneToSendSf11               (31),  -- optional parameters
    toneToSendSf12               (32),  -- optional parameters
    toneToSendSf13               (33),  -- optional parameters
    toneToSendSf14               (34),  -- optional parameters
    toneToSendSf15               (35),  -- optional parameters
    toneToSendSf16               (36),  -- optional parameters
    toneToSendSf17               (37),  -- optional parameters
    toneToSendSf18               (38),  -- optional parameters
    toneToSendSf19               (39),  -- optional parameters
    toneToSendSf20               (40),  -- optional parameters
    toneToSendSf21               (41),  -- optional parameters
    toneToSendSf22               (42),  -- optional parameters
    toneToSendSf23               (43),  -- optional parameters
    toneToSendSf24               (44),  -- optional parameters
    toneToSendSf25               (45),  -- optional parameters
    toneToSendSf26               (46),  -- optional parameters

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toneToSendSf27	(47),	-- optional parameters
toneToSendSf28	(48),	-- optional parameters
toneToSendSf29	(49),	-- optional parameters
toneToSendSf30	(50),	-- optional parameters
toneToSendSf31	(51),	-- optional parameters
toneToSendSf32	(52),	-- optional parameters
toneToSendSf33	(53),	-- optional parameters
toneToSendSf34	(54),	-- optional parameters
toneToSendSf35	(55),	-- optional parameters
toneToSendSf36	(56),	-- optional parameters
toneToSendSf37	(57),	-- optional parameters
toneToSendSf38	(58),	-- optional parameters
toneToSendSf39	(59),	-- optional parameters
toneToSendSf40	(60),	-- optional parameters
toneToSendSf41	(61),	-- optional parameters
toneToSendSf42	(62),	-- optional parameters
toneToSendSf43	(63),	-- optional parameters
toneToSendSf44	(64),	-- optional parameters
toneToSendSf45	(65),	-- optional parameters
toneToSendSf46	(66),	-- optional parameters
toneToSendSf47	(67),	-- optional parameters
toneToSendSf48	(68),	-- optional parameters
toneToSendSf49	(69),	-- optional parameters
toneToSendSf50	(70),	-- optional parameters
toneToSendSf51	(71),	-- optional parameters
toneToSendSf52	(72),	-- optional parameters
toneToSendSf53	(73),	-- optional parameters
toneToSendSf54	(74),	-- optional parameters
toneToSendSf55	(75),	-- optional parameters
toneToSendSf56	(76),	-- optional parameters
toneToSendSf57	(77),	-- optional parameters
toneToSendSf58	(78),	-- optional parameters
toneToSendSf59	(79),	-- optional parameters
toneToSendSf60	(80),	-- optional parameters
toneToSendSf61	(81),	-- optional parameters
toneToSendSf62	(82),	-- optional parameters
toneToSendSf63	(83),	-- optional parameters
toneToSendSf64	(84),	-- optional parameters
toneToSendSf65	(85),	-- optional parameters
toneToSendSf66	(86),	-- optional parameters
toneToSendSf67	(87),	-- optional parameters
toneToSendSf68	(88),	-- optional parameters
toneToSendSf69	(89),	-- optional parameters
toneToSendSf70	(90),	-- optional parameters
toneToSendSf71	(91),	-- optional parameters
toneToSendSf72	(92),	-- optional parameters
toneToSendSf73	(93),	-- optional parameters
toneToSendSf74	(94),	-- optional parameters
toneToSendSf75	(95),	-- optional parameters
toneToSendSf76	(96),	-- optional parameters
toneToSendSf77	(97),	-- optional parameters
toneToSendSf78	(98),	-- optional parameters
toneToSendSf79	(99),	-- optional parameters
toneToSendSf80	(100),	-- optional parameters
toneToSendSf81	(101),	-- optional parameters
toneToSendSf82	(102),	-- optional parameters
toneToSendSf83	(103),	-- optional parameters
toneToSendSf84	(104),	-- optional parameters
toneToSendSf85	(105),	-- optional parameters
toneToSendSf86	(106),	-- optional parameters

toneToSendSf87 (107), -- optional parameters
toneToSendSf88 (108), -- optional parameters
toneToSendSf89 (109), -- optional parameters
toneToSendSf90 (110), -- optional parameters
toneToSendSf91 (111), -- optional parameters
toneToSendSf92 (112), -- optional parameters
toneToSendSf93 (113), -- optional parameters
toneToSendSf94 (114), -- optional parameters
toneToSendSf95 (115), -- optional parameters
toneToSendSf96 (116), -- optional parameters
toneToSendSf97 (117), -- optional parameters
toneToSendSf98 (118), -- optional parameters
toneToSendSf99 (119), -- optional parameters
toneToSendSf100 (120), -- optional parameters
toneFrequency (121), -- optional parameters
toneDuration (122), -- optional parameters
pauseDurationList (123), -- optional parameters
connectionInfo (124), -- optional parameters
privateData (125) } -- optional parameters

ServiceCompletionFailure ::= BIT STRING
{ primaryCallConnectionInfo (0), -- optional parameters
secondaryCallConnectionInfo (1), -- optional parameters
otherDevicesPrimaryCallList (2), -- optional parameters
otherDevicesSecondaryCallList (3), -- optional parameters
mediaCallCharacteristics (4), -- optional parameters
privateData (5) } -- optional parameters

MediaServList ::= SEQUENCE
{ attachMediaService [0] IMPLICIT AttachMediaService OPTIONAL,
detachMediaService [1] IMPLICIT DetachMediaService OPTIONAL }

AttachMediaService ::= BIT STRING
{ mediaServiceVersion (0), -- optional parameters
mediaServiceInstanceID (1), -- optional parameters
connectionModeConsultConference (2), -- optional parameters
connectionModeConsultConferenceHold (3), -- optional parameters
connectionModeDeflect (4), -- optional parameters
connectionModeDirectedPickup (5), -- optional parameters
connectionModeJoin (6), -- optional parameters
connectionModeSingleStepConference (7), -- optional parameters
connectionModeSingleStepConferenceHold (8), -- optional parameters
connectionModeSingleStepTransfer (9), -- optional parameters
connectionModeTransfer (10), -- optional parameters
connectionModeDirect (11), -- optional parameters
requestedConnectionState (12), -- optional parameters
privateData (13), -- optional parameters
mediaServiceInstanceIDInAck (14), -- optional parameters
mediaConnectionInfoInAck (15), -- optional parameters
privateDataInAck (16), -- optional parameters
deviceIDOnly (17), -- misc characteristics
ackModelMultiStep (18) } -- misc characteristics

DetachMediaService ::= BIT STRING
{ alerting (0), -- initial states
connected (1), -- initial states
fail (2), -- initial states
hold (3), -- initial states
queued (4), -- initial states
privateData (5), -- optional parameters

```

privateDataInAck          ( 6),    -- optional parameters
deviceIDOnly              ( 7),    -- misc characteristics
ackModelMultiStep         ( 8) }   -- misc characteristics

MediaEvtsList ::= SEQUENCE
{
    mediaAttached          [0] IMPLICIT MediaAttached    OPTIONAL,
    mediaDetached          [1] IMPLICIT MediaDetached    OPTIONAL }

MediaAttached ::= BIT STRING
{
    mediaServiceVersion    ( 0),    -- optional parameters
    mediaServiceInstanceID ( 1),    -- optional parameters
    mediaStreamID          ( 2),    -- optional parameters
    mediaCallCharacteristics ( 3),    -- optional parameters
    callCharacteristics     ( 4),    -- optional parameters
    mediaConnectionInfo     ( 5),    -- optional parameters
    privateData            ( 6) }   -- optional parameters

MediaDetached ::= BIT STRING
{
    mediaServiceVersion    ( 0),    -- optional parameters
    mediaServiceInstanceID ( 1),    -- optional parameters
    mediaStreamID          ( 2),    -- optional parameters
    mediaCallCharacteristics ( 3),    -- optional parameters
    callCharacteristics     ( 4),    -- optional parameters
    mediaConnectionInfo     ( 5),    -- optional parameters
    privateData            ( 6) }   -- optional parameters

RouteingServList ::= SEQUENCE
{
    routeRegister          [ 0] IMPLICIT RouteRegister    OPTIONAL,
    routeRegisterCancel    [ 1] IMPLICIT RouteRegisterCancel OPTIONAL,
    routeRegisterAbort     [ 2] IMPLICIT RouteRegisterAbort OPTIONAL,
    reRoute                [ 3] IMPLICIT ReRoute          OPTIONAL,
    routeEnd               [ 4] IMPLICIT RouteEnd          OPTIONAL,
    routeReject            [ 5] IMPLICIT RouteReject       OPTIONAL,
    routeRequest           [ 6] IMPLICIT RouteRequest      OPTIONAL,
    routeSelect            [ 7] IMPLICIT RouteSelect       OPTIONAL,
    routeUsed              [ 8] IMPLICIT RouteUsed        OPTIONAL }

RouteRegister ::= BIT STRING
{
    routeingDevice         ( 0),    -- optional parameters
    requestedMonitorMediaClass ( 1),    -- optional parameters
    requestedMonitorMediaClassAudio ( 2),    -- optional parameters
    requestedMonitorMediaClassData ( 3),    -- optional parameters
    requestedMonitorMediaClassImage ( 4),    -- optional parameters
    requestedMonitorMediaClassVoice ( 5),    -- optional parameters
    requestedMonitorMediaClassChat (10),    -- optional parameters
    requestedMonitorMediaClassEmail (11),    -- optional parameters
    requestedMonitorMediaClassMessage (12),    -- optional parameters
    requestedMonitorMediaClassIM (13),    -- optional parameters
    requestedMonitorMediaClassSMS (14),    -- optional parameters
    requestedMonitorMediaClassMMS (15),    -- optional parameters
    privateData            ( 6),    -- optional parameters
    actualRouteingMediaClassInAck ( 7),    -- optional parameters
    privateDataInAck       ( 8),    -- optional parameters
    allRouteingDevices      ( 9) }   -- misc characteristics

RouteRegisterAbort ::= BIT STRING
{
    privateData            ( 0) }   -- optional parameters

```

```

RouteRegisterCancel ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1) }    -- optional parameters

ReRoute ::= BIT STRING
{
    replyTimeout               ( 1),    -- optional parameters
    correlatorData             ( 2),    -- optional parameters
    privateData                ( 3) }    -- optional parameters

RouteEnd ::= BIT STRING
{
    errorValue                 ( 1),    -- optional parameters
    correlatorData             ( 2),    -- optional parameters
    privateData                ( 3),    -- optional parameters
    supportsSending            ( 4),    -- misc characteristics
    supportsReceiving          ( 5) }    -- misc characteristics

RouteReject ::= BIT STRING
{
    rejectCauseBusyOverflow    ( 0),    -- optional parameters
    rejectCauseQueueTimeOverflow ( 1),    -- optional parameters
    rejectCauseCapacityOverflow ( 2),    -- optional parameters
    rejectCauseCalendarOverflow ( 3),    -- optional parameters
    rejectCauseUnknownOverflow ( 4),    -- optional parameters
    correlatorData             ( 5),    -- optional parameters
    privateData                ( 6) }    -- optional parameters

RouteRequest ::= BIT STRING
{
    callingDevice              ( 0),    -- optional parameters
    routeingDevice             ( 1),    -- optional parameters
    routeSelAlgorithmACD       ( 2),    -- optional parameters
    routeSelAlgorithmEmergency ( 3),    -- optional parameters
    routeSelAlgorithmLeastCost ( 4),    -- optional parameters
    routeSelAlgorithmNormal    ( 5),    -- optional parameters
    routeSelAlgorithmUserDefined ( 6),    -- optional parameters
    priority                   ( 7),    -- optional parameters
    replyTimeout               ( 8),    -- optional parameters
    correlatorData             ( 9),    -- optional parameters
    mediaCallCharacteristics   (10),    -- optional parameters
    callCharacteristics         (11),    -- optional parameters
    routedCallInfo             (12),    -- optional parameters
    subjectOfCall              (15),    -- optional parameters
    messageInformation          (16),    -- optional parameters
    languagePreferences        (17),    -- optional parameters
    deviceHistory              (18),    -- optional parameters
    privateData                (13),    -- optional parameters
    nonCallRelatedRouteing     (14) }    -- misc characteristics

RouteSelect ::= BIT STRING
{
    alternateRoutes            ( 0),    -- optional parameters
    remainRetriesNoListAvailable ( 1),    -- optional parameters
    remainRetriesNoCountAvailable ( 2),    -- optional parameters
    remainRetriesRetryCount    ( 3),    -- optional parameters
    routeUsed                  ( 4),    -- optional parameters
    correlatorData             ( 5),    -- optional parameters
    privateData                ( 6) }    -- optional parameters

RouteUsed ::= BIT STRING
{
    callingDevice              ( 0),    -- optional parameters
    domain                    ( 1),    -- optional parameters
    correlatorData             ( 2),    -- optional parameters
    privateData                ( 3) }    -- optional parameters

```

PhysDevServList ::= SEQUENCE

```
{
    buttonPress          [ 0] IMPLICIT ButtonPress          OPTIONAL,
    getAuditoryApparatusInfo [ 1] IMPLICIT GetAuditoryApparatusInfo  OPTIONAL,
    getButtonInformation    [ 2] IMPLICIT GetButtonInformation  OPTIONAL,
    getDisplay             [ 3] IMPLICIT GetDisplay             OPTIONAL,
    getHookSwitchStatus    [ 4] IMPLICIT GetHookSwitchStatus    OPTIONAL,
    getLampInfo            [ 5] IMPLICIT GetLampInfo            OPTIONAL,
    getLampMode            [ 6] IMPLICIT GetLampMode            OPTIONAL,
    getMessageWaitingIndicator [ 7] IMPLICIT GetMessageWaitingIndicator OPTIONAL,
    getMicrophoneGain      [ 8] IMPLICIT GetMicrophoneGain      OPTIONAL,
    getMicrophoneMute      [ 9] IMPLICIT GetMicrophoneMute      OPTIONAL,
    getRingerStatus        [10] IMPLICIT GetRingerStatus        OPTIONAL,
    getSpeakerMute         [11] IMPLICIT GetSpeakerMute         OPTIONAL,
    getSpeakerVolume       [12] IMPLICIT GetSpeakerVolume       OPTIONAL,
    setButtonInformation    [13] IMPLICIT SetButtonInformation    OPTIONAL,
    setDisplay             [14] IMPLICIT SetDisplay             OPTIONAL,
    setHookSwitchStatus    [15] IMPLICIT SetHookSwitchStatus    OPTIONAL,
    setLampMode            [16] IMPLICIT SetLampMode            OPTIONAL,
    setMessageWaitingIndicator [17] IMPLICIT SetMessageWaitingIndicator OPTIONAL,
    setMicrophoneGain      [18] IMPLICIT SetMicrophoneGain      OPTIONAL,
    setMicrophoneMute      [19] IMPLICIT SetMicrophoneMute      OPTIONAL,
    setRingerStatus        [20] IMPLICIT SetRingerStatus        OPTIONAL,
    setSpeakerMute         [21] IMPLICIT SetSpeakerMute         OPTIONAL,
    setSpeakerVolume       [22] IMPLICIT SetSpeakerVolume       OPTIONAL }
```

ButtonPress ::= BIT STRING

```
{
    privateData          ( 0), -- optional parameters
    privateDataInAck     ( 2), -- optional parameters
    ackModelMultiStep    ( 2) } -- misc characteristics
```

GetAuditoryApparatusInfo ::= BIT STRING

```
{
    auditoryApparatus          ( 0), -- optional parameters
    privateData                ( 1), -- optional parameters
    auditoryApparatusTypeSpeakerphone ( 2), -- optional parameters
    auditoryApparatusTypeHandset   ( 3), -- optional parameters
    auditoryApparatusTypeHeadset   ( 4), -- optional parameters
    auditoryApparatusTypeSpeakerOnlyPhone ( 5), -- optional parameters
    auditoryApparatusTypeOther     ( 6), -- optional parameters
    speakerPresent               ( 7), -- optional parameters
    speakerVolumeSettable        ( 8), -- optional parameters
    speakerVolumeReadable        ( 9), -- optional parameters
    speakerMuteSettable          (10), -- optional parameters
    speakerMuteReadable          (11), -- optional parameters
    microphonePresent            (12), -- optional parameters
    microphoneGainSettable       (13), -- optional parameters
    microphoneGainReadable       (14), -- optional parameters
    microphoneMuteSettable       (15), -- optional parameters
    microphoneMuteReadable       (16), -- optional parameters
    hookswitchSettable           (17), -- optional parameters
    hookswitchOnHook             (18), -- optional parameters
    privateDataInAck             (19) } -- optional parameters
```

GetButtonInformation ::= BIT STRING

```
{
    button          ( 0), -- optional parameters
    privateData     ( 1), -- optional parameters
    buttonLabelInAck ( 2), -- optional parameters
    buttonLabelSettableInAck ( 3), -- optional parameters
    buttonFunctionInAck ( 4), -- optional parameters
    buttonAssociatedNumberInAck ( 5), -- optional parameters
    buttonAssociatedNumberSettableInAck ( 6), -- optional parameters
```

```

listOfLampsInAck          ( 7),    -- optional parameters
privateDataInAck          ( 8) }    -- optional parameters

GetDisplay ::= BIT STRING
{
    displayID              ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    characterSetASCII       ( 2),    -- optional parameters
    characterSetUnicode     ( 3),    -- optional parameters
    characterSetProprietary ( 4),    -- optional parameters
    privateDataInAck        ( 5) }    -- optional parameters

GetHookSwitchStatus ::= BIT STRING
{
    hookSwitch             ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    privateDataInAck        ( 2) }    -- optional parameters

GetLampInfo ::= BIT STRING
{
    lamp                   ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    lampLabelInAck         ( 2),    -- optional parameters
    buttonInAck            ( 3),    -- optional parameters
    lampColorInAck         ( 4),    -- optional parameters
    privateDataInAck        ( 5) }    -- optional parameters

GetLampMode ::= BIT STRING
{
    lamp                   ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    lampModeInAck          ( 2),    -- optional parameters
    lampBrightnessNormal   ( 3),    -- optional parameters
    lampBrightnessDim       ( 4),    -- optional parameters
    lampBrightnessBright   ( 5),    -- optional parameters
    lampColorInAck         ( 6),    -- optional parameters
    buttonInAck            ( 7),    -- optional parameters
    privateDataInAck        ( 8) }    -- optional parameters

GetMessageWaitingIndicator ::= BIT STRING
{
    privateData            ( 0),    -- optional parameter
    deviceForMsgInAck      ( 1),    -- optional parameter
    lampIsPresentInAck     ( 2),    -- optional parameter
    privateDataInAck        ( 3) }    -- optional parameters

GetMicrophoneGain ::= BIT STRING
{
    auditoryApparatus      ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    micGainAbsInAck        ( 2),    -- optional parameters
    privateDataInAck        ( 3) }    -- optional parameters

GetMicrophoneMute ::= BIT STRING
{
    auditoryApparatus      ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    privateDataInAck        ( 2) }    -- optional parameters

GetRingerStatus ::= BIT STRING
{
    ringer                 ( 0),    -- optional parameters
    privateData            ( 1),    -- optional parameters
    ringCountInAck         ( 2),    -- optional parameters
    ringPatternInAck       ( 3),    -- optional parameters
    ringVolumeInAck        ( 4),    -- optional parameters
    ringVolumeAbsInAck     ( 5),    -- optional parameters
    privateDataInAck        ( 6) }    -- optional parameters

```



```

GetSpeakerMute ::= BIT STRING
{
    auditoryApparatus          ( 0),  -- optional parameters
    privateDataInAck           ( 1),  -- optional parameters
    privateData                 ( 2) } -- optional parameters

GetSpeakerVolume ::= BIT STRING
{
    auditoryApparatus          ( 0),  -- optional parameters
    privateData                ( 1),  -- optional parameters
    speakerVolAbsInAck         ( 2),  -- optional parameters
    privateDataInAck           ( 3) } -- optional parameters

SetButtonInformation ::= BIT STRING
{
    buttonLabel                ( 0),  -- optional parameters
    buttonAssociatedNumber      ( 1),  -- optional parameters
    privateData                ( 2),  -- optional parameters
    privateDataInAck           ( 3),  -- optional parameters
    ackModelMultiStep          ( 4) } -- misc characteristics

SetDisplay ::= BIT STRING
{
    physBaseRowNumber          ( 0),  -- optional parameters
    physColumnRowNumber        ( 1),  -- optional parameters
    offset                     ( 2),  -- optional parameters
    privateData                ( 3),  -- optional parameters
    privateDataInAck           ( 4),  -- optional parameters
    supportsModifyingPosition  ( 5),  -- misc characteristics
    ackModelMultiStep          ( 6) } -- misc characteristics

SetHookSwitchStatus ::= BIT STRING
{
    privateData                ( 0),  -- optional parameters
    ackModelMultiStep          ( 1) } -- misc characteristics

SetLampMode ::= BIT STRING
{
    lampModeBrokenFlutter      ( 0),  -- optional parameter
    lampModeFlutter            ( 1),  -- optional parameter
    lampModeOff                ( 2),  -- optional parameter
    lampModeSteady             ( 3),  -- optional parameter
    lampModeWink               ( 4),  -- optional parameter
    lampModeReserved           ( 5),  -- optional parameter
    lampModeSf0                ( 6),  -- optional parameters
    lampModeSf1                ( 7),  -- optional parameters
    lampModeSf2                ( 8),  -- optional parameters
    lampModeSf3                ( 9),  -- optional parameters
    lampModeSf4                (10),  -- optional parameters
    lampModeSf5                (11),  -- optional parameters
    lampModeSf6                (12),  -- optional parameters
    lampModeSf7                (13),  -- optional parameters
    lampModeSf8                (14),  -- optional parameters
    lampModeSf9                (15),  -- optional parameters
    lampModeSf10               (16),  -- optional parameters
    lampModeSf11               (17),  -- optional parameters
    lampModeSf12               (18),  -- optional parameters
    lampModeSf13               (19),  -- optional parameters
    lampModeSf14               (20),  -- optional parameters
    lampModeSf15               (21),  -- optional parameters
    lampModeSf16               (22),  -- optional parameters
    lampModeSf17               (23),  -- optional parameters
    lampModeSf18               (24),  -- optional parameters
    lampModeSf19               (25),  -- optional parameters
    lampModeSf20               (26),  -- optional parameters
    lampModeSf21               (27),  -- optional parameters

```

lampModeSf22	(28),	-- optional parameters
lampModeSf23	(29),	-- optional parameters
lampModeSf24	(30),	-- optional parameters
lampModeSf25	(31),	-- optional parameters
lampModeSf26	(32),	-- optional parameters
lampModeSf27	(33),	-- optional parameters
lampModeSf28	(34),	-- optional parameters
lampModeSf29	(35),	-- optional parameters
lampModeSf30	(36),	-- optional parameters
lampModeSf31	(37),	-- optional parameters
lampModeSf32	(38),	-- optional parameters
lampModeSf33	(39),	-- optional parameters
lampModeSf34	(40),	-- optional parameters
lampModeSf35	(41),	-- optional parameters
lampModeSf36	(42),	-- optional parameters
lampModeSf37	(43),	-- optional parameters
lampModeSf38	(44),	-- optional parameters
lampModeSf39	(45),	-- optional parameters
lampModeSf40	(46),	-- optional parameters
lampModeSf41	(47),	-- optional parameters
lampModeSf42	(48),	-- optional parameters
lampModeSf43	(49),	-- optional parameters
lampModeSf44	(50),	-- optional parameters
lampModeSf45	(51),	-- optional parameters
lampModeSf46	(52),	-- optional parameters
lampModeSf47	(53),	-- optional parameters
lampModeSf48	(54),	-- optional parameters
lampModeSf49	(55),	-- optional parameters
lampModeSf50	(56),	-- optional parameters
lampModeSf51	(57),	-- optional parameters
lampModeSf52	(58),	-- optional parameters
lampModeSf53	(59),	-- optional parameters
lampModeSf54	(60),	-- optional parameters
lampModeSf55	(61),	-- optional parameters
lampModeSf56	(62),	-- optional parameters
lampModeSf57	(63),	-- optional parameters
lampModeSf58	(64),	-- optional parameters
lampModeSf59	(65),	-- optional parameters
lampModeSf60	(66),	-- optional parameters
lampModeSf61	(67),	-- optional parameters
lampModeSf62	(68),	-- optional parameters
lampModeSf63	(69),	-- optional parameters
lampModeSf64	(70),	-- optional parameters
lampModeSf65	(71),	-- optional parameters
lampModeSf66	(72),	-- optional parameters
lampModeSf67	(73),	-- optional parameters
lampModeSf68	(74),	-- optional parameters
lampModeSf69	(75),	-- optional parameters
lampModeSf70	(76),	-- optional parameters
lampModeSf71	(77),	-- optional parameters
lampModeSf72	(78),	-- optional parameters
lampModeSf73	(79),	-- optional parameters
lampModeSf74	(80),	-- optional parameters
lampModeSf75	(81),	-- optional parameters
lampModeSf76	(82),	-- optional parameters
lampModeSf77	(83),	-- optional parameters
lampModeSf78	(84),	-- optional parameters
lampModeSf79	(85),	-- optional parameters
lampModeSf80	(86),	-- optional parameters
lampModeSf81	(87),	-- optional parameters

lampModeSf82	(88),	-- optional parameters
lampModeSf83	(89),	-- optional parameters
lampModeSf84	(90),	-- optional parameters
lampModeSf85	(91),	-- optional parameters
lampModeSf86	(92),	-- optional parameters
lampModeSf87	(93),	-- optional parameters
lampModeSf88	(94),	-- optional parameters
lampModeSf89	(95),	-- optional parameters
lampModeSf90	(96),	-- optional parameters
lampModeSf91	(97),	-- optional parameters
lampModeSf92	(98),	-- optional parameters
lampModeSf93	(99),	-- optional parameters
lampModeSf94	(100),	-- optional parameters
lampBrightnessNormal	(101),	-- optional parameters
lampBrightnessDim	(102),	-- optional parameters
lampBrightnessBright	(103),	-- optional parameters
lampColorNoColor	(104),	-- optional parameters
lampColorRed	(105),	-- optional parameters
lampColorYellow	(106),	-- optional parameters
lampColorGreen	(107),	-- optional parameters
lampColorBlue	(108),	-- optional parameters
lampColorReserved	(109),	-- optional parameters
lampColorSf0	(110),	-- optional parameters
lampColorSf1	(111),	-- optional parameters
lampColorSf2	(112),	-- optional parameters
lampColorSf3	(113),	-- optional parameters
lampColorSf4	(114),	-- optional parameters
lampColorSf5	(115),	-- optional parameters
lampColorSf6	(116),	-- optional parameters
lampColorSf7	(117),	-- optional parameters
lampColorSf8	(118),	-- optional parameters
lampColorSf9	(119),	-- optional parameters
lampColorSf10	(120),	-- optional parameters
lampColorSf11	(121),	-- optional parameters
lampColorSf12	(122),	-- optional parameters
lampColorSf13	(123),	-- optional parameters
lampColorSf14	(124),	-- optional parameters
lampColorSf15	(125),	-- optional parameters
lampColorSf16	(126),	-- optional parameters
lampColorSf17	(127),	-- optional parameters
lampColorSf18	(128),	-- optional parameters
lampColorSf19	(129),	-- optional parameters
lampColorSf20	(130),	-- optional parameters
lampColorSf21	(131),	-- optional parameters
lampColorSf22	(132),	-- optional parameters
lampColorSf23	(133),	-- optional parameters
lampColorSf24	(134),	-- optional parameters
lampColorSf25	(135),	-- optional parameters
lampColorSf26	(136),	-- optional parameters
lampColorSf27	(137),	-- optional parameters
lampColorSf28	(138),	-- optional parameters
lampColorSf29	(139),	-- optional parameters
lampColorSf30	(140),	-- optional parameters
lampColorSf31	(141),	-- optional parameters
lampColorSf32	(142),	-- optional parameters
lampColorSf33	(143),	-- optional parameters
lampColorSf34	(144),	-- optional parameters
lampColorSf35	(145),	-- optional parameters
lampColorSf36	(146),	-- optional parameters
lampColorSf37	(147),	-- optional parameters

lampColorSf38	(148),	-- optional parameters
lampColorSf39	(149),	-- optional parameters
lampColorSf40	(150),	-- optional parameters
lampColorSf41	(151),	-- optional parameters
lampColorSf42	(152),	-- optional parameters
lampColorSf43	(153),	-- optional parameters
lampColorSf44	(154),	-- optional parameters
lampColorSf45	(155),	-- optional parameters
lampColorSf46	(156),	-- optional parameters
lampColorSf47	(157),	-- optional parameters
lampColorSf48	(158),	-- optional parameters
lampColorSf49	(159),	-- optional parameters
lampColorSf50	(160),	-- optional parameters
lampColorSf51	(161),	-- optional parameters
lampColorSf52	(162),	-- optional parameters
lampColorSf53	(163),	-- optional parameters
lampColorSf54	(164),	-- optional parameters
lampColorSf55	(165),	-- optional parameters
lampColorSf56	(166),	-- optional parameters
lampColorSf57	(167),	-- optional parameters
lampColorSf58	(168),	-- optional parameters
lampColorSf59	(169),	-- optional parameters
lampColorSf60	(170),	-- optional parameters
lampColorSf61	(171),	-- optional parameters
lampColorSf62	(172),	-- optional parameters
lampColorSf63	(173),	-- optional parameters
lampColorSf64	(174),	-- optional parameters
lampColorSf65	(175),	-- optional parameters
lampColorSf66	(176),	-- optional parameters
lampColorSf67	(177),	-- optional parameters
lampColorSf68	(178),	-- optional parameters
lampColorSf69	(179),	-- optional parameters
lampColorSf70	(180),	-- optional parameters
lampColorSf71	(181),	-- optional parameters
lampColorSf72	(182),	-- optional parameters
lampColorSf73	(183),	-- optional parameters
lampColorSf74	(184),	-- optional parameters
lampColorSf75	(185),	-- optional parameters
lampColorSf76	(186),	-- optional parameters
lampColorSf77	(187),	-- optional parameters
lampColorSf78	(188),	-- optional parameters
lampColorSf79	(189),	-- optional parameters
lampColorSf80	(190),	-- optional parameters
lampColorSf81	(191),	-- optional parameters
lampColorSf82	(192),	-- optional parameters
lampColorSf83	(193),	-- optional parameters
lampColorSf84	(194),	-- optional parameters
lampColorSf85	(195),	-- optional parameters
lampColorSf86	(196),	-- optional parameters
lampColorSf87	(197),	-- optional parameters
lampColorSf88	(198),	-- optional parameters
lampColorSf89	(199),	-- optional parameters
lampColorSf90	(200),	-- optional parameters
lampColorSf91	(201),	-- optional parameters
lampColorSf92	(202),	-- optional parameters
lampColorSf93	(203),	-- optional parameters
lampColorSf94	(204),	-- optional parameters
privateData	(205),	-- optional parameters
privateDataInAck	(206),	-- optional parameters
ackModelMultiStep	(207) }	-- misc characteristics

```

SetMessageWaitingIndicator ::= BIT STRING
{
    deviceForMsg          ( 0),  -- optional parameters
    privateData           ( 1),  -- optional parameters
    privateDataInAck      ( 2),  -- optional parameters
    ackModelMultiStep     ( 3) }  -- misc characteristics

SetMicrophoneGain ::= BIT STRING
{
    microphoneGainAbs     ( 0),  -- optional parameters
    microphoneGainInc     ( 1),  -- optional parameters
    privateData           ( 2),  -- optional parameters
    privateDataInAck      ( 3),  -- optional parameters
    ackModelMultiStep     ( 4) }  -- misc characteristics

SetMicrophoneMute ::= BIT STRING
{
    privateData           ( 0),  -- optional parameters
    privateDataInAck      ( 1),  -- optional parameters
    ackModelMultiStep     ( 2) }  -- misc characteristics

SetRingerStatus ::= BIT STRING
{
    ringerModeRinging     ( 0),  -- optional parameters
    ringerModeNotRinging  ( 1),  -- optional parameters
    ringVolumeAbs         ( 2),  -- optional parameters
    ringVolumeInc         ( 3),  -- optional parameters
    privateData           ( 4),  -- optional parameters
    privateDataInAck      ( 5),  -- optional parameters
    ackModelMultiStep     ( 6) }  -- misc characteristics

SetSpeakerMute ::= BIT STRING
{
    privateData           ( 0),  -- optional parameters
    privateDataInAck      ( 1),  -- optional parameters
    ackModelMultiStep     ( 2) }  -- misc characteristics

SetSpeakerVolume ::= BIT STRING
{
    speakerVolumeAbs      ( 0),  -- optional parameters
    speakerVolumeInc      ( 1),  -- optional parameters
    privateData           ( 2),  -- optional parameters
    privateDataInAck      ( 3),  -- optional parameters
    ackModelMultiStep     ( 4),  -- misc characteristics
    resettedAfterCall      ( 5),  -- misc characteristics
    notSettableWhileActive ( 6) }  -- misc characteristics

PhysDevEvsList ::= SEQUENCE
{
    buttonInformation      [ 0] IMPLICIT  ButtonInformation  OPTIONAL,
    buttonPress            [ 1] IMPLICIT  ButtonPressEvent   OPTIONAL,
    displayUpdated         [ 2] IMPLICIT  DisplayUpdated      OPTIONAL,
    hookswitch             [ 3] IMPLICIT  Hookswitch          OPTIONAL,
    lampMode               [ 4] IMPLICIT  LampMode            OPTIONAL,
    messageWaiting         [ 5] IMPLICIT  MessageWaiting      OPTIONAL,
    microphoneGain         [ 6] IMPLICIT  MicrophoneGain       OPTIONAL,
    microphoneMute         [ 7] IMPLICIT  MicrophoneMute       OPTIONAL,
    ringerStatus           [ 8] IMPLICIT  RingerStatus         OPTIONAL,
    speakerMute            [ 9] IMPLICIT  SpeakerMute          OPTIONAL,
    speakerVolume          [10] IMPLICIT  SpeakerVolume        OPTIONAL }

ButtonInformation ::= BIT STRING
{
    buttonLabel            ( 0),  -- optional parameters
    buttonAssociatedNumber ( 1),  -- optional parameters
    buttonPressIndicator   ( 2),  -- optional parameters
    privateData            ( 3) }  -- optional parameters

```

```

ButtonPressEvent ::= BIT STRING
{
    buttonLabel          ( 0),  -- optional parameters
    buttonAssociatedNumber ( 1),  -- optional parameters
    privateData          ( 2) }  -- optional parameters

DisplayUpdated ::= BIT STRING
{
    characterSetASCII      ( 0),  -- optional parameters
    characterSetUnicode    ( 1),  -- optional parameters
    characterSetProprietary ( 2),  -- optional parameters
    privateData            ( 3) }  -- optional parameters

Hookswitch ::= BIT STRING
{
    privateData          ( 0) }  -- optional parameters

LampMode ::= BIT STRING
{
    lampModeBrokenFlutter ( 0),  -- optional parameters
    lampModeFlutter       ( 1),  -- optional parameters
    lampModeOff           ( 2),  -- optional parameters
    lampModeSteady        ( 3),  -- optional parameters
    lampModeWink          ( 4),  -- optional parameters
    lampModeReserved      ( 5),  -- optional parameters
    lampModeSf0           ( 6),  -- optional parameters
    lampModeSf1           ( 7),  -- optional parameters
    lampModeSf2           ( 8),  -- optional parameters
    lampModeSf3           ( 9),  -- optional parameters
    lampModeSf4           (10),  -- optional parameters
    lampModeSf5           (11),  -- optional parameters
    lampModeSf6           (12),  -- optional parameters
    lampModeSf7           (13),  -- optional parameters
    lampModeSf8           (14),  -- optional parameters
    lampModeSf9           (15),  -- optional parameters
    lampModeSf10          (16),  -- optional parameters
    lampModeSf11          (17),  -- optional parameters
    lampModeSf12          (18),  -- optional parameters
    lampModeSf13          (19),  -- optional parameters
    lampModeSf14          (20),  -- optional parameters
    lampModeSf15          (21),  -- optional parameters
    lampModeSf16          (22),  -- optional parameters
    lampModeSf17          (23),  -- optional parameters
    lampModeSf18          (24),  -- optional parameters
    lampModeSf19          (25),  -- optional parameters
    lampModeSf20          (26),  -- optional parameters
    lampModeSf21          (27),  -- optional parameters
    lampModeSf22          (28),  -- optional parameters
    lampModeSf23          (29),  -- optional parameters
    lampModeSf24          (30),  -- optional parameters
    lampModeSf25          (31),  -- optional parameters
    lampModeSf26          (32),  -- optional parameters
    lampModeSf27          (33),  -- optional parameters
    lampModeSf28          (34),  -- optional parameters
    lampModeSf29          (35),  -- optional parameters
    lampModeSf30          (36),  -- optional parameters
    lampModeSf31          (37),  -- optional parameters
    lampModeSf32          (38),  -- optional parameters
    lampModeSf33          (39),  -- optional parameters
    lampModeSf34          (40),  -- optional parameters
    lampModeSf35          (41),  -- optional parameters
    lampModeSf36          (42),  -- optional parameters
    lampModeSf37          (43),  -- optional parameters
    lampModeSf38          (44),  -- optional parameters
    lampModeSf39          (45),  -- optional parameters

```

lampModeSf40	(46),	-- optional parameters
lampModeSf41	(47),	-- optional parameters
lampModeSf42	(48),	-- optional parameters
lampModeSf43	(49),	-- optional parameters
lampModeSf44	(50),	-- optional parameters
lampModeSf45	(51),	-- optional parameters
lampModeSf46	(52),	-- optional parameters
lampModeSf47	(53),	-- optional parameters
lampModeSf48	(54),	-- optional parameters
lampModeSf49	(55),	-- optional parameters
lampModeSf50	(56),	-- optional parameters
lampModeSf51	(57),	-- optional parameters
lampModeSf52	(58),	-- optional parameters
lampModeSf53	(59),	-- optional parameters
lampModeSf54	(60),	-- optional parameters
lampModeSf55	(61),	-- optional parameters
lampModeSf56	(62),	-- optional parameters
lampModeSf57	(63),	-- optional parameters
lampModeSf58	(64),	-- optional parameters
lampModeSf59	(65),	-- optional parameters
lampModeSf60	(66),	-- optional parameters
lampModeSf61	(67),	-- optional parameters
lampModeSf62	(68),	-- optional parameters
lampModeSf63	(69),	-- optional parameters
lampModeSf64	(70),	-- optional parameters
lampModeSf65	(71),	-- optional parameters
lampModeSf66	(72),	-- optional parameters
lampModeSf67	(73),	-- optional parameters
lampModeSf68	(74),	-- optional parameters
lampModeSf69	(75),	-- optional parameters
lampModeSf70	(76),	-- optional parameters
lampModeSf71	(77),	-- optional parameters
lampModeSf72	(78),	-- optional parameters
lampModeSf73	(79),	-- optional parameters
lampModeSf74	(80),	-- optional parameters
lampModeSf75	(81),	-- optional parameters
lampModeSf76	(82),	-- optional parameters
lampModeSf77	(83),	-- optional parameters
lampModeSf78	(84),	-- optional parameters
lampModeSf79	(85),	-- optional parameters
lampModeSf80	(86),	-- optional parameters
lampModeSf81	(87),	-- optional parameters
lampModeSf82	(88),	-- optional parameters
lampModeSf83	(89),	-- optional parameters
lampModeSf84	(90),	-- optional parameters
lampModeSf85	(91),	-- optional parameters
lampModeSf86	(92),	-- optional parameters
lampModeSf87	(93),	-- optional parameters
lampModeSf88	(94),	-- optional parameters
lampModeSf89	(95),	-- optional parameters
lampModeSf90	(96),	-- optional parameters
lampModeSf91	(97),	-- optional parameters
lampModeSf92	(98),	-- optional parameters
lampModeSf93	(99),	-- optional parameters
lampModeSf94	(100),	-- optional parameters
lampBrightnessNormal	(101),	-- optional parameters
lampBrightnessDim	(102),	-- optional parameters
lampBrightnessBright	(103),	-- optional parameters
lampColorNoColor	(104),	-- optional parameters
lampColorRed	(105),	-- optional parameters

lampColorYellow	(106),	-- optional parameters
lampColorGreen	(107),	-- optional parameters
lampColorBlue	(108),	-- optional parameters
lampColorReserved	(109),	-- optional parameters
lampColorSf0	(110),	-- optional parameters
lampColorSf1	(111),	-- optional parameters
lampColorSf2	(112),	-- optional parameters
lampColorSf3	(113),	-- optional parameters
lampColorSf4	(114),	-- optional parameters
lampColorSf5	(115),	-- optional parameters
lampColorSf6	(116),	-- optional parameters
lampColorSf7	(117),	-- optional parameters
lampColorSf8	(118),	-- optional parameters
lampColorSf9	(119),	-- optional parameters
lampColorSf10	(120),	-- optional parameters
lampColorSf11	(121),	-- optional parameters
lampColorSf12	(122),	-- optional parameters
lampColorSf13	(123),	-- optional parameters
lampColorSf14	(124),	-- optional parameters
lampColorSf15	(125),	-- optional parameters
lampColorSf16	(126),	-- optional parameters
lampColorSf17	(127),	-- optional parameters
lampColorSf18	(128),	-- optional parameters
lampColorSf19	(129),	-- optional parameters
lampColorSf20	(130),	-- optional parameters
lampColorSf21	(131),	-- optional parameters
lampColorSf22	(132),	-- optional parameters
lampColorSf23	(133),	-- optional parameters
lampColorSf24	(134),	-- optional parameters
lampColorSf25	(135),	-- optional parameters
lampColorSf26	(136),	-- optional parameters
lampColorSf27	(137),	-- optional parameters
lampColorSf28	(138),	-- optional parameters
lampColorSf29	(139),	-- optional parameters
lampColorSf30	(140),	-- optional parameters
lampColorSf31	(141),	-- optional parameters
lampColorSf32	(142),	-- optional parameters
lampColorSf33	(143),	-- optional parameters
lampColorSf34	(144),	-- optional parameters
lampColorSf35	(145),	-- optional parameters
lampColorSf36	(146),	-- optional parameters
lampColorSf37	(147),	-- optional parameters
lampColorSf38	(148),	-- optional parameters
lampColorSf39	(149),	-- optional parameters
lampColorSf40	(150),	-- optional parameters
lampColorSf41	(151),	-- optional parameters
lampColorSf42	(152),	-- optional parameters
lampColorSf43	(153),	-- optional parameters
lampColorSf44	(154),	-- optional parameters
lampColorSf45	(155),	-- optional parameters
lampColorSf46	(156),	-- optional parameters
lampColorSf47	(157),	-- optional parameters
lampColorSf48	(158),	-- optional parameters
lampColorSf49	(159),	-- optional parameters
lampColorSf50	(160),	-- optional parameters
lampColorSf51	(161),	-- optional parameters
lampColorSf52	(162),	-- optional parameters
lampColorSf53	(163),	-- optional parameters
lampColorSf54	(164),	-- optional parameters
lampColorSf55	(165),	-- optional parameters


```

lampColorSf56      (166), -- optional parameters
lampColorSf57      (167), -- optional parameters
lampColorSf58      (168), -- optional parameters
lampColorSf59      (169), -- optional parameters
lampColorSf60      (170), -- optional parameters
lampColorSf61      (171), -- optional parameters
lampColorSf62      (172), -- optional parameters
lampColorSf63      (173), -- optional parameters
lampColorSf64      (174), -- optional parameters
lampColorSf65      (175), -- optional parameters
lampColorSf66      (176), -- optional parameters
lampColorSf67      (177), -- optional parameters
lampColorSf68      (178), -- optional parameters
lampColorSf69      (179), -- optional parameters
lampColorSf70      (180), -- optional parameters
lampColorSf71      (181), -- optional parameters
lampColorSf72      (182), -- optional parameters
lampColorSf73      (183), -- optional parameters
lampColorSf74      (184), -- optional parameters
lampColorSf75      (185), -- optional parameters
lampColorSf76      (186), -- optional parameters
lampColorSf77      (187), -- optional parameters
lampColorSf78      (188), -- optional parameters
lampColorSf79      (189), -- optional parameters
lampColorSf80      (190), -- optional parameters
lampColorSf81      (191), -- optional parameters
lampColorSf82      (192), -- optional parameters
lampColorSf83      (193), -- optional parameters
lampColorSf84      (194), -- optional parameters
lampColorSf85      (195), -- optional parameters
lampColorSf86      (196), -- optional parameters
lampColorSf87      (197), -- optional parameters
lampColorSf88      (198), -- optional parameters
lampColorSf89      (199), -- optional parameters
lampColorSf90      (201), -- optional parameters
lampColorSf92      (202), -- optional parameters
lampColorSf93      (203), -- optional parameters
lampColorSf94      (204), -- optional parameters
privateData        (205) } -- optional parameters

MessageWaiting ::= BIT STRING
{
    deviceForMsg      ( 0), -- optional parameters
    privateData       ( 1) } -- optional parameters

MicrophoneGain ::= BIT STRING
{
    microphoneGainAbs ( 0), -- optional parameters
    microphoneGainInc ( 1), -- optional parameters
    privateData       ( 2) } -- optional parameters

MicrophoneMute ::= BIT STRING
{
    privateData       ( 0) } -- optional parameters

RingerStatus ::= BIT STRING
{
    ringerModeRinging ( 0), -- optional parameters
    ringerModeNotRinging ( 1), -- optional parameters
    ringCount         ( 2), -- optional parameters
    ringPattern        ( 3), -- optional parameters
    ringVolumeAbs      ( 4), -- optional parameters
    ringVolumeInc      ( 5), -- optional parameters
    privateData        ( 6) } -- optional parameters

```

```

SpeakerMute ::= BIT STRING
{
    privateData                ( 0 ) } -- optional parameters

SpeakerVolume ::= BIT STRING
{
    speakerVolumeAbs           ( 0 ), -- optional parameters
    speakerVolumeInc           ( 1 ), -- optional parameters
    privateData                ( 2 ) } -- optional parameters

LogicalServList ::= SEQUENCE
{
    callBackNonCallRel         [ 0 ] IMPLICIT CallBackNonCallRel         OPTIONAL,
    callBackMsgNonCallRel      [ 1 ] IMPLICIT CallBackMsgNonCallRel      OPTIONAL,
    cancelCallBack             [ 2 ] IMPLICIT CancelCallBack             OPTIONAL,
    cancelCallBackMsg          [ 3 ] IMPLICIT CancelCallBackMsg          OPTIONAL,
    getAgentState              [ 4 ] IMPLICIT GetAgentState              OPTIONAL,
    getAutoAnswer              [ 5 ] IMPLICIT GetAutoAnswer              OPTIONAL,
    getAutoWorkMode            [ 6 ] IMPLICIT GetAutoWorkMode            OPTIONAL,
    getCallerIDStatus          [ 7 ] IMPLICIT GetCallerIDStatus          OPTIONAL,
    getCallBack                [19] IMPLICIT GetCallBack                OPTIONAL,
    getDoNotDisturb            [ 8 ] IMPLICIT GetDoNotDisturb            OPTIONAL,
    getForwarding               [ 9 ] IMPLICIT GetForwarding             OPTIONAL,
    getLastNumberDialed        [10] IMPLICIT GetLastNumberDialed        OPTIONAL,
    getPresenceState           [20] IMPLICIT GetPresenceState           OPTIONAL,
    getRouteingMode            [11] IMPLICIT GetRouteingMode            OPTIONAL,
    setAgentState              [12] IMPLICIT SetAgentState              OPTIONAL,
    setAutoAnswer              [13] IMPLICIT SetAutoAnswer              OPTIONAL,
    setAutoWorkMode            [14] IMPLICIT SetAutoWorkMode            OPTIONAL,
    setCallerIDStatus          [15] IMPLICIT SetCallerIDStatus          OPTIONAL,
    setDoNotDisturb            [16] IMPLICIT SetDoNotDisturb            OPTIONAL,
    setForwarding               [17] IMPLICIT SetForwarding             OPTIONAL,
    setPresenceState           [21] IMPLICIT SetPresenceState           OPTIONAL,
    setRouteingMode            [18] IMPLICIT SetRouteingMode            OPTIONAL }

CallBackNonCallRel ::= BIT STRING
{
    privateData                ( 0 ), -- optional parameters
    privateDataInAck           ( 1 ), -- optional parameters
    additionalReqForbidden      ( 2 ), -- optional parameters
    ackModelMultiStep          ( 3 ) } -- misc characteristics

CallBackMsgNonCallRel ::= BIT STRING
{
    privateData                ( 0 ), -- optional parameters
    privateDataInAck           ( 1 ), -- optional parameters
    additionalReqForbidden      ( 2 ), -- optional parameters
    ackModelMultiStep          ( 3 ) } -- misc characteristics

CancelCallBack ::= BIT STRING
{
    privateData                ( 0 ), -- optional parameters
    privateDataInAck           ( 1 ), -- optional parameters
    ackModelMultiStep          ( 2 ), -- misc characteristics
    supportsClearing           ( 3 ) } -- misc characteristics

CancelCallBackMsg ::= BIT STRING
{
    privateData                ( 0 ), -- optional parameters
    privateDataInAck           ( 1 ), -- optional parameters
    ackModelMultiStep          ( 2 ), -- misc characteristics
    supportsClearing           ( 3 ) } -- misc characteristics

GetAgentState ::= BIT STRING
{
    acdGroup                   ( 0 ), -- optional parameters
    privateData                ( 1 ), -- optional parameters
    agentStateListAgentIDInAck ( 2 ), -- optional parameters

```

```

agentGroupInAck          ( 3),    -- optional parameters
pendingAgentStateInAck   ( 4),    -- optional parameters
agentStateConditionForcedPauseInAck ( 5),    -- optional parameters
agentStateConditionPauseInAck ( 6),    -- optional parameters
privateDataInAck         ( 7) }   -- optional parameters

GetAutoAnswer ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    numberOfRingsInAck   ( 1),    -- optional parameters
    privateDataInAck     ( 2) }   -- optional parameters

GetAutoWorkMode ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    autoWorkIntervalInAck ( 1),    -- optional parameters
    privateDataInAck     ( 2) }   -- optional parameters

GetCallerIDStatus ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }   -- optional parameters

GetCallBack ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }   -- optional parameters

GetDoNotDisturb ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    callOriginParameterInAck ( 1),    -- optional parameters
    callOriginInternInAck ( 2),    -- optional parameters
    callOriginExternInAck ( 3),    -- optional parameters
    callingDeviceListInAck ( 4),    -- optional parameters
    privateDataInAck     ( 5) }   -- optional parameters

GetForwarding ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    forwardListInAck     ( 1),    -- optional parameters
    forwardListImmediateInAck ( 2),    -- optional parameters
    forwardListBusyInAck ( 3),    -- optional parameters
    forwardListDNDInAck  ( 4),    -- optional parameters
    forwardListNoAnsInAck ( 5),    -- optional parameters
    forwardListBusyIntInAck ( 6),    -- optional parameters
    forwardListBusyExtInAck ( 7),    -- optional parameters
    forwardListDNDIntInAck ( 8),    -- optional parameters
    forwardListDNDExtInAck ( 9),    -- optional parameters
    forwardListNoAnsIntInAck (10),    -- optional parameters
    forwardListNoAnsExtInAck (11),    -- optional parameters
    forwardListImmIntInAck (12),    -- optional parameters
    forwardListImmExtInAck (13),    -- optional parameters
    forwardDNInAck       (14),    -- optional parameters
    forwardDefaultInAck  (15),    -- optional parameters
    forwardDefaultTypeAndDNInAck (16),    -- optional parameters
    forwardDefaultTypeInAck (17),    -- optional parameters
    forwardDefaultDNInAck (18),    -- optional parameters
    ringCountInAck       (19),    -- optional parameters
    privateDataInAck     (20) }   -- optional parameters

GetLastNumberDialed ::= BIT STRING
{
    privateData          ( 0),    -- optional parameters
    privateDataInAck     ( 1) }   -- optional parameters

```

```

GetPresenceState ::= BIT STRING
{
    privateData                ( 0),  -- optional parameters
    fromTimeInAck              ( 1),  -- optional parameters
    untilTimeInAck              ( 2),  -- optional parameters
    placeInAck                  ( 3),  -- optional parameters
    moodInAck                   ( 4),  -- optional parameters
    namedPresenceStateInAck     ( 5),  -- optional parameters
    privateDataInAck            ( 6) } -- optional parameters

GetRouteingMode ::= BIT STRING
{
    privateData                ( 0),  -- optional parameters
    privateDataInAck           ( 1) } -- optional parameters

SetAgentState ::= BIT STRING
{
    requestedAgentStateLoggedOn ( 0),  -- optional parameters
    requestedAgentStateLoggedOff ( 1),  -- optional parameters
    requestedAgentStateNotReady ( 2),  -- optional parameters
    requestedAgentStateReady     ( 3),  -- optional parameters
    requestedAgentStateWorkingAfterCall ( 4),  -- optional parameters
    agentID                      ( 5),  -- optional parameters
    password                     ( 6),  -- optional parameters
    group                        ( 7),  -- optional parameters
    privateData                  ( 8),  -- optional parameters
    pendingAgentStateWorkingAfterCallInAck ( 9),  -- optional parameters
    pendingAgentStateNotReadyInAck (10),  -- optional parameters
    pendingAgentStateNullInAck   (11),  -- optional parameters
    privateDataInAck             (12),  -- optional parameters
    ackModelMultiStep            (13),  -- misc characteristics
    groupDeviceAllowedInReq      (14),  -- misc characteristics
    aCDDeviceAllowedInReq        (15),  -- misc characteristics
    delayTransitionIfBusy        (16),  -- misc characteristics
    delayTransitionIfWorkingAfterCall (17) } -- misc characteristics

SetAutoAnswer ::= BIT STRING
{
    numberOfRings               ( 0),  -- optional parameters
    privateData                  ( 1),  -- optional parameters
    privateDataInAck            ( 2),  -- optional parameters
    ackModelMultiStep           ( 3) } -- misc characteristics

SetAutoWorkMode ::= BIT STRING
{
    autoWorkInterval            ( 0),  -- optional parameters
    privateData                  ( 1),  -- optional parameters
    privateDataInAck            ( 2),  -- optional parameters
    ackModelMultiStep           ( 3),  -- misc characteristics
    groupDeviceAllowedInReq      ( 4),  -- misc characteristics
    aCDDeviceAllowedInReq        ( 5) } -- misc characteristics

SetCallerIDStatus ::= BIT STRING
{
    privateData                  ( 0),  -- optional parameters
    privateDataInAck            ( 1),  -- optional parameters
    ackModelMultiStep           ( 2) } -- misc characteristics

SetDoNotDisturb ::= BIT STRING
{
    callOriginationInternal      ( 0),  -- optional parameters
    callOriginationExternal      ( 1),  -- optional parameters
    callingDeviceList            ( 2),  -- optional parameters
    privateData                  ( 3),  -- optional parameters
    privateDataInAck            ( 4),  -- optional parameters
    ackModelMultiStep           ( 5) } -- misc characteristics

```

SetForwarding ::= BIT STRING

forwardingTypeBusy	(0),	-- optional parameters
forwardingTypeBusyInt	(1),	-- optional parameters
forwardingTypeBusyExt	(2),	-- optional parameters
forwardingTypeDND	(3),	-- optional parameters
forwardingTypeDNDInt	(4),	-- optional parameters
forwardingTypeDNDExt	(5),	-- optional parameters
forwardingTypeNoAns	(6),	-- optional parameters
forwardingTypeNoAnsInt	(7),	-- optional parameters
forwardingTypeNoAnsExt	(8),	-- optional parameters
forwardingTypeImmediate	(9),	-- optional parameters
forwardingTypeImmInt	(10),	-- optional parameters
forwardingTypeImmExt	(11),	-- optional parameters
forwardDN	(12),	-- optional parameters
ringCount	(13),	-- optional parameters
privateData	(14),	-- optional parameters
privateDataInAck	(15),	-- optional parameters
ackModelMultiStep	(16),	-- misc characteristics
ringDuration	(17) }	-- optional parameters

SetPresenceState ::= BIT STRING

fromTime	(0),	-- optional parameters
untilTime	(1),	-- optional parameters
place	(2),	-- optional parameters
mood	(3),	-- optional parameters
namedPresenceState	(4),	-- optional parameters
privateData	(5),	-- optional parameters
privateDataInAck	(6),	-- optional parameters
ackModelMultiStep	(7) }	-- misc characteristics

SetRouteingMode ::= BIT STRING

privateData	(0),	-- optional parameters
privateDataInAck	(1),	-- optional parameters
ackModelMultiStep	(2) }	-- misc characteristics

LogicalEvtsList ::= SEQUENCE

agentBusy	[0] IMPLICIT	AgentBusy	OPTIONAL,
agentLoggedOff	[1] IMPLICIT	AgentLoggedOff	OPTIONAL,
agentLoggedOn	[2] IMPLICIT	AgentLoggedOn	OPTIONAL,
agentNotReady	[3] IMPLICIT	AgentNotReady	OPTIONAL,
agentReady	[4] IMPLICIT	AgentReady	OPTIONAL,
agentWorkingAfterCall	[5] IMPLICIT	AgentWorkingAfterCall	OPTIONAL,
autoAnswer	[6] IMPLICIT	AutoAnswer	OPTIONAL,
autoWorkMode	[7] IMPLICIT	AutoWorkMode	OPTIONAL,
callBack	[8] IMPLICIT	CallBackEvent	OPTIONAL,
callBackMessage	[9] IMPLICIT	CallBackMessageEvent	OPTIONAL,
callerIDStatus	[10] IMPLICIT	CallerIDStatus	OPTIONAL,
doNotDisturb	[11] IMPLICIT	DoNotDisturb	OPTIONAL,
forwarding	[12] IMPLICIT	Forwarding	OPTIONAL,
presenceState	[14] IMPLICIT	PresenceStateEvent	OPTIONAL,
routeingMode	[13] IMPLICIT	RouteingMode	OPTIONAL }

AgentBusy ::= BIT STRING

agentID	(0),	-- optional parameters
acdGroup	(1),	-- optional parameters
pendingAgentStateWorkingAfterCall	(2),	-- optional parameters
pendingAgentStateNotReady	(3),	-- optional parameters
pendingAgentStateReady	(4),	-- optional parameters
pendingAgentStateNull	(5),	-- optional parameters

```

        cause                                ( 6),    -- optional parameters
        privateData                          ( 7) }    -- optional parameters

AgentLoggedOff ::= BIT STRING
{
    agentID                                ( 0),    -- optional parameters
    acdGroup                               ( 1),    -- optional parameters
    agentPassword                           ( 2),    -- optional parameters
    cause                                  ( 3),    -- optional parameters
    privateData                             ( 4) }    -- optional parameters

AgentLoggedOn ::= BIT STRING
{
    agentID                                ( 0),    -- optional parameters
    acdGroup                               ( 1),    -- optional parameters
    agentPassword                           ( 2),    -- optional parameters
    cause                                  ( 3),    -- optional parameters
    privateData                             ( 4) }    -- optional parameters

AgentNotReady ::= BIT STRING
{
    agentID                                ( 0),    -- optional parameters
    acdGroup                               ( 1),    -- optional parameters
    cause                                  ( 2),    -- optional parameters
    privateData                             ( 3) }    -- optional parameters

AgentReady ::= BIT STRING
{
    agentID                                ( 0),    -- optional parameters
    acdGroup                               ( 1),    -- optional parameters
    cause                                  ( 2),    -- optional parameters
    privateData                             ( 3) }    -- optional parameters

AgentWorkingAfterCall ::= BIT STRING
{
    agentID                                ( 0),    -- optional parameters
    acdGroup                               ( 1),    -- optional parameters
    pendingAgentStateNotReady               ( 2),    -- optional parameters
    pendingAgentStateReady                  ( 3),    -- optional parameters
    pendingAgentStateNull                   ( 4),    -- optional parameters
    cause                                  ( 5),    -- optional parameters
    privateData                             ( 6) }    -- optional parameters

AutoAnswer ::= BIT STRING
{
    numberOfRings                           ( 0),    -- optional parameters
    privateData                             ( 1) }    -- optional parameters

AutoWorkMode ::= BIT STRING
{
    privateData                             ( 0) }    -- optional parameters

CallBackEvent ::= BIT STRING
{
    privateData                             ( 0) }    -- optional parameters

CallBackMessageEvent ::= BIT STRING
{
    privateData                             ( 0) }    -- optional parameters

CallerIDStatus ::= BIT STRING
{
    privateData                             ( 0) }    -- optional parameters

DoNotDisturb ::= BIT STRING
{
    callOriginationParameter                ( 0),    -- optional parameters
    callOriginationInternal                 ( 1),    -- optional parameters
    callOriginationExternal                 ( 2),    -- optional parameters
    callingDeviceList                       ( 3),    -- optional parameters
    privateData                             ( 4) }    -- optional parameters

```

```

Forwarding ::= BIT STRING
{
    forwardingTypeBusy                ( 0),
    forwardingTypeBusyInt             ( 1),
    forwardingTypeBusyExt             ( 2),
    forwardingTypeDND                 ( 3),
    forwardingTypeDNDInt              ( 4),
    forwardingTypeDNDExt              ( 5),
    forwardingTypeNoAns               ( 6),
    forwardingTypeNoAnsInt            ( 7),
    forwardingTypeNoAnsExt            ( 8),
    forwardingTypeImmediate           ( 9),
    forwardingTypeImmInt              (10),
    forwardingTypeImmExt              (11),
    forwardTo                         (12),
    forwardDefaultTypeAndDN           (13),
    forwardDefaultType                (14),
    forwardDefaultDN                  (15),
    ringCount                         (16),
    privateData                       (17),
    ringDuration                      (18) }

PresenceStateEvent ::= BIT STRING
{
    fromTime                         ( 0), -- optional parameters
    untilTime                       ( 1), -- optional parameters
    place                           ( 2), -- optional parameters
    mood                            ( 3), -- optional parameters
    namedPresenceState              ( 4), -- optional parameters
    privateData                     ( 5) } -- optional parameters

RouteingMode ::= BIT STRING
{
    privateData                      ( 0) } -- optional parameters

DeviceMaintEvtsList ::= SEQUENCE
{
    backInService                    [0] IMPLICIT    BackInService        OPTIONAL,
    deviceCapsChanged                [1] IMPLICIT    DeviceCapsChanged    OPTIONAL,
    outOfService                     [2] IMPLICIT    OutOfService         OPTIONAL,
    partiallyInService                [3] IMPLICIT    PartiallyInService   OPTIONAL }

BackInService ::= BIT STRING
{
    cause                           ( 0), -- optional parameters
    privateData                     ( 1) } -- optional parameters

DeviceCapsChanged ::= BIT STRING
{
    cause                           ( 0), -- optional parameters
    privateData                     ( 1) } -- optional parameters

OutOfService ::= BIT STRING
{
    cause                           ( 0), -- optional parameters
    privateData                     ( 1) } -- optional parameters

PartiallyInService ::= BIT STRING
{
    cause                           ( 0), -- optional parameters
    privateData                     ( 1) } -- optional parameters

IOServicesServList ::= SEQUENCE
{
    ioRegister                      [ 0] IMPLICIT    IoRegister          OPTIONAL,
    ioRegisterAbort                  [ 1] IMPLICIT    IoRegisterAbort      OPTIONAL,
    ioRegisterCancel                  [ 2] IMPLICIT    IoRegisterCancel      OPTIONAL,
    dataPathResumed                  [ 3] IMPLICIT    DataPathResumed        OPTIONAL,
    dataPathSuspended                [ 4] IMPLICIT    DataPathSuspended      OPTIONAL,

```

fastData	[5]	IMPLICIT	FastData	OPTIONAL,
resumeDataPath	[6]	IMPLICIT	ResumeDataPath	OPTIONAL,
sendBroadcastData	[7]	IMPLICIT	SendBroadcastData	OPTIONAL,
sendData	[8]	IMPLICIT	SendData	OPTIONAL,
sendMulticastData	[9]	IMPLICIT	SendMulticastData	OPTIONAL,
startDataPath	[10]	IMPLICIT	StartDataPath	OPTIONAL,
stopDataPath	[11]	IMPLICIT	StopDataPath	OPTIONAL,
suspendDataPath	[12]	IMPLICIT	SuspendDataPath	OPTIONAL }

IoRegister ::= BIT STRING

```
{
    ioDevice          ( 0),  -- optional parameters
    privateData       ( 1),  -- optional parameters
    privateDataInAck  ( 2),  -- optional parameters
    allIODevices      ( 3) } -- misc characteristics
```

IoRegisterAbort ::= BIT STRING

```
{
    privateData      ( 0) } -- optional parameters
```

IoRegisterCancel ::= BIT STRING

```
{
    privateData          ( 0),  -- optional parameters
    privateDataInAck     ( 1) } -- optional parameters
```

DataPathResumed ::= BIT STRING

```
{
    privateData          ( 0),  -- optional parameters
    privateDataInAck     ( 1) } -- optional parameters
```

DataPathSuspended ::= BIT STRING

```
{
    privateData          ( 0),  -- optional parameters
    privateDataInAck     ( 1) } -- optional parameters
```

FastData ::= BIT STRING

```
{
    objectDevice      ( 0),  -- optional parameters
    objectCall        ( 1),  -- optional parameters
    dataPathTypeText  ( 2),  -- optional parameters
    dataPathTypeVoice ( 3),  -- optional parameters
    displayAttribPhyBaseRowNumber ( 4),  -- optional parameters
    displayAttribPhyBaseColumnNumber ( 5),  -- optional parameters
    displayAttribOffset ( 6),  -- optional parameters
    privateData       ( 7),  -- optional parameters
    privateDataInAck  ( 8),  -- optional parameters
    supportsModifyingPosition ( 9) } -- misc characteristics
```

ResumeDataPath ::= BIT STRING

```
{
    privateData          ( 0),  -- optional parameters
    privateDataInAck     ( 1),  -- optional parameters
    sendsDataPathResumed ( 2) } -- misc characteristics
```

SendBroadcastData ::= BIT STRING

```
{
    privateData          ( 0),  -- optional parameters
    dataPathTypeText     ( 1),  -- optional parameters
    dataPathTypeVoice    ( 2),  -- optional parameters
    displayAttribPhyBaseRowNumber ( 3),  -- optional parameters
    displayAttribPhyBaseColumnNumber ( 4),  -- optional parameters
    displayAttribOffset   ( 5),  -- optional parameters
    privateDataInAck     ( 6),  -- optional parameters
    supportsModifyingPosition ( 7) } -- misc characteristics
```

SendData ::= BIT STRING

```
{
    displayAttribPhyBaseRowNumber ( 0),  -- optional parameters
    displayAttribPhyBaseColumnNumber ( 1),  -- optional parameters
```


displayAttribOffset (2), -- optional parameters
ioCauseTerminationCharReceived (3), -- optional parameters
ioCauseCharCountReached (4), -- optional parameters
ioCauseTimeout (5), -- optional parameters
ioCauseSfTerminated (6), -- optional parameters
privateData (7), -- optional parameters
privateDataInAck (8), -- optional parameters
supportsModifyingPosition (9) } -- misc characteristics

SendMulticastData ::= BIT STRING
{ ioData (0), -- optional parameters
displayAttribPhyBaseRowNumber (1), -- optional parameters
displayAttribPhyBaseColumnNumber (2), -- optional parameters
displayAttribOffset (3), -- optional parameters
privateData (4), -- optional parameters
privateDataInAck (5), -- optional parameters
supportsModifyingPosition (6) } -- misc characteristics

StartDataPath ::= BIT STRING
{ objectDevice (0), -- optional parameters
objectCall (1), -- optional parameters
dataPathDirectionCfToObject (2), -- optional parameters
dataPathDirectionObjectToCf (3), -- optional parameters
dataPathDirectionBidirectional (4), -- optional parameters
dataPathTypeText (5), -- optional parameters
dataPathTypeVoice (6), -- optional parameters
numberOfCharsToCollect (7), -- optional parameters
terminationChar (8), -- optional parameters
timeout (9), -- optional parameters
privateData (10), -- optional parameters
numberOfCharsToCollectInAck (11), -- optional parameters
terminationCharInAck (12), -- optional parameters
timeoutInAck (13), -- optional parameters
privateDataInAck (14) } -- optional parameters

StopDataPath ::= BIT STRING
{ privateData (0), -- optional parameters
privateDataInAck (1) } -- optional parameters

SuspendDataPath ::= BIT STRING
{ privateData (0), -- optional parameters
privateDataInAck (1) } -- optional parameters

DataCollectionServList ::= SEQUENCE
{ dataCollected [0] IMPLICIT DataCollected OPTIONAL,
dataCollectionResumed [1] IMPLICIT DataCollectionResumed OPTIONAL,
dataCollectionSuspended [2] IMPLICIT DataCollectionSuspended OPTIONAL,
resumeDataCollection [3] IMPLICIT ResumeDataCollection OPTIONAL,
startDataCollection [4] IMPLICIT StartDataCollection OPTIONAL,
stopDataCollection [5] IMPLICIT StopDataCollection OPTIONAL,
suspendDataCollection [6] IMPLICIT SuspendDataCollection OPTIONAL }

DataCollected ::= BIT STRING
{ digitsDuration (0), -- optional parameters
digitsPauseDuration (1), -- optional parameters
toneDetectedBeep (2), -- optional parameters
toneDetectedBilling (3), -- optional parameters
toneDetectedBusy (4), -- optional parameters
toneDetectedCarrier (5), -- optional parameters
toneDetectedConfirmation (6), -- optional parameters

toneDetectedDial (7), -- optional parameters
 toneDetectedFaxCNG (8), -- optional parameters
 toneDetectedHold (9), -- optional parameters
 toneDetectedHowler (10), -- optional parameters
 toneDetectedIntrusion (11), -- optional parameters
 toneDetectedModemCNG (12), -- optional parameters
 toneDetectedPark (13), -- optional parameters
 toneDetectedRecordWarning (14), -- optional parameters
 toneDetectedReorder (15), -- optional parameters
 toneDetectedRingback (16), -- optional parameters
 toneDetectedSilence (17), -- optional parameters
 toneDetectedSitVC (18), -- optional parameters
 toneDetectedSitIC (19), -- optional parameters
 toneDetectedSitRO (20), -- optional parameters
 toneDetectedSitNC (21), -- optional parameters
 toneDetectedSf0 (22), -- optional parameters
 toneDetectedSf1 (23), -- optional parameters
 toneDetectedSf2 (24), -- optional parameters
 toneDetectedSf3 (25), -- optional parameters
 toneDetectedSf4 (26), -- optional parameters
 toneDetectedSf5 (27), -- optional parameters
 toneDetectedSf6 (28), -- optional parameters
 toneDetectedSf7 (29), -- optional parameters
 toneDetectedSf8 (30), -- optional parameters
 toneDetectedSf9 (31), -- optional parameters
 toneDetectedSf10 (32), -- optional parameters
 toneDetectedOther (33), -- optional parameters
 toneFrequency (34), -- optional parameters
 toneDuration (35), -- optional parameters
 tonePauseDuration (36), -- optional parameters
 connectionInfo (37), -- optional parameters
 dcollCauseFushCharReceived (38), -- optional parameters
 dcollCauseCharCountReached (39), -- optional parameters
 dcollCauseTimeout (40), -- optional parameters
 dcollCauseSFTerminated (41), -- optional parameters
 privateData (42), -- optional parameters
 privateDataInAck (43) } -- optional parameters

DataCollectionResumed ::= BIT STRING
 {
 privateData (0), -- optional parameters
 privateDataInAck (1) } -- optional parameters

DataCollectionSuspended ::= BIT STRING
 {
 privateData (0), -- optional parameters
 privateDataInAck (1) } -- optional parameters

ResumeDataCollection ::= BIT STRING
 {
 privateData (0), -- optional parameters
 privateDataInAck (1) } -- optional parameters

StartDataCollection ::= BIT STRING
 {
 objectDevice (0), -- optional parameters
 objectCall (1), -- optional parameters
 dataCollectionTypeDigits (2), -- optional parameters
 dataCollectionTypeTones (3), -- optional parameters
 digitsReportingCriteriaNumChars (4), -- optional parameters
 digitsReportingCriteriaFlushChar (5), -- optional parameters
 digitsReportingCriteriaTimeout (6), -- optional parameters
 privateData (7), -- optional parameters
 privateDataInAck (8) } -- optional parameters

```

StopDataCollection ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1) }    -- optional parameters

SuspendDataCollection ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1) }    -- optional parameters

VoiceUnitServList ::= SEQUENCE
{
    activate                   [12] IMPLICIT Activate          OPTIONAL,
    clear                      [13] IMPLICIT Clear              OPTIONAL,
    deactivate                 [14] IMPLICIT Deactivate         OPTIONAL,
    concatenateMsg             [ 0] IMPLICIT ConcatenateMsg     OPTIONAL,
    deleteMsg                 [ 1] IMPLICIT DeleteMsg          OPTIONAL,
    queue                      [15] IMPLICIT Queue              OPTIONAL,
    playMsg                    [ 2] IMPLICIT PlayMsg            OPTIONAL,
    queryVoiceAttrib           [ 3] IMPLICIT QueryVoiceAttrib   OPTIONAL,
    recordMsg                  [ 4] IMPLICIT RecordMsg          OPTIONAL,
    reposition                 [ 5] IMPLICIT Reposition         OPTIONAL,
    resume                     [ 6] IMPLICIT Resume             OPTIONAL,
    review                     [ 7] IMPLICIT Review             OPTIONAL,
    start                      [16] IMPLICIT Start              OPTIONAL,
    setVoiceAttrib             [ 8] IMPLICIT SetVoiceAttrib     OPTIONAL,
    stop                       [ 9] IMPLICIT Stop               OPTIONAL,
    suspend                    [10] IMPLICIT Suspend            OPTIONAL,
    synthesizeMsg              [11] IMPLICIT SynthesizeMsg      OPTIONAL }

Activate ::= BIT STRING
{
    resource                   ( 0),    -- optional parameters
    grammarName                ( 1),    -- optional parameters
    privateData                ( 2),    -- optional parameters
    privateDataInAck           ( 3) }    -- optional parameters

Clear ::= BIT STRING
{
    resource                   ( 0),    -- optional parameters
    privateData                ( 1),    -- optional parameters
    privateDataInAck           ( 2) }    -- optional parameters

ConcatenateMsg ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1) }    -- optional parameters

Deactivate ::= BIT STRING
{
    resource                   ( 0),    -- optional parameters
    grammarName                ( 1),    -- optional parameters
    privateData                ( 2),    -- optional parameters
    privateDataInAck           ( 3) }    -- optional parameters

DeleteMsg ::= BIT STRING
{
    privateData                ( 0),    -- optional parameters
    privateDataInAck           ( 1) }    -- optional parameters

PlayMsg ::= BIT STRING
{
    duration                   ( 0),    -- optional parameters
    terminationParameter       ( 1),    -- optional parameters
    terminationDurationExceeded ( 2),    -- optional parameters
    terminationDTMFDigitDetected ( 3),    -- optional parameters
    terminationEndOfSpeechDetected ( 4),    -- optional parameters
    terminationSpeech           ( 5),    -- optional parameters
    privateData                ( 6),    -- optional parameters

```

```

privateDataInAck          ( 7),    -- optional parameters
multipleMsgsSimultaneously ( 8) }  -- miscellaneous characteristics

```

QueryVoiceAttrib ::= BIT STRING

```

{
    messageToQuery          (30),    -- optional parameters
    resource                (31),    -- optional parameters
    attribToQueryEncodingAlgorithm ( 0),    -- optional parameters
    attribToQuerySamplingRate  ( 1),    -- optional parameters
    attribToQueryDuration     ( 2),    -- optional parameters
    attribToQueryFilename     ( 3),    -- optional parameters
    attribToQueryCurrentPosition ( 4),    -- optional parameters
    attribToQueryCurrentSpeed  ( 5),    -- optional parameters
    attribToQueryCurrentVolume ( 6),    -- optional parameters
    attribToQueryCurrentLevel  ( 7),    -- optional parameters
    attribToQueryCurrentState  ( 8),    -- optional parameters
    attribToQueryGrammars      (32),    -- optional parameters
    attribToQueryLanguage      (33),    -- optional parameters
    attribToQueryMode          (34),    -- optional parameters
    attribToQueryRetainAudio    (35),    -- optional parameters
    attribToQuerySilenceTimeout (36),    -- optional parameters
    attribToQueryMaxTimeout    (37),    -- optional parameters
    attribToQueryBabbleTimeout (38),    -- optional parameters
    attribToQueryEndSilence    (39),    -- optional parameters
    attribToQueryRejectionThreshold (40), -- optional parameters
    attribToQueryAutoInterruptable (41), -- optional parameters
    attribToQueryInnerXML      (42),    -- optional parameters
    attribToQueryInterdigitTimeout (43), -- optional parameters
    attribToQueryPreflush      (44),    -- optional parameters
    connection                ( 9),    -- optional parameters
    duration                  (10),    -- optional parameters
    terminationParameter       (11),    -- optional parameters
    terminationDurationExceeded (12),    -- optional parameters
    terminationDTMFDigitDetected (13), -- optional parameters
    terminationEndOfSpeechDetected (14), -- optional parameters
    terminationSpeech          (15),    -- optional parameters
    privateData                (16),    -- optional parameters
    attribInAckEncodingAlgorithmADPCM6K (17), -- optional parameters
    attribInAckEncodingAlgorithmADPCM8K (18), -- optional parameters
    attribInAckEncodingAlgorithmMuLawPCM6K (19), -- optional parameters
    attribInAckEncodingAlgorithmALawPCM6K (20), -- optional parameters
    attribInAckSamplingRate    (21),    -- optional parameters
    attribInAckDuration        (22),    -- optional parameters
    attribInAckFilename        (23),    -- optional parameters
    attribInAckCurrentPosition (24),    -- optional parameters
    attribInAckCurrentSpeed    (25),    -- optional parameters
    attribInAckCurrentVolumeAbs (26),    -- optional parameters
    attribInAckCurrentGain     (27),    -- optional parameters
    attribInAckCurrentState    (28),    -- optional parameters
    privateDataInAck          (29) }  -- optional parameters

```

Queue ::= BIT STRING

```

{
    message          ( 0),    -- optional parameters
    resource         ( 1),    -- optional parameters
    text             ( 2),    -- optional parameters
    privateData      ( 3),    -- optional parameters
    privateDataInAck ( 4) }  -- optional parameters

```

RecordMsg ::= BIT STRING

```

{
    resource          (13),    -- optional parameters
    samplingRate      ( 0),    -- optional parameters

```

encodingAlgorithmADPCM6K (1), -- optional parameters
 encodingAlgorithmADPCM8K (2), -- optional parameters
 encodingAlgorithmMuLawPCM6K (3), -- optional parameters
 encodingAlgorithmALawPCM6K (4), -- optional parameters
 maxDuration (5), -- optional parameters
 terminationParameter (6), -- optional parameters
 terminationDurationExceeded (7), -- optional parameters
 terminationDTMFDigitDetected (8), -- optional parameters
 terminationEndOfDataDetected (9), -- optional parameters
 terminationSpeechDetected (10), -- optional parameters
 privateData (11), -- optional parameters
 privateDataInAck (12) } -- optional parameters

Reposition ::= BIT STRING
 {
 periodOfRepositionStartOfMsg (0), -- optional parameters
 periodOfRepositionEndOfMsg (1), -- optional parameters
 periodOfRepositionRelativePointer (2), -- optional parameters
 msgToReposition (3), -- optional parameters
 privateData (4), -- optional parameters
 privateDataInAck (5) } -- optional parameters

Resume ::= BIT STRING
 {
 msgToResume (0), -- optional parameters
 resource (4), -- optional parameters
 duration (1), -- optional parameters
 privateData (2), -- optional parameters
 privateDataInAck (3) } -- optional parameters

Review ::= BIT STRING
 {
 msgToReview (4), -- optional parameters
 resource (5), -- optional parameters
 periodToResumeStartOfMsg (0), -- optional parameters
 periodToResumeLengthOfReview (1), -- optional parameters
 privateData (2), -- optional parameters
 privateDataInAck (3) } -- optional parameters

SetVoiceAttrib ::= BIT STRING
 {
 resource (9), -- optional parameters
 currentSpeed (0), -- optional parameters
 currentVolumeAbs (1), -- optional parameters
 currentVolumeInc (2), -- optional parameters
 grammars (10), -- optional parameters
 language (11), -- optional parameters
 mode (12), -- optional parameters
 retainAudio (13), -- optional parameters
 silenceTimeout (14), -- optional parameters
 maxTimeout (15), -- optional parameters
 babbleTimeout (16), -- optional parameters
 endSilence (17), -- optional parameters
 rejectionThreshold (18), -- optional parameters
 autoInterruptable (19), -- optional parameters
 innerXML (20), -- optional parameters
 interdigitTimeout (21), -- optional parameters
 preflush (22), -- optional parameters
 periodToResumeStartOfMsg (3), -- optional parameters
 periodToResumeLengthOfReview (4), -- optional parameters
 currentGain (5), -- optional parameters
 message (6), -- optional parameters
 privateData (7), -- optional parameters
 privateDataInAck (8) } -- optional parameters

```

Start ::= BIT STRING
{
    resource                ( 0),    -- optional parameters
    text                    ( 1),    -- optional parameters
    privateData              ( 2),    -- optional parameters
    privateDataInAck        ( 3) }   -- optional parameters

Stop ::= BIT STRING
{
    msgToBeStopped          ( 2),    -- optional parameters
    resource                ( 3),    -- optional parameters
    privateData              ( 0),    -- optional parameters
    privateDataInAck        ( 1) }   -- optional parameters

Suspend ::= BIT STRING
{
    message                 ( 0),    -- optional parameters
    resource                ( 3),    -- optional parameters
    privateData              ( 1),    -- optional parameters
    privateDataInAck        ( 2) }   -- optional parameters

SynthesizeMsg ::= BIT STRING
{
    genderMale              ( 0),    -- optional parameters
    genderFemale            ( 1),    -- optional parameters
    privateData              ( 2),    -- optional parameters
    privateDataInAck        ( 3) }   -- optional parameters

VoiceUnitEvtsList ::= SEQUENCE
{
    bookmarkReached          [ 7] IMPLICIT BookmarkReached          OPTIONAL,
    completed                [ 8] IMPLICIT Completed                OPTIONAL,
    dtmfDetected             [ 9] IMPLICIT DtmfDetected             OPTIONAL,
    emptied                  [10] IMPLICIT Emptied                  OPTIONAL,
    interruptionDetected     [11] IMPLICIT InterruptionDetected     OPTIONAL,
    notRecognized            [12] IMPLICIT NotRecognized            OPTIONAL,
    play                     [ 0] IMPLICIT Play                     OPTIONAL,
    record                   [ 1] IMPLICIT Record                   OPTIONAL,
    recognized               [13] IMPLICIT Recognized               OPTIONAL,
    review                   [ 2] IMPLICIT ReviewEvent              OPTIONAL,
    started                  [14] IMPLICIT Started                  OPTIONAL,
    silenceTimeoutExpired    [15] IMPLICIT SilenceTimeoutExpired    OPTIONAL,
    speechDetected           [16] IMPLICIT SpeechDetected           OPTIONAL,
    stop                     [ 3] IMPLICIT StopEvent                OPTIONAL,
    suspendPlay              [ 4] IMPLICIT SuspendPlay              OPTIONAL,
    suspendRecord            [ 5] IMPLICIT SuspendRecord            OPTIONAL,
    voiceAttribChanged       [ 6] IMPLICIT VoiceAttribChanged       OPTIONAL,
    voiceErrorOccurred       [17] IMPLICIT VoiceErrorOccurred       OPTIONAL }

BookmarkReached ::= BIT STRING
{
    resource                ( 0),    -- optional parameters
    currentPosition        ( 1),    -- optional parameters
    servicesPermitted       ( 2),    -- optional parameters
    privateData              ( 3) }   -- optional parameters

Completed ::= BIT STRING
{
    resource                ( 0),    -- optional parameters
    cause                   ( 1),    -- optional parameters
    servicesPermitted       ( 2),    -- optional parameters
    privateData              ( 3) }   -- optional parameters

DtmfDetected ::= BIT STRING
{
    resource                ( 0),    -- optional parameters
    cause                   ( 1),    -- optional parameters

```

```

        servicesPermitted          ( 2),    -- optional parameters
        privateData                ( 3) }    -- optional parameters

Emptied ::= BIT STRING
{
    resource                      ( 0),    -- optional parameters
    cause                        ( 1),    -- optional parameters
    servicesPermitted            ( 2),    -- optional parameters
    privateData                  ( 3) }    -- optional parameters

InterruptionDetected ::= BIT STRING
{
    resource                      ( 0),    -- optional parameters
    cause                        ( 1),    -- optional parameters
    servicesPermitted            ( 2),    -- optional parameters
    privateData                  ( 3) }    -- optional parameters

NotRecognized ::= BIT STRING
{
    resource                      ( 0),    -- optional parameters
    result                      ( 1),    -- optional parameters
    cause                        ( 2),    -- optional parameters
    servicesPermitted            ( 3),    -- optional parameters
    privateData                  ( 4) }    -- optional parameters

Play ::= BIT STRING
{
    length                      ( 0),    -- optional parameters
    currentPosition              ( 1),    -- optional parameters
    speed                       ( 2),    -- optional parameters
    cause                        ( 3),    -- optional parameters
    servicesPermitted            ( 4),    -- optional parameters
    privateData                  ( 5) }    -- optional parameters

Recognized ::= BIT STRING
{
    resource                      ( 0),    -- optional parameters
    cause                        ( 1),    -- optional parameters
    servicesPermitted            ( 2),    -- optional parameters
    privateData                  ( 3) }    -- optional parameters

Record ::= BIT STRING
{
    length                      ( 0),    -- optional parameters
    currentPosition              ( 1),    -- optional parameters
    speed                       ( 2),    -- optional parameters
    cause                        ( 3),    -- optional parameters
    servicesPermitted            ( 4),    -- optional parameters
    privateData                  ( 5) }    -- optional parameters

ReviewEvent ::= BIT STRING
{
    message                      ( 5),    -- optional parameters
    resource                      ( 6),    -- optional parameters
    length                      ( 0),    -- optional parameters
    currentPosition              ( 1),    -- optional parameters
    cause                        ( 2),    -- optional parameters
    servicesPermitted            ( 3),    -- optional parameters
    privateData                  ( 4) }    -- optional parameters

SilenceTimeoutExpired ::= BIT STRING
{
    resource                      ( 0),    -- optional parameters
    cause                        ( 1),    -- optional parameters
    servicesPermitted            ( 2),    -- optional parameters
    privateData                  ( 3) }    -- optional parameters

```

```

SpeechDetected ::= BIT STRING
{
    resource                ( 0),  -- optional parameters
    cause                   ( 1),  -- optional parameters
    servicesPermitted       ( 2),  -- optional parameters
    privateData             ( 3) }  -- optional parameters

Started ::= BIT STRING
{
    resource                ( 0),  -- optional parameters
    cause                   ( 1),  -- optional parameters
    servicesPermitted       ( 2),  -- optional parameters
    privateData             ( 3) }  -- optional parameters

StopEvent ::= BIT STRING
{
    message                 ( 6),  -- optional parameters
    resource                ( 7),  -- optional parameters
    length                  ( 0),  -- optional parameters
    currentPosition        ( 1),  -- optional parameters
    speed                   ( 2),  -- optional parameters
    cause                   ( 3),  -- optional parameters
    servicesPermitted       ( 4),  -- optional parameters
    privateData             ( 5) }  -- optional parameters

SuspendPlay ::= BIT STRING
{
    message                 ( 5),  -- optional parameters
    resource                ( 6),  -- optional parameters
    length                  ( 0),  -- optional parameters
    currentPosition        ( 1),  -- optional parameters
    cause                   ( 2),  -- optional parameters
    servicesPermitted       ( 3),  -- optional parameters
    privateData             ( 4) }  -- optional parameters

SuspendRecord ::= BIT STRING
{
    message                 ( 5),  -- optional parameters
    resource                ( 6),  -- optional parameters
    length                  ( 0),  -- optional parameters
    currentPosition        ( 1),  -- optional parameters
    cause                   ( 2),  -- optional parameters
    servicesPermitted       ( 3),  -- optional parameters
    privateData             ( 4) }  -- optional parameters

VoiceAttribChanged ::= BIT STRING
{
    message                 ( 7),  -- optional parameters
    resource                ( 8),  -- optional parameters
    playVolumeAbs          ( 0),  -- optional parameters
    playVolumeInc          ( 1),  -- optional parameters
    recordGain              ( 2),  -- optional parameters
    speed                   ( 3),  -- optional parameters
    currentPosition        ( 4),  -- optional parameters
    grammars                ( 9),  -- optional parameters
    language                (10),  -- optional parameters
    mode                   (11),  -- optional parameters
    retainAudio             (12),  -- optional parameters
    silenceTimeout          (13),  -- optional parameters
    maxTimeout              (14),  -- optional parameters
    babbleTimeout           (15),  -- optional parameters
    endSilence              (16),  -- optional parameters
    rejectionThreshold      (17),  -- optional parameters
    autoInterruptable       (18),  -- optional parameters
    innerXML                (19),  -- optional parameters
    interdigitTimeout       (20),  -- optional parameters

```



```

    preflush                (21),    -- optional parameters
    cause                   ( 5),    -- optional parameters
    privateData              ( 6) }  -- optional parameters

VoiceErrorOccured ::= BIT STRING
{
    resource                ( 0),    -- optional parameters
    cause                   ( 1),    -- optional parameters
    servicesPermitted       ( 2),    -- optional parameters
    privateData             ( 3) }  -- optional parameters

CDRServList ::= SEQUENCE
{
    cdrNotification         [ 0] IMPLICIT   CdrNotification         OPTIONAL,
    cdrReport               [ 1] IMPLICIT   CdrReport               OPTIONAL,
    sendStoredCDRs          [ 2] IMPLICIT   SendStoredCDRs          OPTIONAL,
    startCDRTransmission    [ 3] IMPLICIT   StartCDRTransmission    OPTIONAL,
    stopCDRTransmission     [ 4] IMPLICIT   StopCDRTransmission     OPTIONAL }

CdrNotification ::= BIT STRING
{
    cdrReasonTimeout        ( 0),    -- optional parameters
    cdrReasonThresholdReached ( 1),    -- optional parameters
    cdrReasonOther          ( 2),    -- optional parameters
    privateData             ( 3),    -- optional parameters
    privateDataInAck        ( 4) }  -- optional parameters

CdrReport ::= BIT STRING
{
    cdrReasonTimeout        ( 0),    -- optional parameters
    cdrReasonThresholdReached ( 1),    -- optional parameters
    cdrReasonOther          ( 2),    -- optional parameters
    recordNumber            ( 3),    -- optional parameters
    recordCreationTime       ( 4),    -- optional parameters
    callingDevice            ( 5),    -- optional parameters
    calledDevice             ( 6),    -- optional parameters
    assocCallingDevice       ( 7),    -- optional parameters
    assocCalledDevice        ( 8),    -- optional parameters
    netwCallingDevice        ( 9),    -- optional parameters
    netwCalledDevice         (10),    -- optional parameters
    callCharacteristics      (11),    -- optional parameters
    mediaCallCharacteristics (12),    -- optional parameters
    chargedDeviceOperator    (13),    -- optional parameters
    chargedDeviceNonOperator (14),    -- optional parameters
    recordedCall             (15),    -- optional parameters
    nodeNumberArea0         (16),    -- optional parameters
    nodeNumberArea1         (17),    -- optional parameters
    nodeNumberArea2         (18),    -- optional parameters
    tariffTable             (19),    -- optional parameters
    connectionStart          (20),    -- optional parameters
    connectionEnd            (21),    -- optional parameters
    connectionDuration       (22),    -- optional parameters
    accessCode               (23),    -- optional parameters
    carrier                  (24),    -- optional parameters
    selectedRoute            (25),    -- optional parameters
    billingIndicatorNormalCharging (26), -- optional parameters
    billingIndicatorReverseCharging (27), -- optional parameters
    billingIndicatorCreditCardCharging (28), -- optional parameters
    billingIndicatorCallForwarding (29), -- optional parameters
    billingIndicatorCallDeflection (30), -- optional parameters
    billingIndicatorCallTransfer (31), -- optional parameters
    billingIndicatorOther    (32),    -- optional parameters
    chargingInfo             (33),    -- optional parameters
    suppServiceInfoNormalCall (34),    -- optional parameters

```

supServiceInfoConsultationCall (35), -- optional parameters
 supServiceInfoTransferCall (36), -- optional parameters
 supServiceInfoCallCompletion (37), -- optional parameters
 supServiceInfoCallForwarding (38), -- optional parameters
 supServiceInfoCallDiversion (39), -- optional parameters
 supServiceInfoConferencing (40), -- optional parameters
 supServiceInfoIntrusion (41), -- optional parameters
 supServiceInfoUserUserInfo (42), -- optional parameters
 supServiceInfoOther (43), -- optional parameters
 reasonForTermNormalClearing (44), -- optional parameters
 reasonForTermUnsuccessfulCallAttempt (45), -- optional parameters
 reasonForTermAbnormalTermination (46), -- optional parameters
 reasonForTermCallTransferred (47), -- optional parameters
 reasonForTermOther (48), -- optional parameters
 authCode (49), -- optional parameters
 accountInfo (50), -- optional parameters
 deviceCategory (51), -- optional parameters
 namedDeviceTypes (52), -- optional parameters
 operatorDevice (53), -- optional parameters
 lastStoredCDRReportSent (54), -- optional parameters
 privateData (55), -- optional parameters
 privateDataInAck (56) } -- optional parameters

SendStoredCDRs ::= BIT STRING
 {
 timePeriod (0), -- optional parameters
 privateData (1), -- optional parameters
 privateDataInAck (2) } -- optional parameters

StartCDRTransmission ::= BIT STRING
 {
 transferModeTransferAtEndOfCall (0), -- optional parameters
 transferModeTransferOnRequest (1), -- optional parameters
 transferModeTransferOnThresholdReached (2), -- optional parameters
 privateData (3), -- optional parameters
 privateDataInAck (4) } -- optional parameters

StopCDRTransmission ::= BIT STRING
 {
 cdrTermReasonEndOfData (0), -- optional parameters
 cdrTermReasonError (1), -- optional parameters
 cdrTermReasonThresholdReached (2), -- optional parameters
 cdrTermReasonOther (3), -- optional parameter
 privateData (4), -- optional parameter
 privateDataInAck (5), -- optional parameter
 swFunctionSupportsSending (6), -- miscellaneous characteristics
 swFunctionSupportsReceiving (7) } -- miscellaneous characteristics

LocationServicesServList ::= SEQUENCE
 {
 getLocationInformation [0] IMPLICIT GetLocationInformation OPTIONAL,
 setLocationInformation [1] IMPLICIT SetLocationInformation OPTIONAL,
 locationTrackingSessionResumed [2] IMPLICIT LocationTrackingSessionResumed OPTIONAL,
 locationTrackingSessionSuspended [3] IMPLICIT LocationTrackingSessionSuspended OPTIONAL,
 resumeLocationTrackingSession [4] IMPLICIT ResumeLocationTrackingSession OPTIONAL,
 locationInformationReport [5] IMPLICIT LocationInformationReport OPTIONAL,
 startLocationTrackingSession [6] IMPLICIT StartLocationTrackingSession OPTIONAL,
 stopLocationTrackingSession [7] IMPLICIT StopLocationTrackingSession OPTIONAL,
 suspendLocationTrackingSession [8] IMPLICIT SuspendLocationTrackingSession OPTIONAL,
 getLocationTrackingCapabilities [9] IMPLICIT GetLocationTrackingCapabilities OPTIONAL,
 getLocationTrackingSessions [10] IMPLICIT GetLocationTrackingSessions OPTIONAL,
 locationSessionInfo [11] IMPLICIT LocationSessionInfo OPTIONAL
 }

```

GetLocationInformation ::= BIT STRING
{
    privateData                ( 0),
    locationInfoInAck          ( 1),
    privateDataInAck           ( 2) }

SetLocationInformation ::= BIT STRING
{
    locationInfo                ( 0),
    replaceMode                 ( 1),
    privateData                 ( 2),
    privateDataInAck            ( 3) }

LocationTrackingSessionResumed ::= BIT STRING
{
    locReason                   ( 0),
    privateData                 ( 1),
    privateDataInAck            ( 2) }

LocationTrackingSessionSuspended ::= BIT STRING
{
    locReason                   ( 0),
    locationInfoList            ( 1),
    privateData                 ( 2),
    privateDataInAck            ( 3) }

ResumeLocationTrackingSession ::= BIT STRING
{
    privateData                 ( 0),
    privateDataInAck            ( 1) }

LocationInformationReport ::= BIT STRING
{
    locationInfoList            ( 0),
    privateData                 ( 1),
    privateDataInAck            ( 2) }

StartLocationTrackingSession ::= BIT STRING
{
    collectionType              ( 0),
    collectionInterval           ( 1),
    maxCollections               ( 2),
    collectionFilter             ( 3),
    reportingType               ( 4),
    reportingCount               ( 5),
    privateData                 ( 6),
    piDFProfileOption1inAck      ( 7),
    piDFProfileOption2inAck      ( 8),
    privateDataInAck            ( 9) }

StopLocationTrackingSession ::= BIT STRING
{
    reason                      ( 0),
    privateData                 ( 1),
    privateDataInAck            ( 2) }

SuspendLocationTrackingSession ::= BIT STRING
{
    reason                      ( 0),
    privateData                 ( 1),
    privateDataInAck            ( 2) }

GetLocationTrackingCapabilities ::= BIT STRING
{
    privateData                 ( 0),
    privateDataInAck            ( 1) }

GetLocationTrackingSessions ::= BIT STRING
{
    privateData                 ( 0),
    privateDataInAck            ( 1) }

```

```

LocationSessionInfo ::= BIT STRING
{
    segmentID                ( 0),
    privateData              ( 1) }

VendorSpecificServList ::= SEQUENCE
{
    escapeRegister            [ 0] IMPLICIT   EscapeRegister            OPTIONAL,
    escapeRegisterCancel     [ 1] IMPLICIT   EscapeRegisterCancel     OPTIONAL,
    escapeRegisterAbort      [ 2] IMPLICIT   EscapeRegisterAbort      OPTIONAL,
    escape                   [ 3] IMPLICIT   Escape                   OPTIONAL,
    privateDataVersionSelection [ 4] IMPLICIT PrivateDataVersionSelection OPTIONAL
}

EscapeRegister ::= BIT STRING
{
    privateData              ( 0), -- optional parameters
    privateDataInAck         ( 1) } -- optional parameters

EscapeRegisterCancel ::= BIT STRING
{
    privateData              ( 0), -- optional parameters
    privateDataInAck         ( 1) } -- optional parameters

EscapeRegisterAbort ::= BIT STRING
{
    privateData              ( 0), -- optional parameters
    privateDataInAck         ( 1) } -- optional parameters

Escape ::= BIT STRING
{
    privateDataInAck         ( 0), -- optional parameters
    swFunctionSupportsSending ( 1), -- misc characteristics
    swFunctionSupportsReceiving ( 2) } -- misc characteristics

PrivateDataVersionSelection ::= BIT STRING
{
    privateDataInAck         ( 0) } -- optional parameters

VendorSpecificEvtsList ::= SEQUENCE
{
    privateEvent             [ 0] IMPLICIT   PrivateEvent             OPTIONAL }

PrivateEvent ::= BIT STRING

-- other Types

DeviceIDFormat ::= BIT STRING
{
    dialableDigitsAsterisk   ( 0),
    dialableDigitsHash       ( 1),
    dialableDigitsABCD       ( 2),
    dialableDigitsExclamation ( 3),
    dialableDigitsP          ( 4),
    dialableDigitsT          ( 5),
    dialableDigitsComma      ( 6),
    dialableDigitsW          ( 7),
    dialableDigitsAt         ( 8),
    dialableDigitsDollar     ( 9),
    dialableDigitsSemicolon  (10),
    sFReprExclamation        (11),
    sFReprEt                 (12),
    sFReprSlash              (13),
    sFReprPercent            (14),
    sFReprNM                 (15),
    sFReprGeneric            (16),
    sFReprImplicitTON        (17),
    sFReprPubTONUnkown       (18),

```

sFReprPubTONInternal (19),
 sFReprPubTONNational (20),
 sFReprPubTONSubscriber (21),
 sFReprPubTONAbbreviated (22),
 sFReprPriTONUnknown (23),
 sFReprPriTONLevel3 (24),
 sFReprPriTONLevel2 (25),
 sFReprPriTONLevel1 (26),
 sFReprPriTONLocal (27),
 sFReprPriTONAbbreviated (28),
 sFReprOther (29),
 sFRResourceID (31),
 privateNumber (32),
 privateName (33),
 deviceNumber (30) }

SwDomainFeatures ::= BIT STRING
 {
 isForwardingBefore (0),
 isForwardingAfter (1),
 swFunctionDefaultSettings (2),
 userSpecific (3),
 userSpecificDefaultForwardingType (4),
 userSpecificDefaultForwardDestination (5),
 negativeAcknowledgment (6),
 supportFailedWithAssConn (7),
 supportFailedWithoutAssConn (8),
 supportFailedWithAssConnNotReported (9),
 recall (10),
 callBack (11),
 extCallsIncoming (12),
 extCallsOutgoing (13),
 prompting (14) }

SwAppearanceAddressability ::= BIT STRING
 {
 nonAddressable (0),
 addressable (1) }

SwAppearanceTypes ::= BIT STRING
 {
 selectedStandard (0),
 basicStandard (1),
 basicBridged (2),
 exclusiveBridged (3),
 independentSharedBridged (4),
 interDependentSharedBridged (5) }

IgnoreUnsupportedParameters ::= ENUMERATED
 {
 ignoreParameters (0),
 rejectMessage (1) }

PauseTime ::= INTEGER (1..2000)

TimeStampMode ::= BIT STRING
 {
 allEvents (0),
 allAcks (1),
 allServReqs (2) }

MiscMonitorCaps ::= BIT STRING
 {
 groupInclusivModel (0),
 groupExclusiveModel (1),
 monitorPhysicalElement (2),
 }

```

acdDeviceInclusiv          ( 3 ),
acdDeviceExclusiv          ( 4 ) }

```

MaxLengthParameters ::= SEQUENCE

```

{
    accountInfo              INTEGER (0..32),
    authCode                  INTEGER (0..32),
    agentID                   INTEGER (0..32),
    agentPassword             INTEGER (0..32),
    callIDInConnectionID      INTEGER (0..8),
    correlatorData            INTEGER (0..32),
    privateData               INTEGER,
    deviceIdentifiers          INTEGER (0..128),
    userData                  INTEGER (0..256),
    buttonLabel               INTEGER (0..64),
    lampLabel                 INTEGER (0..64),
    charactersToSend          INTEGER (0..64) }

```

MaxLengthParametersContinued ::= SEQUENCE

```

{
    monitorCrossRefID         INTEGER,
    callQualifyingData        INTEGER,
    subDomainCallLinkageData  INTEGER,
    subDomainThreadID         INTEGER,
    ioData                    INTEGER,
    messageInfo               INTEGER }

```

FilterThreshold ::= SEQUENCE

```

{
    getLogicalDeviceInformation    INTEGER,
    getPhysicalDeviceInformation    INTEGER,
    getSwitchingFunctionCaps       INTEGER,
    getSwitchingFunctionDevices    INTEGER,
    switchingFunctionDevices        INTEGER,
    changeSystemStatusFilter        INTEGER,
    systemStatusRegister           INTEGER,
    systemStatusRegisterAbort       INTEGER,
    systemStatusRegisterCancel     INTEGER,
    requestSystemStatus            INTEGER,
    systemStatus                   INTEGER,
    switchingFunctionCapsChanged    INTEGER,
    switchingFunctionDevsChanged    INTEGER,
    changeMonitorFilter            INTEGER,
    monitorStart                   INTEGER,
    monitorStop                    INTEGER,
    snapshotCall                   INTEGER,
    snapshotDevice                 INTEGER,
    snapshotCallData               INTEGER,
    snapshotDeviceData             INTEGER,
    acceptCall                     INTEGER,
    alternateCall                  INTEGER,
    answerCall                     INTEGER,
    callBackCallRelated            INTEGER,
    callBackMessageCallRelated     INTEGER,
    campOnCall                     INTEGER,
    clearCall                      INTEGER,
    clearConnection                INTEGER,
    conferenceCall                 INTEGER,
    consultationCall               INTEGER,
    deflectCall                   INTEGER,
    dialDigits                    INTEGER,
    directedPickupCall             INTEGER,
    groupPickupCall               INTEGER,

```

holdCall	INTEGER,
intrudeCall	INTEGER,
joinCall	INTEGER,
makeCall	INTEGER,
makePredictiveCall	INTEGER,
parkCall	INTEGER,
reconnectCall	INTEGER,
retrieveCall	INTEGER,
singleStepConferenceCall	INTEGER,
singleStepTransferCall	INTEGER,
transferCall	INTEGER,
associateData	INTEGER,
cancelTelephonyTone	INTEGER,
generateDigits	INTEGER,
generateTelephonyTone	INTEGER,
sendUserInformation	INTEGER,
startDTMFDigitsCollection	INTEGER,
startTelephonyTonesCollection	INTEGER,
stopDTMFDigitsCollection	INTEGER,
stopTelephonyTonesCollection	INTEGER,
attachMediaService	INTEGER,
detachMediaService	INTEGER,
routeRegister	INTEGER,
routeRegisterAbort	INTEGER,
routeRegisterCancel	INTEGER,
reRoute	INTEGER,
routeEnd	INTEGER,
routeReject	INTEGER,
routeRequest	INTEGER,
routeSelect	INTEGER,
routeUsed	INTEGER,
buttonPress	INTEGER,
getAuditoryApparatusInfo	INTEGER,
getButtonInformation	INTEGER,
getDisplay	INTEGER,
getHookswitchStatus	INTEGER,
getLampInformation	INTEGER,
getLampMode	INTEGER,
getMicrophoneGain	INTEGER,
getMicrophoneMute	INTEGER,
getMessageWaitingIndicator	INTEGER,
getRingerStatus	INTEGER,
getSpeakerMute	INTEGER,
getSpeakerVolume	INTEGER,
setButtonInformation	INTEGER,
setDisplay	INTEGER,
setHookswitchStatus	INTEGER,
setLampMode	INTEGER,
setMsgWaitingIndicator	INTEGER,
setMicrophoneGain	INTEGER,
setMicrophoneMute	INTEGER,
setRingerStatus	INTEGER,
setSpeakerMute	INTEGER,
setSpeakerVolume	INTEGER,
callBackMessageNonCallRelated	INTEGER,
callBackNonCallRelated	INTEGER,
cancelCallBack	INTEGER,
cancelCallBackMessage	INTEGER,
getAgentState	INTEGER,
getAutoAnswer	INTEGER,

getAutoWorkMode	INTEGER,
getCallerIDStatus	INTEGER,
getDoNotDisturb	INTEGER,
getForwarding	INTEGER,
getLastNumberDialed	INTEGER,
getRouteingMode	INTEGER,
setAgentState	INTEGER,
setAutoAnswer	INTEGER,
setAutoWorkMode	INTEGER,
setCallerIDStatus	INTEGER,
setDoNotDisturb	INTEGER,
setForwarding	INTEGER,
setRouteingMode	INTEGER,
backInService	INTEGER,
deviceCaosChanged	INTEGER,
outOfService	INTEGER,
partiallyInService	INTEGER,
ioRegister	INTEGER,
ioRegisterAbort	INTEGER,
ioRegisterCancel	INTEGER,
dataPathResumed	INTEGER,
dataPathSuspended	INTEGER,
fastData	INTEGER,
resumeDataPath	INTEGER,
sendBroadcastData	INTEGER,
sendData	INTEGER,
sendMulticastData	INTEGER,
startDataPath	INTEGER,
stopDataPath	INTEGER,
suspendDataPath	INTEGER,
concatenateMsg	INTEGER,
deleteMsg	INTEGER,
playMsg	INTEGER,
queryVoiceAttribute	INTEGER,
recordMsg	INTEGER,
reposition	INTEGER,
resume	INTEGER,
review	INTEGER,
setVoiceAttribute	INTEGER,
stop	INTEGER,
suspend	INTEGER,
synthesizeMsg	INTEGER,
cdrNotification	INTEGER,
cdrReport	INTEGER,
sendStoredCDRs	INTEGER,
startCDRTransmission	INTEGER,
stopCDRTransmission	INTEGER,
escapeRegister	INTEGER,
escapeRegisterAbort	INTEGER,
escapeRegisterCancel	INTEGER,
escape	INTEGER,
privateDataVersion	INTEGER }

MediaServiceCapsList ::= SEQUENCE OF SEQUENCE

{	mediaServiceType	MediaServiceType,	
	mediaServiceVersion	INTEGER	OPTIONAL,
	mediaServiceInstance	MediaServiceInstanceID	OPTIONAL,
	connectionMode	ConnectionModeBMap	OPTIONAL,
	mediaStreamIDSupported	BOOLEAN }	

DeviceCategory ::= ENUMERATED

```
{
    acd                      ( 0 ),
    group                    ( 1 ),
    networkInterface         ( 2 ),
    park                     ( 3 ),
    routeingDevice           ( 4 ),
    station                  ( 5 ),
    voiceUnit                ( 6 ),
    genericInteractiveVoice   ( 8 ),
    listenerInteractiveVoice  ( 9 ),
    dtmfInteractiveVoice     (10),
    promptInteractiveVoice    (11),
    promptQueueInteractiveVoice (12),
    messageInteractiveVoice   (13),
    conference               (14),
    other                    ( 7 ) }
```

GroupDeviceAttributes ::= BIT STRING

```
{
    acd                      ( 0 ),
    hunt                     ( 1 ),
    pick                     ( 2 ),
    user                     ( 4 ),
    agent                    ( 5 ),
    other                    ( 3 ) }
```

NamedDeviceTypes ::= ENUMERATED

```
{
    acd                      ( 0 ),
    acdGroup                 ( 1 ),
    button                   ( 2 ),
    buttonGroup              ( 3 ),
    conferenceBridge         ( 4 ),
    line                     ( 5 ),
    lineGroup                ( 6 ),
    operator                 ( 7 ),
    operatorGroup            ( 8 ),
    parkingDevice            ( 9 ),
    station                  (10),
    stationGroup             (11),
    trunk                    (12),
    trunkGroup               (13),
    other                    (14),
    otherGroup               (15) }
```

ACDModels ::= BIT STRING

```
{
    visibleACDRelatedDevices ( 0 ),
    nonVisibleACDRelatedDevices ( 1 ) }
```

AgentLogOnModels ::= BIT STRING

```
{
    logOnToACDDevice         ( 0 ),
    logOnToACDGroupExplOneStep ( 1 ),
    logOnToACDGroupExplTwoSteps ( 2 ),
    logOnToACDImplOneStep     ( 3 ) }
```

AppearanceType ::= ENUMERATED

```
{
    selectedStandard         ( 0 ),
    basicStandard            ( 1 ),
    basicBridged             ( 2 ),
    exclusiveBridged         ( 3 ),
    independentSharedBridged ( 4 ),
    interdependentSharedBridged ( 5 ) }
```

```
TransAndConfSetup ::= BIT STRING
{
    consultationCall          ( 0 ),
    holdCallMakeCall         ( 1 ),
    alternateCall             ( 2 ),
    twoCallsInHold           ( 3 ),
    twoCallsInConnected      ( 4 ) }

END -- of CSTA-capability-exchange
```

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9.11 Call Detail Record

```

CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) }

DEFINITIONS ::=

BEGIN

EXPORTS
CDRCrossRefID, CDRInfo, CDRReason, CDRTermReason, CDRTimePeriod,
CDRTransferMode;

IMPORTS
DeviceID, CalledDeviceID, CallingDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceCategory, NamedDeviceTypes FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

CDRCrossRefID ::= OCTET STRING

CDRReason ::= ENUMERATED
{
  timeout                (0),
  thresholdReached       (1),
  other                   (2) }

CDRInfo ::= SEQUENCE OF CDRInformationItem

CDRInformationItem ::= SEQUENCE
{
  recordNumber            INTEGER (1..128)                OPTIONAL,
  recordCreationTime      TimeInfo,                       OPTIONAL,
  callingDevice           CallingDeviceID                 OPTIONAL,
  calledDevice            CalledDeviceID                  OPTIONAL,
  associatedCallingDevice AssociatedCallingDeviceID        OPTIONAL,
  associatedCalledDevice  AssociatedCalledDeviceID         OPTIONAL,
  networkCallingDevice    NetworkCallingDeviceID          OPTIONAL,

```

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
callCharacteristics	[0] IMPLICIT CallCharacteristics	OPTIONAL,
mediaCallCharacteristics	[1] IMPLICIT MediaCallCharacteristics	OPTIONAL,
chargedDevice	[2] ChargedDevice	OPTIONAL,
recordedCall	ConnectionID	OPTIONAL,
nodeNumber	[3] IMPLICIT NodeNumber	OPTIONAL,
tariffTable	[4] IMPLICIT INTEGER	OPTIONAL,
connectionStart	[5] IMPLICIT TimeInfo	OPTIONAL,
connectionEnd	[6] IMPLICIT TimeInfo	OPTIONAL,
connectionDuration	[7] IMPLICIT INTEGER	OPTIONAL,
accessCode	[8] IMPLICIT OCTET STRING	OPTIONAL,
carrier	[9] IMPLICIT INTEGER	OPTIONAL,
selectedRoute	[10] IMPLICIT INTEGER	OPTIONAL,
billingID	[11] IMPLICIT BillingID	OPTIONAL,
chargingInfo	[12] IMPLICIT ChargingInfo	OPTIONAL,
supplServiceInfo	[13] IMPLICIT SupplServiceInfo	OPTIONAL,
reasonForTerm	[14] IMPLICIT ReasonForTerm	OPTIONAL,
authCode	[15] IMPLICIT AuthCode	OPTIONAL,
accountInfo	[16] IMPLICIT AccountInfo	OPTIONAL,
deviceCategory	[17] IMPLICIT DeviceCategory	OPTIONAL,
namedDeviceTypes	[18] IMPLICIT NamedDeviceTypes	OPTIONAL,
operatorDevice	[19] DeviceID	OPTIONAL }

ChargedDevice ::= CHOICE

```
{
    operator          [ 0] IMPLICIT DeviceID,
    nonOperator       [ 1] IMPLICIT DeviceID }
```

NodeNumber ::= SEQUENCE

```
{
    area0             [ 0] IMPLICIT INTEGER OPTIONAL,
    area1             [ 1] IMPLICIT INTEGER OPTIONAL,
    area2             [ 2] IMPLICIT INTEGER OPTIONAL }
```

BillingID ::= ENUMERATED

```
{
    normalCharging    (0),
    reverseCharging   (1),
    creditCardCharging (2),
    callForwarding    (3),
    callDeflection     (4),
    callTransfer       (5),
    other              (6) }
```

SupplServiceInfo ::= BIT STRING

```
{
    normalCall        (0),
    consultationCall   (1),
    transferCall       (2),
    callCompletion     (3),
    callForwarding     (4),
    callDiversion      (5),
    conferencing       (6),
    intrusion          (7),
    userUserInfo       (8),
    other              (9) }
```

ReasonForTerm ::= ENUMERATED

```
{
    normalClearing     (0),
    unsuccessfulCallAttempt (1),
    abnormalTermination (2),
    callTransferred    (3),
    other              (4) }
```

```
CDRTimePeriod ::= SEQUENCE
{
    beginningOfCDR      TimeInfo,
    endOfCDR             TimeInfo }

CDRTransferMode ::= ENUMERATED
{
    transferAtEndOfCall      (0),
    transferOnRequest        (1),
    transferOnThresholdReached (2) }

CDRTermReason ::= ENUMERATED
{
    endOfDataDetected      (0),
    errorDetected          (1),
    thresholdReached        (2),
    other                   (3) }

END -- of CSTA-call-detail-record
```

9.12 Charge information

```

CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }

DEFINITIONS ::=
BEGIN

EXPORTS
ChargingInfo;

ChargingInfo ::= SEQUENCE
{
  numberUnits          NumberUnits,
  typeOfChargingInfo   ENUMERATED
  {
    subTotal          (0),
    total              (1) } },

NumberUnits ::= CHOICE
{
  numberOfChargeUnits   [0] IMPLICIT   NumberOfChargingUnits,
  numberOfCurrencyUnits [1] IMPLICIT   NumberOfCurrencyUnits },

NumberOfChargingUnits ::= SEQUENCE OF SEQUENCE
{
  chargingUnits   INTEGER,
  typeOfUnits     OCTET STRING OPTIONAL },

NumberOfCurrencyUnits ::= SEQUENCE
{
  currencyType      OCTET STRING, -- size 0 indicates default currency
  currencyAmount    INTEGER,
  currencyMultiplier ENUMERATED
  {
    oneThousandth    (0),
    oneHundredth      (1),
    oneTenth          (2),
    one                (3),
    ten                (4),
    hundred            (5),
    thousand           (6)
  }
}

END -- of CSTA-charge-info

```

9.13 Data call types

```
CSTA-data-call-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-call-types( 134) }

DEFINITIONS ::=
BEGIN

EXPORTS
NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList;

NumberOfChannels ::= INTEGER

MaxChannelBind ::= INTEGER

ConnectionRateList ::= SEQUENCE OF INTEGER

DelayToleranceList ::= SEQUENCE OF INTEGER

END -- of CSTA-data-call-types
```

9.14 Escape types

```
CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) }

DEFINITIONS ::=
BEGIN

EXPORTS
EscapeRegisterID;

EscapeRegisterID ::= [0] OCTET STRING

END -- of CSTA-escape-types
```

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9.15 Media services

```
CSTA-media-services
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) media-services( 136) }
```

```
DEFINITIONS ::=
BEGIN
```

```
EXPORTS
```

```
ConnectionInformation, ConnectionMode, ConnectionModeBMap, MediaCallCharacteristics,
MediaServiceInstanceID, MediaServiceType, MediaStreamID, MediaClass;
```

```
MediaServiceType ::= ENUMERATED
```

```
{
    cstaVoiceUnit                ( 0),
    dataModem                    ( 1),
    digitalDataIsochronousIeee1394 ( 2),
    digitalDataIsochronousGeoport ( 3),
    digitalDataIsochronousIeeeAtm ( 4),
    digitalDataIsochronousIeeeIsdn ( 5),
    digitalDataApi                ( 6),
    ectfS100MediaServicesDefault ( 7),
    ectfS100MediaServicesAppServices ( 8),
    cstaIVRScrip1                ( 9),
    cstaIVRScrip2                (10),
    cstaIVRScrip3                (11),
    cstaIVRScrip4                (12),
    cstaIVRScrip5                (13),
    cstaIVRScrip6                (14),
    cstaIVRScrip7                (15),
    cstaIVRScrip8                (16),
    cstaIVRScrip9                (17),
    cstaIVRScrip10               (18),
    liveSoundCaptureAnalog       (19),
    liveSoundTransmitAnalog      (20),
    liveSoundCaptureIeee1394     (21),
    liveSoundTransmitIeee1394    (22),
    liveSoundCaptureTransmitGeoport (23),
    liveSoundCaptureTransmitAtm   (24),
    liveSoundCaptureTransmitISDN  (25),
    soundCaptureTransmitADPCM     (26),
    soundCaptureTransmitApi       (27),
    usb                           (28),
    sfSpecific1                   (29),
    sfSpecific2                   (30),
    sfSpecific3                   (31),
    sfSpecific4                   (32),
    sfSpecific5                   (33),
    sfSpecific6                   (34),
    sfSpecific7                   (35),
    sfSpecific8                   (36),
    sfSpecific9                   (37),
    sfSpecific10                  (38) }
```

```
MediaStreamID ::= OCTET STRING
```

```
MediaServiceInstanceID ::= OCTET STRING
```

```
ConnectionInformation ::= SEQUENCE
```

```
{   flowDirection          ENUMERATED
```

```

        {
            transmit          (0),
            receive            (1),
            transmitAndReceive (2),
            none               (3) } OPTIONAL,
        numberOfChannels      INTEGER      DEFAULT 1,
        mediaSessionInformation IA5String   OPTIONAL
    }

ConnectionMode ::= ENUMERATED
{
    consultationConference          (0),
    consultationConferenceHold      (1),
    deflect                         (2),
    directedPickup                  (3),
    join                           (4),
    singleStepConference            (5),
    singleStepConferenceHold        (6),
    singleStepTransfer              (7),
    transfer                        (8),
    direct                          (9) }

ConnectionModeBMap ::= BIT STRING
{
    consultationConference          (0),
    consultationConferenceHold      (1),
    deflect                         (2),
    directedPickup                  (3),
    join                           (4),
    singleStepConference            (5),
    singleStepConferenceHold        (6),
    singleStepTransfer              (7),
    transfer                        (8),
    direct                          (9) }

MediaCallCharacteristics ::= SEQUENCE
{
    mediaClass          MediaClass,
    connectionRate      [0] IMPLICIT INTEGER OPTIONAL,
                        -- value 0 indicates that
                        -- the connection rate is
                        -- unknown

    bitRate              [1] IMPLICIT ENUMERATED
    {
        constant        (0),
        variable         (1) } DEFAULT constant,
    delayTolerance       [2] IMPLICIT INTEGER OPTIONAL,
    switchingSubDomainInCCIEType
    [3] IMPLICIT ENUMERATED
    {
        isdn            (0),
        atm              (1),
        isoEthernet      (2),
        rsvp             (3),
        other            (4),
        sip              (5) } OPTIONAL,
    switchingSubDomainInformationElements OCTET STRING OPTIONAL }
                        -- is mandatory, if the switchingSubDomainCCIEType is present,
                        -- should be ignored otherwise

MediaClass ::= BIT STRING
{
    voice      ( 0),
    data       ( 1),
    image      ( 2),
    audio      ( 4),
    other      ( 3),
    notKnown   ( 5),
    chat       ( 6),

```

email	(7),
message	(8),
im	(9),
sms	(10),
mms	(11) }

END -- of CSTA-media-services

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9.16 Physical device features

CSTA-physical-device-feature

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }
```

DEFINITIONS ::=

BEGIN

EXPORTS

```
AuditoryApparatusID, AuditoryApparatusList, ButtonID, CharacterSet, DisplayID, LampBrightness,
LampColor, LampID, LampMode, MicGainAbs, MicrophoneGain, RingerID, RingMode,
VolAbs, Volume, HookswitchID;
```

AuditoryApparatusList ::= SEQUENCE OF SEQUENCE

```
{    auditoryApparatus      AuditoryApparatusID,
    auditoryApparatusType   ENUMERATED
    {    speakerphone      (0),
        handset            (1),
        headset            (2),
        speakerOnlyPhone   (3),
        other               (4) },

    speaker      BIT STRING
    {    present      (0),
        volumeSettable (1),
        volumeReadable (2),
        muteSettable   (3),
        muteReadable   (4) },

    microphone BIT STRING
    {    present      (0),
        gainSettable  (1),
        gainReadable  (2),
        muteSettable  (3),
        muteReadable  (4) },

    hookswitch BIT STRING
    {    hookswitchSettable (0),
        hookswitchOnHook   (1) },

    hookswitchID HookswitchID }
```

AuditoryApparatusID ::= OCTET STRING

ButtonID ::= OCTET STRING

CharacterSet ::= ENUMERATED

```
{    ascii      (0),
    unicode      (1),
    proprietary  (2) }
```

DisplayID ::= OCTET STRING

HookswitchID ::= OCTET STRING

LampBrightness ::= ENUMERATED

```
{    unspecified (0),
    dim           (1),
    bright        (2) }
```

```
LampColor ::= INTEGER
{
    noColor          (0),
    red              (1),
    yellow           (2),
    green            (3),
    blue             (4),
    unknown          (5) } (0..100)
```

```
LampID ::= OCTET STRING
```

```
LampMode ::= INTEGER
{
    brokenFlutter    (0),
    flutter          (1),
    off              (2),
    steady           (3),
    wink             (4),
    unknown          (5) } (0..100)
```

```
MicrophoneGain ::= CHOICE
{
    micGainAbs      MicGainAbs,
    micGainInc      MicGainInc }
```

```
MicGainInc ::= ENUMERATED
{
    increment        (0),
    decrement        (1) }
```

```
MicGainAbs ::= INTEGER (0..100)
```

```
RingerID ::= OCTET STRING
```

```
RingMode ::= ENUMERATED
{
    ringing          (0),
    notRinging       (1) }
```

```
Volume ::= CHOICE
{
    volAbs           VolAbs,
    volInc           VolInc }
```

```
VolInc ::= ENUMERATED
{
    increment        (0),
    decrement        (1) }
```

```
VolAbs ::= INTEGER (0..100)
```

```
END -- of CSTA-physical-device-feature
```

9.17 Data Collection

```
CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) }

DEFINITIONS ::=
BEGIN

EXPORTS
DcollCrossRefID;

DcollCrossRefID ::= OCTET STRING

END -- of CSTA-data-collection
```

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9.18 Event Cause

```
CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

```
DEFINITIONS ::=
BEGIN
```

```
EXPORTS
EventCause;
```

```
EventCause ::= ENUMERATED
{
  aCDBusy ( 57),
  aCDForward ( 58),
  aCDSaturated ( 59),
  activation ( 88),
  activeParticipation ( 1),
  alertTimeExpired ( 60),
  alternate ( 2),
  autoWork ( 61),
  babble ( 89),
  badAttribute ( 90),
  badGrammar ( 91),
  badVoice ( 92),
  badUri ( 93),
  blocked ( 35),
  busy ( 3),
  busyOverflow ( 94),
  calendarOverflow ( 95),
  callBack ( 4),
  callCancelled ( 5),
  callForward ( 9),
  callForwardImmediate ( 6),
  callForwardBusy ( 7),
  callForwardNoAnswer ( 8),
  callInterception (116),
  callInterceptionBusy (117),
  callInterceptionForwarded (118),
  callInterceptionNoAnswer (119),
  callInterceptionResourcesNotAvailable (120),
  callNotAnswered ( 10),
  callPickup ( 11),
  camOn ( 12),
  camOnTrunks ( 62),
  capacityOverflow ( 96),
  characterCountReached ( 36),
  conference ( 63),
  consultation ( 37),
  destDetected ( 64),
  destNotObtainable ( 13),
  destOutOfOrder ( 65),
  distributed ( 38),
  distributionDelay ( 66),
  doNotDisturb ( 14),
  dTMFDigitDetected ( 39),
  duplicatedDTMF ( 97),
  durationExceeded ( 40),
  earlyStop ( 98),
  emptyQueue ( 99),
```

endOfMessageDetected	(41),
enteringDistribution	(42),
forcedPause	(43),
forcedTransition	(67),
incompatibleDestination	(15),
interDigitTimeout	(100),
intrude	(68),
invalidAccountCode	(16),
invalidConnection	(101),
invalidConnectionState	(102),
invalidNumberFormat	(69),
joinCall	(70),
keyOperation	(17),
keyOperationInUse	(71),
lawfulInterception	(121),
lockout	(18),
maintenance	(19),
makeCall	(44),
makeConnection	(103),
makePredictiveCall	(72),
maxTimeout	(104),
messageDurationExceeded	(73),
messageSizeExceeded	(45),
multipleAlerting	(74),
multipleQueuing	(75),
networkCongestion	(20),
networkDialling	(76),
networkNotObtainable	(21),
networkOutOfOrder	(77),
networkSignal	(46),
newCall	(22),
nextMessage	(47),
noAudioSaved	(105),
noAvailableAgents	(23),
noQueue	(106),
normal	(78),
normalClearing	(48),
noRule	(107),
noSpeechDetected	(49),
notAvaliableBearerService	(79),
notSupportedBearerService	(80),
numberChanged	(50),
numberUnallocated	(81),
outOfGrammar	(108),
overflow	(26),
override	(24),
park	(25),
pathReplacement	(109),
queueCleared	(82),
queueTimeOverflow	(110),
recall	(27),
recallBusy	(111),
recallForwarded	(112),
recallNoAnswer	(113),
recallResourcesNotAvailable	(114),
redirected	(28),
remainsInQueue	(83),
reorderTone	(29),
reserved	(84),
resourcesNotAvailable	(30),


```
selectedTrunkBusy          ( 85),
silentParticipation        ( 31),
singleStepConference       ( 51),
singleStepTransfer         ( 52),
speechDetected             ( 53),
suspend                    ( 86),
switchingFunctionTerminated ( 54),
terminationCharacterReceived ( 55),
timeout                    ( 56),
transfer                   ( 32),
trunksBusy                 ( 33),
unauthorisedBearerService  ( 87),
unknownOverflow            (115) }
-- voiceUnitInitiator      ( 34)
-- *** note that the voiceUnitOriginator ( 34) is no longer used (commented out) ***

END -- of CSTA-event-causes
```

9.19 Error Value

```

CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }

DEFINITIONS ::=
BEGIN

EXPORTS
UniversalFailure, universalFailure, ErrorValue;

IMPORTS
ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) };

universalFailure ERROR ::=
{
  PARAMETER      UniversalFailure
  CODE           local:1 }

ErrorValue ::= UniversalFailure

UniversalFailure ::= CHOICE
{
  operation              [0] OperationErrors,
  security                [1] SecurityErrors,
  stateIncompatibility    [2] StateIncompatibilityErrors,
  systemResourceAvailability [3] SystemResourceAvailabilityErrors,
  subscribedResourceAvailability [4] SubscribedResourceAvailabilityErrors,
  performanceManagement   [5] PerformanceManagementErrors,
  privateData             [6] PrivateDataInfoErrors,
  unspecified              [7] UnspecifiedErrors }

OperationErrors ::= ENUMERATED -- in CSTA2 added in CSTA3
{
  generic                      ( 1),
  atLeastOneConditionalParameterNotProvided ( 29),
  featureAlreadySet            ( 30),
  invalidMsgID                 ( 25),
  invalidParameterValue        ( 31),
  invalidAccountCode          ( 21),
  invalidAgentGroup            ( 32),
  invalidAgentIdentifier       ( 33),
  invalidAgentPassword         ( 34),
  invalidAgentState            ( 35),
  invalidAlertTime             ( 36),
  invalidAllocationState       ( 16),
  invalidAuthCode              ( 22),
  invalidAutoAnswer            ( 37),
  invalidBitRate               ( 38),
  invalidButtonIdentifier       ( 39),
  invalidCallType              ( 42),
  invalidConnectionRate        ( 43),
  invalidConsultPurpose        ( 44),
  invalidCorrelatorData        ( 20),
  invalidCrossRefID            ( 17),
  invalidDelayTolerance        ( 45),
  invalidDestination           ( 14),
  invalidDestinationDetect     ( 46),
  invalidDoNotDisturb          ( 47),
  invalidEscapeCrossRefID      ( 48),
  invalidFeature               ( 15),

```

invalidFile	(28),
invalidFlowDirection	(49),
invalidForwardingDestination	(7),
invalidForwardingFlag	(51),
invalidForwardingType	(52),
invalidHookswitchType	(53),
invalidHookswitchComponent	(54),
invalidLampMode	(55),
invalidLampID	(56),
invalidMessageWaitingSetting	(57),
invalidMicrophoneGain	(58),
invalidMicrophoneMute	(59),
invalidMonitorCrossRefID	(60),
invalidMonitorFilter	(61),
invalidMonitorObject	(62),
invalidMonitorType	(63),
invalidNumberOfChannels	(64),
invalidParticipationType	(65),
invalidRemainRetry	(66),
invalidRingCount	(67),
invalidRingPattern	(68),
invalidRingVolume	(69),
invalidRouteingAlgorithm	(70),
invalidRouteingCrossRefID	(71),
invalidRouteRegistrationCrossRefID	(72),
invalidSpeakerVolume	(73),
invalidSpeakerMute	(74),
invalidSwitchingSubdomainCharsType	(75),
invalidObjectType	(18),
invalidActiveCallObject	(76),
invalidCalledDeviceObjectType	(77),
invalidCallingDeviceObjectType	(78),
invalidCallToBePickedUpObjectType	(79),
invalidCallToDivertObjectType	(80),
invalidCallToParkObjectType	(81),
invalidDestinationDeviceObject	(195),
invalidHeldCallObject	(82),
invalidMonitorObjectType	(83),
invalidParkToObjectType	(84),
messageIDRequired	(26),
notDifferentDevices	(85),
notSameDevice	(86),
objectNotKnown	(4),
invalidCallID	(11),
invalidActiveCallID	(87),
invalidHeldCallID	(88),
invalidConnectionID	(13),
invalidActiveConnectionID	(89),
invalidHeldConnectionID	(90),
invalidDeviceID	(12),
invalidActiveDeviceID	(91),
invalidCalledDeviceID	(6),
invalidCallingDeviceID	(5),
invalidCallToParkDeviceID	(92),
invalidDestinationDeviceID	(93),
invalidDivertingDeviceID	(94),
invalidHeldDeviceID	(95),
invalidParkToDeviceID	(96),
invalidPickUpDeviceID	(97),
parameterNotSupported	(98),

accountCodeNotSupported	(99),
agentGroupNotSupported	(100),
agentPasswordNotSupported	(101),
agentStateNotSupported	(102),
alertTimeNotSupported	(103),
allocationNotSupported	(104),
authorisationCodeNotSupported	(105),
autoAnswerNotSupported	(106),
bitRateNotSupported	(107),
buttonNotSupported	(108),
callTypeNotSupported	(109),
charactersToSendNotSupported	(110),
connectionRateNotSupported	(111),
connectionReservationNotSupported	(112),
consultPurposeNotSupported	(113),
correlatorDataNotSupported	(114),
delayToleranceNotSupported	(115),
destinationDetectNotSupported	(116),
digitModeNotSupported	(117),
errorValueNotSupported	(118),
flowDirectionNotSupported	(119),
forwardingDestinationNotSupported	(120),
lampNotSupported	(121),
monitorTypeNotSupported	(122),
numberOfChannelsNotSupported	(123),
parameterTypeNotSupported	(124),
priorityNotSupported	(125),
privateDataNotSupported	(126),
pulseDurationNotSupported	(127),
pulseRateNotSupported	(128),
remainRetryNotSupported	(129),
ringCountNotSupported	(130),
routeUsedNotSupported	(131),
securityNotSupported	(132),
swSubdomainCCIETypeNotSupported	(133),
toneDurationNotSupported	(134),
sysStatRegIDNotSupported	(135),
userDataNotSupported	(136),
privilegeViolationSpecifiedDevice	(8),
privilegeViolationActiveDevice	(137),
privilegeViolationCalledDevice	(9),
privilegeViolationCallingDevice	(10),
privilegeViolationCallToParkDevice	(138),
privilegeViolationDestinationDevice	(139),
privilegeViolationOnDivertingDevice	(140),
privilegeViolationHeldDevice	(141),
privilegeViolationOnParkToDevice	(142),
privilegeViolationPickUpDevice	(143),
routeingTimerExpired	(144),
requestIncompatibleWithObject	(2),
requestIncompatibleWithConnection	(145),
requestIncompatibleWithActiveConnection	(146),
requestIncompatibleWithHeldConnection	(147),
requestIncompatibleWithDevice	(148),
requestIncompatibleWithCalledDevice	(24),
requestIncompatibleWithCallingDevice	(23),
requestIncompatibleWithSubjectDevice	(149),
requestIncompatibleWithActiveDevice	(150),
requestIncompatibleWithCallToParkDevice	(151),
requestIncompatibleWithDestinationDevice	(152),

requestIncompatibleWithDivertingDevice (153),
 requestIncompatibleWithHeldDevice (154),
 requestIncompatibleWithMedia (27),
 requestIncompatibleWithParkToDevice (155),
 requestIncompatibleWithPickupDevice (156),
 serviceNotSupported (50),
 securityViolation (19),
 valueOutOfRange (3),
 agentStateOutOfRange (157),
 alertTimeOutOfRange (158),
 allocationOutOfRange (159),
 autoAnswerOutOfRange (160),
 bitRateOutOfRange (161),
 callTypeOutOfRange (162),
 connectionRateOutOfRange (163),
 connectionReservationOutOfRange (164),
 consultPurposeOutOfRange (165),
 correlatorDataOutOfRange (166),
 delayToleranceOutOfRange (167),
 destinationDetectOutOfRange (168),
 digitModeOutOfRange (169),
 doNotDisturbOutOfRange (170),
 flowDirectionOutOfRange (171),
 forwardingFlagOutOfRange (172),
 forwardingTypeOutOfRange (173),
 hookswitchComponentOutOfRange (174),
 hookswitchTypeOutOfRange (175),
 lampModeOutOfRange (176),
 messageWaitingSettingOutOfRange (177),
 micGainOutOfRange (178),
 micMuteOutOfRange (179),
 monitorTypeOutOfRange (180),
 numberOfChannelsOutOfRange (181),
 participationTypeOutOfRange (182),
 pulseDurationOutOfRange (183),
 pulseRateOutOfRange (184),
 ringCountOutOfRange (185),
 ringPatternOutOfRange (186),
 ringVolumnOutOfRange (187),
 routingAlgorithmOutOfRange (188),
 speakerMuteOutOfRange (189),
 speakerVolumeOutOfRange (190),
 switchingCeittTypeOutOfRange (191),
 systemStatusOutOfRange (192),
 toneCharacterOutOfRange (193),
 toneDurationOutOfRange (194) }

SecurityErrors ::= ENUMERATED
 {
 generic (0),
 sequenceNumberViolated (1),
 timeStampViolated (2),
 securityInfoViolated (4) }

StateIncompatibilityErrors ::= ENUMERATED
 {
 generic (1),
 invalidObjectState (2),
 invalidDeviceState (15),
 connectedCallExists (16),
 invalidActiveDeviceState (17),
 invalidCalledDeviceState (18),
 }

invalidCallingDeviceState	(19),
invalidCallToParkDeviceState	(20),
invalidDestinationDeviceState	(21),
invalidDivertingDeviceState	(22),
invalidHeldDeviceState	(23),
invalidParkToDeviceState	(24),
invalidConnectionState	(25),
invalidActiveConnectionState	(26),
invalidConnectionIDForActiveCall	(3),
invalidHeldConnectionState	(27),
noActiveCall	(4),
noCallToAnswer	(8),
noCallToClear	(6),
noCallToComplete	(9),
noConnectionToClear	(7),
noHeldCall	(5),
incorrectMsgState	(28),
beginningOfMsg	(13),
endOfMsg	(12),
msgSuspended	(14),
notAbleToPlay	(10),
notAbleToResume	(11) }

SystemResourceAvailabilityErrors ::= ENUMERATED

{ generic	(1),
resourceBusy	(2),
internalResourceBusy	(3),
classifierBusy	(9),
noMediaChannelsAvailable	(10),
channelsInUseForBridgedDevices	(11),
channelsInUseForData	(12),
toneDetectorBusy	(13),
toneGeneratorBusy	(14),
networkBusy	(5),
resourceOutOfService	(4),
deviceOutOfService	(15),
activeDeviceOutOfService	(16),
calledDeviceOutOfService	(17),
callingDeviceOutOfService	(18),
callToParkDeviceOutOfService	(19),
destinationDeviceOutOfService	(20),
divertingDeviceOutOfService	(21),
heldDeviceOutOfService	(22),
parkToDeviceOutOfService	(23),
pickupDeviceOutOfService	(24),
networkOutOfService	(6),
otherResourceOutOfService	(25),
resourceLimitExceeded	(26),
overallMonitorLimitExceeded	(7),
conferenceMemberLimitExceeded	(8),
registrationLimitExceeded	(27),
conferenceResourceCannotBeSatisfied	(28),
maxDevicesExceeded	(29),
startTimeOutOfRange	(30),
durationExceeded	(31) }

SubscribedResourceAvailabilityErrors ::= ENUMERATED

{ generic	(1),
objectMonitorLimitExceeded	(2),
trunkLimitExceeded	(3),

```
        outstandingReqLimitExceeded      ( 4 ),
        objectRegistrationLimitExceeded  ( 5 ) }

PerformanceManagementErrors ::= ENUMERATED
{
    generic                ( 1 ),
    performanceLimitExceeded ( 2 ) }

PrivateDataInfoErrors ::= ENUMERATED
{
    cSTAPrivateDataInfoError ( 1 ) }

UnspecifiedErrors ::= NULL

END -- of CSTA-error-definition
```

10 Event Report Service

```

CSTA-event-report-definitions
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-report-definitions( 21) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
CallClearedEvent FROM CSTA-call-cleared-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-cleared-event( 22) }
ConferencedEvent FROM CSTA-conferenced-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conferenced-event( 23) }
ConnectionClearedEvent FROM CSTA-connection-cleared-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-cleared-event( 24) }
DeliveredEvent FROM CSTA-delivered-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delivered-event( 25) }
DivertedEvent FROM CSTA-diverted-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) diverted-event( 26) }
EstablishedEvent FROM CSTA-established-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) established-event( 27) }
FailedEvent FROM CSTA-failed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) failed-event( 28) }
HeldEvent FROM CSTA-held-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) held-event( 29) }
NetworkReachedEvent FROM CSTA-network-reached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-reached-event( 30) }
OriginatedEvent FROM CSTA-originated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) originated-event( 31) }
QueuedEvent FROM CSTA-queued-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queued-event( 32) }
RetrievedEvent FROM CSTA-retrieved-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieved-event( 33) }
ServiceInitiatedEvent FROM CSTA-service-initiated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-initiated-event( 34) }
TransferredEvent FROM CSTA-transferred-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) transferred-event( 35) }
AutoAnswerEvent FROM CSTA-auto-answer-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-answer-event( 40) }
CallInformationEvent FROM CSTA-call-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)

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        standard( 0) csta3( 285) call-information-event( 41) }
DoNotDisturbEvent FROM CSTA-do-not-disturb-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) do-not-disturb-event( 42) }
ForwardingEvent FROM CSTA-forwarding-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) forwarding-event( 43) }
MessageWaitingEvent FROM CSTA-message-waiting-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) message-waiting-event( 44) }
MicrophoneMuteEvent FROM CSTA-microphone-mute-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) microphone-mute-event( 45) }
SpeakerMuteEvent FROM CSTA-speaker-mute-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) speaker-mute-event( 46) }
SpeakerVolumeEvent FROM CSTA-speaker-volume-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) speaker-volume-event( 47) }
AgentBusyEvent FROM CSTA-agent-busy-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) agent-busy-event( 319) }
AgentLoggedInEvent FROM CSTA-agent-logged-on-event
    { iso( 1) identified-organization( 3) icd-ecma( 12) --corrected 12/2000
      standard( 0) csta3( 285) agent-logged-on-event( 321) }
AgentLoggedOffEvent FROM CSTA-agent-logged-off-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) agent-logged-off-event( 320) }
AgentNotReadyEvent FROM CSTA-agent-not-ready-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) agent-not-ready-event( 322) }
AgentReadyEvent FROM CSTA-agent-ready-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) agent-ready-event( 323) }
AgentWorkingAfterCallEvent FROM CSTA-agent-working-after-call-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) agent-working-after-call-event( 324) }
BackInServiceEvent FROM CSTA-back-in-service-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) back-in-service-event( 333) }
OutOfServiceEvent FROM CSTA-out-of-service-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) out-of-service-event( 335) }
PrivateEvent FROM CSTA-private-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) private-event( 71) }
PresenceStateEvent FROM CSTA-presence-state-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) presence-state-event( 552) }
PlayEvent FROM CSTA-play-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) play( 75) }
RecordEvent FROM CSTA-record-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) record( 76) }
ReviewEvent FROM CSTA-review-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) review( 77) }
StopEvent FROM CSTA-stop-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)

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        standard( 0 ) csta3( 285 ) stop( 78 ) }
SuspendPlayEvent FROM CSTA-suspend-play-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) suspend-play( 79 ) }
SuspendRecordEvent FROM CSTA-suspend-record-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) suspend-record( 80 ) }
VoiceAttributesChangeEvent FROM CSTA-voice-attributes-change-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) voice-attributes-change-event( 74 ) }
MonitorCrossRefID FROM CSTA-status-reporting
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) status-reporting( 126 ) }
BridgedEvent FROM CSTA-bridged-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) bridged-event( 224 ) }
DigitsDialedEvent FROM CSTA-digits-dialed-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) digits-dialed-event( 225 ) }
NetworkCapabilitiesChangedEvent FROM CSTA-network-capabilities-changed-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) network-capabilities-changed-event( 226 ) }
OfferedEvent FROM CSTA-offered-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) offered-event( 227 ) }
ChargingEvent FROM CSTA-charging-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) charging-event( 240 ) }
DigitsGeneratedEvent FROM CSTA-digits-generated-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) digits-generated-event( 241 ) }
TelephonyTonesGeneratedEvent FROM CSTA-telephony-tones-generated-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) telephony-tones-generated-event( 242 ) }
ServiceCompletionFailureEvent FROM CSTA-service-completion-failure-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) service-completion-failure-event( 243 ) }
MediaAttachedEvent FROM CSTA-media-attached-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) media-attached-event( 246 ) }
MediaDetachedEvent FROM CSTA-media-detached-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) media-detached-event( 247 ) }
ButtonInformationEvent FROM CSTA-button-information-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) button-information-event( 283 ) }
ButtonPressEvent FROM CSTA-button-press-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) button-press-event( 284 ) }
DisplayUpdatedEvent FROM CSTA-display-updated-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) display-updated-event( 285 ) }
HookswitchEvent FROM CSTA-hookswitch-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) hookswitch-event( 286 ) }
LampModeEvent FROM CSTA-lamp-mode-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )
      standard( 0 ) csta3( 285 ) lamp-mode-event( 287 ) }
MicrophoneGainEvent FROM CSTA-microphone-gain-event
    { iso( 1 ) identified-organization( 3 ) icd-ecma( 12 )

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        standard( 0) csta3( 285) microphone-gain-event( 288) }
RingerStatusEvent FROM CSTA-ringer-status-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) ringer-status-event( 289) }
AutoWorkModeEvent FROM CSTA-auto-work-mode-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) auto-work-mode-event( 326) }
CallBackEvent FROM CSTA-call-back-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-back-event( 327) }
CallBackMessageEvent FROM CSTA-call-back-message-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-back-message-event( 328) }
CallerIDStatusEvent FROM CSTA-caller-id-status-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) caller-id-status-event( 329) }
RouteingModeEvent FROM CSTA-routeing-mode-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) routeing-mode-event( 332) }
PartiallyInServiceEvent FROM CSTA-partially-in-service-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) partially-in-service ( 379) }
BookmarkReachedEvent FROM CSTA-bookmark-reached-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) bookmark-reached-event(517) }
CompletedEvent FROM CSTA-completed-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) completed-event(518) }
DtmfDetectedEvent FROM CSTA-dtmf-detected-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) dtmf-detected-event(519) }
EmptiedEvent FROM CSTA-emptied-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) emptied-event(520) }
InterruptionDetectedEvent FROM CSTA-interruption-detected-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) interruption-detected-event(521) }
NotRecognizedEvent FROM CSTA-not-recognized-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) not-recognized-event(522) }
RecognizedEvent FROM CSTA-recognized-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) recognized-event(523) }
SilenceTimeoutExpiredEvent FROM CSTA-silence-timeout-expired-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) silence-timeout-expired-event(524) }
SpeechDetectedEvent FROM CSTA-speech-detected-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) speech-detected-event ( 525) }
StartedEvent FROM CSTA-started-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) started-event ( 526) }
VoiceErrorOccuredEvent FROM CSTA-voice-error-occured-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) voice-error-occured-event ( 527) }
DeviceCapsChangedEvent FROM CSTA-device-capabilities-changed-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-capabilities-changed-event( 334) };

```

```

cstAEventReport OPERATION ::=
{   ARGUMENT          CSTAEventReportArgument
    ALWAYS RESPONDS    FALSE
    CODE                local:21 }

CSTAEventReportArgument ::= SEQUENCE
{   crossRefIdentifier    MonitorCrossRefID,
    eventSpecificInfo      EventSpecificInfo }

EventSpecificInfo ::= CHOICE
{   callControlEvents      [ 0 ] CallControlEvents,
    callAssociatedEvents    [ 1 ] CallAssociatedEvents,
    mediaAttachmentEvents  [ 2 ] MediaAttachmentEvents,
    physicalDeviceFeatureEvents [ 3 ] PhysicalDeviceFeatureEvents,
    logicalDeviceFeatureEvents [ 4 ] LogicalDeviceFeatureEvents,
    deviceMaintenanceEvents [ 5 ] DeviceMaintenanceEvents,
    voiceUnitEvents        [ 6 ] VoiceUnitEvents,
    vendorSpecEvents       [ 7 ] VendorSpecEvents }

CallControlEvents ::= CHOICE
{   bridged                [ 0 ] IMPLICIT BridgedEvent,
    callCleared            [ 1 ] IMPLICIT CallClearedEvent,
    conferenced            [ 2 ] IMPLICIT ConferencedEvent,
    connectionCleared      [ 3 ] IMPLICIT ConnectionClearedEvent,
    delivered              [ 4 ] IMPLICIT DeliveredEvent,
    digitsDialed           [ 5 ] IMPLICIT DigitsDialedEvent,
    diverted               [ 6 ] IMPLICIT DivertedEvent,
    established            [ 7 ] IMPLICIT EstablishedEvent,
    failed                 [ 8 ] IMPLICIT FailedEvent,
    held                   [ 9 ] IMPLICIT HeldEvent,
    networkCapabilitiesChanged [10] IMPLICIT NetworkCapabilitiesChangedEvent,
    networkReached         [11] IMPLICIT NetworkReachedEvent,
    offered                [12] IMPLICIT OfferedEvent,
    originated             [13] IMPLICIT OriginatedEvent,
    queued                 [14] IMPLICIT QueuedEvent,
    retrieved              [15] IMPLICIT RetrievedEvent,
    serviceInitiated       [16] IMPLICIT ServiceInitiatedEvent,
    transferred            [17] IMPLICIT TransferredEvent }

CallAssociatedEvents ::= CHOICE
{   callInformation        [ 0 ] IMPLICIT CallInformationEvent,
    charging                [ 1 ] IMPLICIT ChargingEvent,
    digitsGeneratedEvent   [ 2 ] IMPLICIT DigitsGeneratedEvent,
    telephonyTonesGeneratedEvent [ 3 ] IMPLICIT TelephonyTonesGeneratedEvent,
    serviceCompletionFailure [ 4 ] IMPLICIT ServiceCompletionFailureEvent }

MediaAttachmentEvents ::= CHOICE
{   mediaAttached          [ 0 ] IMPLICIT MediaAttachedEvent,
    mediaDetached          [ 1 ] IMPLICIT MediaDetachedEvent }

PhysicalDeviceFeatureEvents ::= CHOICE
{   buttonInformation      [ 0 ] IMPLICIT ButtonInformationEvent,
    buttonPress            [ 1 ] IMPLICIT ButtonPressEvent,
    displayUpdated         [ 2 ] IMPLICIT DisplayUpdatedEvent,
    hookswitch             [ 3 ] IMPLICIT HookswitchEvent,
    lampMode               [ 4 ] IMPLICIT LampModeEvent,
    messageWaiting         [ 5 ] IMPLICIT MessageWaitingEvent,
    microphoneGain          [ 6 ] IMPLICIT MicrophoneGainEvent,
    microphoneMute         [ 7 ] IMPLICIT MicrophoneMuteEvent,
    ringerStatus           [ 8 ] IMPLICIT RingerStatusEvent,

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    speakerMute                [ 9] IMPLICIT SpeakerMuteEvent,
    speakerVolume              [10] IMPLICIT SpeakerVolumeEvent }

LogicalDeviceFeatureEvents ::= CHOICE
{
    agentBusy                  [ 0] IMPLICIT AgentBusyEvent,
    agentLoggedOn              [ 1] IMPLICIT AgentLoggedOnEvent,
    agentLoggedOff             [ 2] IMPLICIT AgentLoggedOffEvent,
    agentNotReady              [ 3] IMPLICIT AgentNotReadyEvent,
    agentReady                 [ 4] IMPLICIT AgentReadyEvent,
    agentWorkingAfterCall      [ 5] IMPLICIT AgentWorkingAfterCallEvent,
    autoAnswer                 [ 6] IMPLICIT AutoAnswerEvent,
    autoWorkMode               [ 7] IMPLICIT AutoWorkModeEvent,
    callBack                   [ 8] IMPLICIT CallBackEvent,
    callBackMessage            [ 9] IMPLICIT CallBackMessageEvent,
    callerIDStatus             [10] IMPLICIT CallerIDStatusEvent,
    doNotDisturb               [11] IMPLICIT DoNotDisturbEvent,
    forwarding                 [12] IMPLICIT ForwardingEvent,
    presenceState              [14] IMPLICIT PresenceStateEvent,
    routeingMode               [13] IMPLICIT RouteingModeEvent }

DeviceMaintenanceEvents ::= CHOICE
{
    backInService              [ 0] IMPLICIT BackInServiceEvent,
    deviceCapabilityChanged     [ 1] IMPLICIT DeviceCapsChangedEvent,
    outOfService               [ 2] IMPLICIT OutOfServiceEvent,
    partiallyInService          [ 3] IMPLICIT PartiallyInServiceEvent }

VoiceUnitEvents ::= CHOICE
{
    bookmarkReached            [ 7] IMPLICIT BookmarkReachedEvent,
    completed                  [ 8] IMPLICIT CompletedEvent,
    dtmfDetected               [ 9] IMPLICIT DtmfDetectedEvent,
    emptied                    [10] IMPLICIT EmptiedEvent,
    interruptionDetected       [11] IMPLICIT InterruptionDetectedEvent,
    notRecognized              [12] IMPLICIT NotRecognizedEvent,
    play                       [10] IMPLICIT PlayEvent,
    recognized                  [13] IMPLICIT RecognizedEvent,
    record                     [ 1] IMPLICIT RecordEvent,
    review                     [ 2] IMPLICIT ReviewEvent,
    silenceTimeoutExpired       [14] IMPLICIT SilenceTimeoutExpiredEvent,
    speechDetected             [15] IMPLICIT SpeechDetectedEvent,
    started                    [16] IMPLICIT StartedEvent,
    stop                       [ 3] IMPLICIT StopEvent,
    suspendPlay                [ 4] IMPLICIT SuspendPlayEvent,
    suspendRecord              [ 5] IMPLICIT SuspendRecordEvent,
    voiceAttributesChange       [ 6] IMPLICIT VoiceAttributesChangeEvent,
    voiceErrorOccured          [17] IMPLICIT VoiceErrorOccuredEvent }

VendorSpecEvents ::= CHOICE
{
    privateEvent               [ 0] IMPLICIT PrivateEvent }

END -- of CSTA-event-report-definitions

```

11 Capability exchange services

11.1 Services

11.1.1 Get CSTA-Features

```

CSTA-get-csta-features-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-csta-features-service( 370 ) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
LocationServicesServList FROM CSTA-capability-exchange
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) capability-exchange( 131) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
RouteingServList, DeviceMaintEvtsList,
CapExchangeServList, SystemStatusServList, MonitoringServList, SnapshotServList,
CallControlServList, CallAssociatedServList, MediaServList, PhysDevServList, LogicalServList,
IOServicesServList, DataCollectionServList, VoiceUnitServList, CDRServList, VendorSpecificServList,
CallControlEvtsList, CallAssociatedEvtsList, MediaEvtsList, PhysDevEvtsList, LogicalEvtsList,
VoiceUnitEvtsList, VendorSpecificEvtsList
FROM CSTA-capability-exchange
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) capability-exchange( 131) };

getCSTAFeature OPERATION ::=
{  ARGUMENT          GetCSTAFeatureArgument
   RESULT            GetCSTAFeatureResult
   ERRORS            {universalFailure }
   CODE              local: 370 }

GetCSTAFeatureArgument ::= SEQUENCE
{  extensions          CSTACommonArguments          OPTIONAL }

GetCSTAFeatureResult ::= SEQUENCE
{  supportedServices SEQUENCE
    {  capExchangeServList      [ 0] CapExchangeServList      OPTIONAL,
      systemStatServList       [ 1] SystemStatusServList      OPTIONAL,
      monitoringServList       [ 2] MonitoringServList        OPTIONAL,
      snapshotServList         [ 3] SnapshotServList          OPTIONAL,
      callControlServList      [ 4] CallControlServList        OPTIONAL,
      callAssociatedServList   [ 5] CallAssociatedServList      OPTIONAL,
      mediaServList            [ 6] MediaServList              OPTIONAL,
      routeingServList         [ 7] RouteingServList           OPTIONAL,
      physDevServList          [ 8] PhysDevServList            OPTIONAL,
      logicalServList          [ 9] LogicalServList            OPTIONAL,
      iOServicesServList       [10] IOServicesServList         OPTIONAL,

```

```

        dataCollectionServList [11] DataCollectionServList OPTIONAL,
        voiceServList [12] VoiceUnitServList OPTIONAL,
        cDRServList [13] CDRServList OPTIONAL,
        vendorSpecificServList [14] VendorSpecificServList OPTIONAL,
        locationServicesServList [15] LocationServicesServList OPTIONAL },
supportedEvents SEQUENCE
{
    callControlEvtsList [0] CallControlEvtsList OPTIONAL,
    callAssociatedEvtsList [1] CallAssociatedEvtsList OPTIONAL,
    mediaEvtsList [2] MediaEvtsList OPTIONAL,
    physDevEvtsList [3] PhysDevEvtsList OPTIONAL,
    logicalEvtsList [4] LogicalEvtsList OPTIONAL,
    deviceMaintEvtsList [5] DeviceMaintEvtsList OPTIONAL,
    voiceEvtsList [6] VoiceUnitEvtsList OPTIONAL,
    vendorSpecificEvtsList [7] VendorSpecificEvtsList OPTIONAL } OPTIONAL,
extensions CSTACommonArguments OPTIONAL
}

END -- of CSTA-get-csta-features-service

```

11.1.2 Get logical device information

```

CSTA-get-logical-device-information
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) get-logical-device-information( 201) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
MonitorFilter, MonitorMediaClass FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes, ACDModels, AgentLogOnModels, AppearanceType,
MiscMonitorCaps, TransAndConfSetup, MediaServiceCapsList, RouteingServList, LogDevServList,
LogDevEvtsList, DeviceMaintEvtsList
FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) }
NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList
FROM CSTA-data-call-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) data-call-types( 134) };

getLogicalDeviceInformation OPERATION ::=
{
    ARGUMENT      GetLogicalDeviceInformationArgument
    RESULT        GetLogicalDeviceInformationResult
    ERRORS        {universalFailure }
    CODE          local:201 }

GetLogicalDeviceInformationArgument ::= SEQUENCE
{
    device          DeviceID,
    extensions      CSTACommonArguments OPTIONAL }

GetLogicalDeviceInformationResult ::= SEQUENCE
{
    deviceCategory      [ 0] IMPLICIT DeviceCategory          DEFAULT station,
    groupDeviceAttributes [ 1] IMPLICIT GroupDeviceAttributes OPTIONAL,
    namedDeviceTypes     [ 2] IMPLICIT NamedDeviceTypes        OPTIONAL,
    shortFormDeviceID    [ 3] DeviceID                          OPTIONAL,
    hasPhysicalElement    BOOLEAN,
    acdModels            ACDModels,
    agentLogOnModels     [ 4] IMPLICIT AgentLogOnModels        OPTIONAL,
    appearanceAddressable BOOLEAN,
    appearanceType       AppearanceType,
    appearanceList       [ 5] IMPLICIT SEQUENCE OF IA5String   OPTIONAL,
    otherPhysicalDeviceList [ 6] IMPLICIT SEQUENCE OF DeviceID   OPTIONAL,
    miscMonitorCaps      [ 7] IMPLICIT MiscMonitorCaps         OPTIONAL,

```


associatedGroupList	[8]	IMPLICIT	SEQUENCE OF DeviceID	OPTIONAL,
maxCallbacks	[9]	IMPLICIT	INTEGER	OPTIONAL,
maxAutoAnswerRings	[10]	IMPLICIT	INTEGER	OPTIONAL,
maxActiveCalls	[11]	IMPLICIT	INTEGER	OPTIONAL,
maxHeldCalls	[12]	IMPLICIT	INTEGER	OPTIONAL,
maxFwdSettings	[13]	IMPLICIT	INTEGER	OPTIONAL,
maxDevicesInConf	[14]	IMPLICIT	INTEGER	OPTIONAL,
transAndConfSetup	[15]	IMPLICIT	TransAndConfSetup	OPTIONAL,
deviceOnDeviceMonitorFilter	[16]	IMPLICIT	MonitorFilter	OPTIONAL,
deviceOnConnectionMonitorFilter	[17]	IMPLICIT	MonitorFilter	OPTIONAL,
callOnDeviceMonitorFilter	[18]	IMPLICIT	MonitorFilter	OPTIONAL,
callOnConnectionMonitorFilter	[19]	IMPLICIT	MonitorFilter	OPTIONAL,
mediaClassSupport	[20]	IMPLICIT	MonitorMediaClass	OPTIONAL,
mediaServiceCapsList	[21]	IMPLICIT	MediaServiceCapsList	OPTIONAL,
connectionRateList	[22]	IMPLICIT	ConnectionRateList	OPTIONAL,
delayToleranceList	[23]	IMPLICIT	DelayToleranceList	OPTIONAL,
numberOfChannels	[24]	IMPLICIT	NumberOfChannels	OPTIONAL,
maxChannelBind	[25]	IMPLICIT	MaxChannelBind	OPTIONAL,
routeingServList	[26]	IMPLICIT	RouteingServList	OPTIONAL,
logDevServList	[27]	IMPLICIT	LogDevServList	OPTIONAL,
logDevEvtsList	[28]	IMPLICIT	LogDevEvtsList	OPTIONAL,
deviceMaintEvtsList	[29]	IMPLICIT	DeviceMaintEvtsList	OPTIONAL,
extensions			CSTACommonArguments	OPTIONAL }

END -- of CSTA-get-logical-device-information

11.1.3 Get physical device information

```

CSTA-get-physical-device-information
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) get-physical-device-information( 202) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
MonitorFilter FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes, PhysDevServList, PhysDevEvtsList
FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) };

getPhysicalDeviceInformation OPERATION ::=
{
    ARGUMENT      GetPhysicalDeviceInformationArgument
    RESULT        GetPhysicalDeviceInformationResult
    ERRORS        {universalFailure}
    CODE          local:202 }

GetPhysicalDeviceInformationArgument ::= SEQUENCE
{
    device          DeviceID,
    extensions      CSTACommonArguments OPTIONAL }

GetPhysicalDeviceInformationResult ::= SEQUENCE
{
    deviceCategory      [ 0] IMPLICIT DeviceCategory          DEFAULT station,
    groupDeviceAttributes [ 1] IMPLICIT GroupDeviceAttributes OPTIONAL,
    namedDeviceTypes    [ 2] IMPLICIT NamedDeviceTypes        OPTIONAL,
    hasLogicalElement   BOOLEAN,
    otherLogicalDeviceList [ 3] IMPLICIT SEQUENCE OF DeviceID  OPTIONAL,
    deviceModelName     [ 4] IMPLICIT IA5String (SIZE(0..64)) OPTIONAL,
    deviceOnDeviceMonitorFilter [ 5] IMPLICIT MonitorFilter    OPTIONAL,
    deviceOnConnectionMonitorFilter [ 6] IMPLICIT MonitorFilter    OPTIONAL,
    callOnDeviceMonitorFilter [ 7] IMPLICIT MonitorFilter    OPTIONAL,
    callOnConnectionMonitorFilter [ 8] IMPLICIT MonitorFilter    OPTIONAL,
    maxDisplays         [ 9] IMPLICIT INTEGER                  OPTIONAL,
    maxButtons          [10] IMPLICIT INTEGER                  OPTIONAL,
    maxLamps            [11] IMPLICIT INTEGER                  OPTIONAL,
    maxRingPatterns     [12] IMPLICIT INTEGER                  OPTIONAL,
    physDevServList     [13] IMPLICIT PhysDevServList          OPTIONAL,
    physDevEvtsList     [14] IMPLICIT PhysDevEvtsList          OPTIONAL,
    extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-get-physical-device-information

```

11.1.4 Get switching function capabilities

```

CSTA-get-switching-function-capabilities
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) get-switching-function-capabilities( 203) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
MonitorMediaClass, MonitorFilter FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
TimeInfo FROM CSTA-security
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) security( 128) }
CSTACCommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-control( 130) }
ACDModels, CapExchangeServList, DeviceIDFormat, FilterThreshold,
IgnoreUnsupportedParameters, CallControlServList, CallControlEvtsList,
CallAssociatedServList, CallAssociatedEvtsList, MediaServList, MediaEvtsList,
RouteingServList, PhysDevEvtsList, PhysDevServList, LogicalEvtsList, LogicalServList,
DeviceMaintEvtsList, IOServicesServList, DataCollectionServList, VoiceUnitServList,
VoiceUnitEvtsList, CDRServList, VendorSpecificServList, VendorSpecificEvtsList,
MaxLengthParameters, TransAndConfSetup, MediaServiceCapsList, MiscMonitorCaps,
MonitoringServList, PauseTime, SnapshotServList, SwAppearanceAddressability,
MaxLengthParametersContinued, SwAppearanceTypes, SwDomainFeatures, SystemStatusServList,
TimeStampMode, LocationServicesServList
FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) }

NumberOfChannels, MaxChannelBind, ConnectionRateList, DelayToleranceList

FROM CSTA-data-call-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) data-call-types( 134) };

getSwitchingFunctionCapabilities OPERATION ::=
{
    ARGUMENT      GetSwitchingFunctionCapsArgument
    RESULT         GetSwitchingFunctionCapsResult
    ERRORS         {universalFailure }
    CODE           local:203 }

GetSwitchingFunctionCapsArgument ::= CHOICE
{
    extensions     CSTACCommonArguments,
    noData         NULL }

```

GetSwitchingFunctionCapsResult ::= SEQUENCE

```
{
    switchingSubDomainName      IA5String (SIZE(0..64)),
    manufacturerName            IA5String (SIZE(0..64)),
    profiles                    Profiles,
    deviceIDFormat              DeviceIDFormat,
    swDomainFeatures            SwDomainFeatures,
    swAppearanceAddressability  SwAppearanceAddressability,
    swAppearanceTypes           SwAppearanceTypes,
    ignoreUnsupportedParameters IgnoreUnsupportedParameters,
    callCharacteristicsSupported [ 0] IMPLICIT   CallCharacteristics      OPTIONAL,
    mediaClassSupport           [ 1] IMPLICIT   MonitorMediaClass        OPTIONAL,
    numberOfChannels            [ 2] IMPLICIT   NumberOfChannels          OPTIONAL,
    maxChannelBind              [ 3] IMPLICIT   MaxChannelBind            OPTIONAL,
    miscMediaCallCharacteristics [ 4] IMPLICIT   MiscMediaCallCharacteristics OPTIONAL,
    connectionRateList          [ 5] IMPLICIT   ConnectionRateList        OPTIONAL,
    delayToleranceList          [ 6] IMPLICIT   DelayToleranceList        OPTIONAL,
    pauseTime                   [ 7] IMPLICIT   PauseTime                  OPTIONAL,
    currentTime                 [ 8] IMPLICIT   TimeInfo                   OPTIONAL,
    messageSeqNumbers           [ 9] IMPLICIT   MessageSeqNumbers          OPTIONAL,
    timeStampMode               [10] IMPLICIT   TimeStampMode              OPTIONAL,
    securityMode                [11] IMPLICIT   SecurityMode               OPTIONAL,
    securityFormat              [12] IMPLICIT   SecurityFormat              OPTIONAL,
    privateDataFormat           [13] IMPLICIT   SecurityFormat              OPTIONAL,
    transAndConfSetup           [14] IMPLICIT   TransAndConfSetup            OPTIONAL,
    monitorFilterItems           [15] IMPLICIT   MonitorFilterItems          OPTIONAL,
    miscMonitorCaps             [16] IMPLICIT   MiscMonitorCaps            OPTIONAL,
    correlatorDataSupported     [17] IMPLICIT   BOOLEAN                      OPTIONAL,
    dynamicFeatureSupported     [18] IMPLICIT   DynamicFeatureSupported    OPTIONAL,
    callLinkageOptions          [28] IMPLICIT   CallLinkageOptions          OPTIONAL,
    aCDModels                   [19] IMPLICIT   ACDModels                     OPTIONAL,
    agentLogOnModels            [20] IMPLICIT   AgentLogOnModels             OPTIONAL,
    agentStateModels            [21] IMPLICIT   AgentStateModels            OPTIONAL,
    connectionView              ConnectionView,
    maxLengthParameters         MaxLengthParameters,
    maxLengthParametersContinued [28] IMPLICIT   MaxLengthParametersContinued  OPTIONAL,
    servEvtsList                [22] IMPLICIT   ServEvtsList              OPTIONAL,
    privateDataVersionList      [23] IMPLICIT   PrivateDataVersionList        OPTIONAL,
    systemStatusTimer           [24] IMPLICIT   INTEGER (0..180)              OPTIONAL,
    simpleThreshold             [25] IMPLICIT   INTEGER                      OPTIONAL,
    filterThreshold             [26] IMPLICIT   FilterThreshold            OPTIONAL,
    mediaServiceCapsList        [27] IMPLICIT   MediaServiceCapsList        OPTIONAL,
    maxDeviceHistoryLength       [29] IMPLICIT   INTEGER                      OPTIONAL,
    maxDestinationDevicesForDeflect [30] IMPLICIT   INTEGER                      OPTIONAL,
    extensions                  CSTACCommonArguments OPTIONAL
}
```

MonitorFilterItems ::= SEQUENCE

```
{
    deviceOnDeviceMonitorFilter [0] IMPLICIT   MonitorFilter      OPTIONAL,
    deviceOnConnectionMonitorFilter [1] IMPLICIT   MonitorFilter      OPTIONAL,
    callOnDeviceMonitorFilter      [2] IMPLICIT   MonitorFilter      OPTIONAL,
    callOnConnectionMonitorFilter [3] IMPLICIT   MonitorFilter      OPTIONAL }
}
```

MessageSeqNumbers ::= BIT STRING

```
{
    allEvents      (0),
    allAcks        (1),
    allServReqs    (2) }
```

SecurityMode ::= ENUMERATED

```
{
    allEvents      (0),
    allAcks        (1),
}
```

allServReqs (2) }

SecurityFormat ::= BIT STRING

```
{
    octetStringFromSF (0),
    otherTypeFromSF (1),
    octetStringToSF (2),
    otherTypeToSF (3) }
```

Profiles ::= BIT STRING

```
{
    basicTelephonyProfile ( 0),
    routeingProfile ( 1),
    level1aVoiceBrowserProfile ( 2),
    level1bVoiceBrowserProfile ( 3),
    level2VoiceBrowserProfile ( 4),
    minimalUaCSTACallControlProfile ( 5),
    basicUaCSTACallControlProfile ( 6),
    advancedUaCSTACallControlProfile ( 7),
    conferencingUaCSTACallControlProfile ( 8),
    basicUaCSTADeviceFeatureProfile ( 9),
    advancedUaCSTADeviceFeatureProfile (10),
    speakerUaCSTADeviceFeatureProfile (11),
    basicSpeechServiceProfile (12),
    advancedSpeechServiceProfile (13) }
```

DynamicFeatureSupported ::= ENUMERATED

```
{
    none (0),
    all (1),
    some (2) }
```

CallLinkageOptions ::= BIT STRING

```
{
    callLinkageFeatureSupported (0),
    threadLinkageFeatureSupported (1) }
```

AgentLogOnModels ::= BIT STRING

```
{
    logOnACDDevice (0),
    logOnACDGroupExplOneStep (1),
    logOnACDGroupExplTwoSteps (2),
    logOnACDGroupImplOneStep (3) }
```

AgentStateModels ::= BIT STRING

```
{
    multiState (0),
    multiStateSemiIndependentLinked (1),
    agentOriented (2) }
```

ConnectionView ::= ENUMERATED

```
{
    fixed (0),
    local (1) }
```

ServEvsList ::= SEQUENCE

```
{
    capExchangeServList [ 0] IMPLICIT CapExchangeServList OPTIONAL,
    systemServList [ 1] IMPLICIT SystemStatusServList OPTIONAL,
    monitoringServList [ 2] IMPLICIT MonitoringServList OPTIONAL,
    snapshotServList [ 3] IMPLICIT SnapshotServList OPTIONAL,
    callControlServList [ 4] IMPLICIT CallControlServList OPTIONAL,
    callControlEvsList [ 5] IMPLICIT CallControlEvsList OPTIONAL,
    callAssociatedServList [ 6] IMPLICIT CallAssociatedServList OPTIONAL,
    callAssociatedEvsList [ 7] IMPLICIT CallAssociatedEvsList OPTIONAL,
    mediaServList [ 8] IMPLICIT MediaServList OPTIONAL,
    mediaEvsList [ 9] IMPLICIT MediaEvsList OPTIONAL,
    routeingServList [10] IMPLICIT RouteingServList OPTIONAL,
```

physDevServList	[11]	IMPLICIT	PhysDevServList	OPTIONAL,
physDevEvtsList	[12]	IMPLICIT	PhysDevEvtsList	OPTIONAL,
logicalServList	[13]	IMPLICIT	LogicalServList	OPTIONAL,
logicalEvtsList	[14]	IMPLICIT	LogicalEvtsList	OPTIONAL,
deviceMaintEvtsList	[15]	IMPLICIT	DeviceMaintEvtsList	OPTIONAL,
iOServicesServList	[16]	IMPLICIT	IOServicesServList	OPTIONAL,
dataCollectionServList	[17]	IMPLICIT	DataCollectionServList	OPTIONAL,
voiceUnitServList	[18]	IMPLICIT	VoiceUnitServList	OPTIONAL,
voiceUnitEvtsList	[19]	IMPLICIT	VoiceUnitEvtsList	OPTIONAL,
cdrServList	[20]	IMPLICIT	CDRServList	OPTIONAL,
vendorSpecificServList	[21]	IMPLICIT	VendorSpecificServList	OPTIONAL,
vendorSpecificEvtsList	[22]	IMPLICIT	VendorSpecificEvtsList	OPTIONAL,
statusReportingServList	[23]	IMPLICIT	StatusReportingServList	OPTIONAL,
locationServList	[24]	IMPLICIT	LocationServicesServList	OPTIONAL }

StatusReportingServList ::= SEQUENCE

{	monitoringServices	[0]	IMPLICIT	MonitoringServList	OPTIONAL,
	snapshotServices	[1]	IMPLICIT	SnapshotServList	OPTIONAL,
	systemServices	[2]	IMPLICIT	SystemStatusServList	OPTIONAL }

MiscMediaCallCharacteristics ::= BIT STRING

{	supportAdjustment	(0)	}

PrivateDataVersionList ::= SEQUENCE OF INTEGER

END -- of CSTA-get-switching-function-capabilities

11.1.5 Get switching function devices

```

CSTA-get-switching-function-devices
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-switching-function-devices( 204) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

getSwitchingFunctionDevices OPERATION ::=
{ ARGUMENT      GetSwitchingFunctionDevicesArgument
  RESULT        GetSwitchingFunctionDevicesResult
  ERRORS        {universalFailure }
  CODE          local:204 }

GetSwitchingFunctionDevicesArgument ::= SEQUENCE
{ requestedDeviceID      DeviceID      OPTIONAL,
  requestedDeviceCategory ReqDeviceCategory OPTIONAL,
  extensions             CSTACommonArguments OPTIONAL }

GetSwitchingFunctionDevicesResult ::= SEQUENCE
{ serviceCrossRefID      ServiceCrossRefID,
  extensions             CSTACommonArguments OPTIONAL }

ReqDeviceCategory ::= ENUMERATED
{
  acd                ( 0),
  conference         (11),
  dtmfIV             (12),
  genericIV          (13),
  groupACD           ( 1),
  groupHunt          ( 2),
  groupPick          ( 3),
  groupOther         ( 4),
  groupUser          (14),
  listenerIV         (15),
  messageIV          (16),
  networkInterface   ( 5),
  park               ( 6),
  promptIV           (17),
  promptQueue        (18),
  routingDevice      ( 7),
  station            ( 8),

```

```
voiceUnit      ( 9),  
other          (10) }
```

END -- of CSTA-get-switching-function-devices

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11.1.6 Switching function devices

```

CSTA-switching-function-devices
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-devices( 205) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID, DeviceCategory, NamedDeviceTypes FROM CSTA-capability-exchange
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) capability-exchange( 131) };

switchingFunctionDevices OPERATION ::=
{
  ARGUMENT      SwitchingFunctionDevicesArgument
  ERRORS        {universalFailure }
  CODE          local:205 }

SwitchingFunctionDevicesArgument ::= SEQUENCE
{
  serviceCrossRefID      ServiceCrossRefID,
  segmentID              INTEGER                      OPTIONAL,
  lastSegment            BOOLEAN,
  deviceList             DeviceList,
  extensions             CSTACommonArguments          OPTIONAL }

DeviceList ::= SEQUENCE OF SEQUENCE
{
  deviceID              DeviceID,
  deviceCategory        [0] IMPLICIT DeviceCategory    DEFAULT station,
  namedDeviceTypes      [1] IMPLICIT NamedDeviceTypes  OPTIONAL,
  deviceAttributes      DeviceAttributes                OPTIONAL,
  deviceModelName       IA5String (SIZE(0..64))         OPTIONAL,
  nidGroup              DeviceID                       OPTIONAL }

DeviceAttributes ::= BIT STRING
{
  mediaAccessDevice     ( 0),
  routingDevice         ( 1),
  groupACD              ( 2),
  groupHunt             ( 3),
  groupPick             ( 4) }

END -- of CSTA-switching-function-devices

```

12 System services

12.1 Registration services

12.1.1 Change system status filter

```

CSTA-change-system-status-filter
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) change-system-status-filter( 206) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

changeSysStatFilter OPERATION ::=
{
    ARGUMENT      ChangeSysStatFilterArg
    RESULT        ChangeSysStatFilterRes
    ERRORS        {universalFailure }
    CODE          local: 206 }

ChangeSysStatFilterArg ::= SEQUENCE
{
    sysStatRegisterID      SysStatRegisterID,
    requestedStatusFilter  SystemStatus,
    extensions             CSTACommonArguments    OPTIONAL }

ChangeSysStatFilterRes ::= SEQUENCE
{
    actualStatusFilter      SystemStatus,
    extensions             CSTACommonArguments    OPTIONAL }

END -- of CSTA-change-system-status-filter

```

12.1.2 System register

```

CSTA-system-register
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) system-register( 207) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

systemRegister OPERATION ::=
{
    ARGUMENT      SystemRegisterArgument
    RESULT        SystemRegisterResult
    ERRORS        {universalFailure }
    CODE          local: 207 }

SystemRegisterArgument ::= SEQUENCE
{
    requestTypes      RequestTypes,
    requestedStatusFilter  StatusFilter          OPTIONAL,
    extensions        CSTACommonArguments      OPTIONAL }

SystemRegisterResult ::= SEQUENCE
{
    sysStatRegisterID  SysStatRegisterID,
    actualStatusFilter  StatusFilter          OPTIONAL,
    extensions          CSTACommonArguments  OPTIONAL }

StatusFilter ::= BIT STRING
{
    initializing          ( 0),
    enabled               ( 1),
    normal                ( 2),
    messageLost           ( 3),
    disabled              ( 4),
    partiallyDisabled     ( 5),
    overloadImminent      ( 6),
    overloadReached       ( 7),
    overloadRelieved      ( 8) }

RequestTypes ::= BIT STRING
{
    systemStatus          ( 0),
    requestSystemStatus   ( 1),
    switchingFunctionCapsChanged ( 2),
    switchingFunctionDevicesChanged ( 3) }

END -- of CSTA-system-register

```

12.1.3 System register abort

```

CSTA-system-register-abort
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) system-register-abort( 208) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }

SysStatRegisterID FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }

CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

systemRegisterAbort OPERATION ::=
{
    ARGUMENT          SystemRegisterAbortArgument
    ERRORS             {universalFailure }
    ALWAYS RESPONDS   FALSE
    CODE              local: 208 }

SystemRegisterAbortArgument ::= SEQUENCE
{
    sysStatRegisterID  SysStatRegisterID,
    extensions         CSTACommonArguments          OPTIONAL }

END -- of CSTA-system-register-abort

```

12.1.4 System register cancel

```

CSTA-system-register-cancel
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) system-register-cancel( 209) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

systemRegisterCancel OPERATION ::=
{
    ARGUMENT      SystemRegisterCancelArgument
    RESULT        SystemRegisterCancelResult
    ERRORS        {universalFailure }
    CODE          local: 209 }

SystemRegisterCancelArgument ::= SEQUENCE
{
    sysStatRegisterID    SysStatRegisterID,
    extensions           CSTACommonArguments          OPTIONAL }

SystemRegisterCancelResult ::= CHOICE
{
    extensions           CSTACommonArguments,
    noData              NULL }

END -- of CSTA-system-register-cancel

```

12.2 Services

12.2.1 Request system status

```

CSTA-request-system-status
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) request-system-status( 210) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

requestSysStat OPERATION ::=
{   ARGUMENT      RequestSysStatArg
    RESULT        RequestSysStatRes
    ERRORS        {universalFailure }
    CODE          local: 210 }

RequestSysStatArg ::= SEQUENCE
{   sysStatRegisterID      SysStatRegisterID      OPTIONAL,
    extensions              CSTACommonArguments    OPTIONAL }

RequestSysStatRes ::= SEQUENCE
{   systemStatus           SystemStatus,
    extensions              CSTACommonArguments    OPTIONAL }

END -- of CSTA-request-system-status

```

12.2.2 System status

```

CSTA-system-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) system-status( 211) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID, SystemStatus FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

systemStatus OPERATION ::=
{  ARGUMENT      SystemStatusArg
   RESULT        SystemStatusRes
   ERRORS        {universalFailure }
   CODE          local: 211 }

SystemStatusArg ::= SEQUENCE
{  sysStatRegisterID  SysStatRegisterID      OPTIONAL,
   systemStatus       SystemStatus,
   extensions         CSTACommonArguments    OPTIONAL }

SystemStatusRes ::= CHOICE
{  extensions         CSTACommonArguments,
   noData             NULL }

END -- of CSTA-system-status

```

12.2.3 Switching function capabilities changed

```

CSTA-switching-function-capabilities-changed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-capabilities-changed( 212) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

swFunctionCapsChanged OPERATION ::=
{ ARGUMENT      SwFunctionCapsChangedArg
  RESULT        SwFunctionCapsChangedRes
  ERRORS        { universalFailure }
  CODE          local: 212 }

SwFunctionCapsChangedArg ::= SEQUENCE
{ sysStatRegisterID      SysStatRegisterID      OPTIONAL,
  extensions              CSTACommonArguments   OPTIONAL }

SwFunctionCapsChangedRes ::= CHOICE
{ extensions              CSTACommonArguments,
  noData                  NULL }

END -- of CSTA-switching-function-capabilities-changed

```


12.2.4 Switching function devices changed

```

CSTA-switching-function-devices-changed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-devices-changed( 213) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SysStatRegisterID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

swFunctionDevicesChanged OPERATION ::=
{  ARGUMENT      SwFunctionDevicesChangedArg
  RESULT        SwFunctionDevicesChangedRes
  ERRORS        {universalFailure }
  CODE          local: 213 }

SwFunctionDevicesChangedArg ::= SEQUENCE
{  sysStatRegisterID      SysStatRegisterID      OPTIONAL,
  extensions              CSTACommonArguments    OPTIONAL }

SwFunctionDevicesChangedRes ::= CHOICE
{  extensions              CSTACommonArguments,
  noData                  NULL }

END -- of CSTA-switching-function-devices-changed

```

12.2.5 Get Registrations

```

CSTA-get-registrations
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-registrations( 371) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
RegistrationTypeList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
RegistrationList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getRegistrations OPERATION ::=
{ ARGUMENT      GetRegistrationsArg
  RESULT        GetRegistrationsRes
  ERRORS        {universalFailure }
  CODE          local: 371 }

GetRegistrationsArg ::= SEQUENCE
{ requestedRegTypes      RegistrationTypeList      OPTIONAL,
  extensions              CSTACommonArguments      OPTIONAL }

GetRegistrationsRes ::= SEQUENCE
{ crossRefIDorRegistrationData CHOICE
  { serviceCrossRefID      ServiceCrossRefID,
    registrationList       RegistrationList },
  extensions              CSTACommonArguments      OPTIONAL }

END -- of CSTA-get-registrations

```

12.2.6 Registration Info

```

CSTA-registration-info
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) registration-info( 372) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
RegistrationList FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }

registrationInfo OPERATION ::=
{   ARGUMENT      RegistrationInfoArg
    ERRORS        {universalFailure }
    CODE          local: 372 }

RegistrationInfoArg ::= SEQUENCE
{   serviceCrossRefID  ServiceCrossRefID,
    segmentID          INTEGER,
    lastSegment        BOOLEAN,
    registrationList    RegistrationList,
    extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-registration-info

```

13 Monitoring services

13.1 Services

13.1.1 Change monitor filter

```

CSTA-change-monitor-filter
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) change-monitor-filter( 102) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorFilter, MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

changeMonitorFilter OPERATION ::=
{  ARGUMENT      ChangeMonitorFilterArgument
   RESULT        ChangeMonitorFilterResult
   ERRORS        {universalFailure }
   CODE          local: 72 }

ChangeMonitorFilterArgument ::= SEQUENCE
{  crossRefIdentifier      MonitorCrossRefID,
   requestedFilterList     MonitorFilter,
   extensions              CSTACCommonArguments      OPTIONAL }

ChangeMonitorFilterResult ::= SEQUENCE
{  actualFilterList       MonitorFilter      OPTIONAL,
   extensions             CSTACCommonArguments  OPTIONAL }

END -- of CSTA-change-monitor-filter

```

13.1.2 Monitor start

```

CSTA-monitor-start
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-start( 101) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
MonitorObject, MonitorFilter, MonitorType, MonitorMediaClass,
MonitorCrossRefID FROM CSTA-status-reporting
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) status-reporting( 126) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

monitorStart OPERATION ::=
{  ARGUMENT      MonitorStartArgument
   RESULT        MonitorStartResult
   ERRORS        {universalFailure }
   CODE          local: 71 }

MonitorStartArgument ::= SEQUENCE
{  monitorObject      MonitorObject,
   requestedMonitorFilter  [0] IMPLICIT MonitorFilter      OPTIONAL,
   monitorType        MonitorType      OPTIONAL,
   requestedMonitorMediaClass  [1] IMPLICIT MonitorMediaClass  OPTIONAL,
   extensions          CSTACCommonArguments      OPTIONAL }

MonitorStartResult ::= SEQUENCE
{  crossRefIdentifier  MonitorCrossRefID,
   actualmonitorFilter  [0] IMPLICIT MonitorFilter      OPTIONAL,
   actualMonitorMediaClass  [1] IMPLICIT MonitorMediaClass  OPTIONAL,
   monitorExistingCalls  BOOLEAN      OPTIONAL,
   extensions            CSTACCommonArguments      OPTIONAL }

END -- of CSTA-monitor-start

```

13.1.3 Monitor stop

```

CSTA-monitor-stop
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-stop( 103) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorCrossRefID FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

monitorStop OPERATION ::=
{  ARGUMENT      MonitorStopArgument
  RESULT        MonitorStopResult
  ERRORS        {universalFailure }
  CODE          local: 73 }

MonitorStopArgument ::= SEQUENCE
{  crossRefIdentifier  MonitorCrossRefID,
  extensions          CSTACommonArguments      OPTIONAL }

MonitorStopResult ::= CHOICE
{  extensions          CSTACommonArguments,
  noData              NULL }

END -- of CSTA-monitor-stop

```

13.1.4 Get Monitor

```

CSTA-get-monitor
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-monitor( 373) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

getMonitors OPERATION ::=
{
  ARGUMENT      GetMonitorArgument
  RESULT        GetMonitorResult
  ERRORS        {universalFailure }
  CODE          local: 373 }

GetMonitorArgument ::= SEQUENCE
{
  extensions          CSTACCommonArguments          OPTIONAL }

GetMonitorResult ::= SEQUENCE
{
  crossRefIDorRegistrationData CHOICE
  {
    serviceCrossRefID, ServiceCrossRefID,
    monitorList      MonitorList },
  extensions          CSTACCommonArguments          OPTIONAL }

END -- of CSTA-get-monitor

```

13.1.5 Monitor Info

```

CSTA-monitor-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) monitor-info( 374) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MonitorList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

monitorInfo OPERATION ::=
{  ARGUMENT      MonitorInfoArgument
  ERRORS         {universalFailure }
  CODE           local: 374 }

MonitorInfoArgument ::= SEQUENCE
{  serviceCrossRefID      ServiceCrossRefID,
  segmentID               INTEGER,
  lastSegment             BOOLEAN,
  monitorList             MonitorList,
  extensions              CSTACommonArguments OPTIONAL }

END -- of CSTA-monitor-info

```


14 Snapshot services

14.1 Services

14.1.1 Snapshot call

```

CSTA-snapshot-call
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) snapshot-call( 105) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
CallingDeviceID, CalledDeviceID, AssociatedCallingDeviceID,
AssociatedCalledDeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-connection-identifiers( 124) }
SnapshotCallData FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
CorrelatorData FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-control( 130) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) }
SubjectOfCall, LanguagePreferences, MessageInfo, DeviceHistory
FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
MediaCallCharacteristics FROM CSTA-media-services
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) media-services( 136) };

snapshotCall OPERATION ::=
{   ARGUMENT      SnapshotCallArgument
    RESULT        SnapshotCallResult
    ERRORS        {universalFailure }
    CODE          local: 75 }

```

```

SnapshotCallArgument ::= SEQUENCE
{
    snapshotObject          ConnectionID,
    extensions              CSTACCommonArguments          OPTIONAL }

SnapshotCallResult ::= SEQUENCE
{
    crossRefIDorSnapshotData CHOICE
    {
        serviceCrossRefID    [0] IMPLICIT ServiceCrossRefID,
        snapshotData         SnapshotCallData },
    mediaCallCharacteristics MediaCallCharacteristics          OPTIONAL,
    callCharacteristics      CallCharacteristics              OPTIONAL,
    callingDevice            CallingDeviceID                  OPTIONAL,
    calledDevice             CalledDeviceID                   OPTIONAL,
    associatedCallingDeviceID AssociatedCallingDeviceID        OPTIONAL,
    associatedCalledDeviceID AssociatedCalledDeviceID          OPTIONAL,
    correlatorData           [1] IMPLICIT CorrelatorData       OPTIONAL,
    callLinkageData          [2] IMPLICIT CallLinkageData       OPTIONAL,
    subjectOfCall            [3] IMPLICIT SubjectOfCall        OPTIONAL,
    messageInfo              [4] IMPLICIT MessageInfo          OPTIONAL,
    languagePreferences      [5] IMPLICIT LanguagePreferences  OPTIONAL,
    deviceHistory            [6] IMPLICIT DeviceHistory         OPTIONAL,
    extensions               CSTACCommonArguments             OPTIONAL }

END -- of CSTA-snapshot-call

```

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14.1.2 Snapshot device

```

CSTA-snapshot-device
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-device( 104) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
SnapshotDeviceData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

snapshotDevice OPERATION ::=
{ ARGUMENT      SnapshotDeviceArgument
  RESULT        SnapshotDeviceResult
  ERRORS        {universalFailure}
  CODE          local: 74 }

SnapshotDeviceArgument ::= SEQUENCE
{ snapshotObject DeviceID,
  extensions      CSTACCommonArguments OPTIONAL }

SnapshotDeviceResult ::= SEQUENCE
{ crossRefIDorSnapshotData CHOICE
  { serviceCrossRefID ServiceCrossRefID,
    snapshotData      SnapshotDeviceData },
  extensions          CSTACCommonArguments OPTIONAL }

END -- of CSTA-snapshot-device

```

14.1.3 Snapshot calldata

```

CSTA-snapshot-call-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-call-data(106) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SnapshotCallData FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

snapshotCallData OPERATION ::=
{  ARGUMENT      SnapshotCallDataArgument
  ERRORS         {universalFailure }
  ALWAYS RESPONDS FALSE
  CODE           local: 76 }

SnapshotCallDataArgument ::= SEQUENCE
{  serviceCrossRefID      ServiceCrossRefID,
  segmentID               INTEGER                OPTIONAL,
  lastSegment             BOOLEAN,
  snapshotData            SnapshotCallData,
  extensions              CSTACommonArguments   OPTIONAL }

END -- of CSTA-snapshot-call-data

```

14.1.4 Snapshot devicedata

```

CSTA-snapshot-device-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) snapshot-device-data(107) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
SnapshotDeviceData FROM CSTA-status-reporting
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) status-reporting( 126) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ServiceCrossRefID FROM CSTA-capability-exchange
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) capability-exchange( 131) };

snapshotDeviceData OPERATION ::=
{  ARGUMENT      SnapshotDeviceDataArgument
   ERRORS        {universalFailure }
   ALWAYS RESPONDS FALSE
   CODE          local: 77 }

SnapshotDeviceDataArgument ::= SEQUENCE
{  serviceCrossRefID  ServiceCrossRefID,
   segmentID          INTEGER,
   lastSegment        BOOLEAN,
   snapshotData        SnapshotDeviceData,
   extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-snapshot-device-data

```

15 Call control services and events

15.1 Services

15.1.1 Accept call

```

CSTA-accept-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) accept-call( 214) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

acceptCall OPERATION ::=
{  ARGUMENT      AcceptCallArgument
   RESULT        AcceptCallResult
   ERRORS        {universalFailure }
   CODE          local: 214 }

AcceptCallArgument ::= SEQUENCE
{  callToBeAccepted      ConnectionID,
   correlatorData        CorrelatorData          OPTIONAL,
   userData              UserData                OPTIONAL,
   extensions            CSTACommonArguments     OPTIONAL }

AcceptCallResult ::= CHOICE
{  extensions            CSTACommonArguments,
   noData                NULL }

END -- of CSTA-accept-call

```

15.1.2 Alternate call

```

CSTA-alternate-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) alternate-call( 1) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConsultOptions FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

alternateCall OPERATION ::=
{  ARGUMENT      AlternateCallArgument
   RESULT        AlternateCallResult
   ERRORS        {universalFailure }
   CODE          local: 1 }

AlternateCallArgument ::= SEQUENCE
{  heldCall      ConnectionID,
   activeCall    ConnectionID,
   connectionReservation BOOLEAN OPTIONAL,
   consultOptions ConsultOptions DEFAULT unrestricted,
   extensions    CSTACCommonArguments OPTIONAL }

AlternateCallResult ::= CHOICE
{  extensions    CSTACCommonArguments,
   noData        NULL }

END -- of CSTA-alternate-call

```

15.1.3 Answer call

```

CSTA-answer-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) answer-call( 2) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

answerCall OPERATION ::=
{  ARGUMENT      AnswerCallArgument
   RESULT        AnswerCallResult
   ERRORS        {universalFailure }
   CODE          local: 2 }

AnswerCallArgument ::= SEQUENCE
{  callToBeAnswered      ConnectionID,
   correlatorData         CorrelatorData      OPTIONAL,
   userData               UserData            OPTIONAL,
   extensions             CSTACCommonArguments  OPTIONAL }

AnswerCallResult ::= CHOICE
{  extensions      CSTACCommonArguments,
   noData          NULL }

END -- of CSTA-answer-call

```


15.1.4 Call back call-related

```

CSTA-call-back-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-call-related( 215) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

callBack OPERATION ::=
{ ARGUMENT      CallBackArgument
  RESULT        CallBackResult
  ERRORS        {universalFailure }
  CODE          local: 215 }

CallBackArgument ::= SEQUENCE
{ callbackConnection      ConnectionID,
  callCharacteristics      CallCharacteristics
  subjectOfCall            [0] IMPLICIT SubjectOfCall
  languagePreferences      [1] IMPLICIT LanguagePreferences
  extensions               CSTACommonArguments
  OPTIONAL,
  OPTIONAL,
  OPTIONAL,
  OPTIONAL }

CallBackResult ::= SEQUENCE
{ targetDevice            DeviceID
  extensions              CSTACommonArguments
  OPTIONAL,
  OPTIONAL }

END -- of CSTA-call-back-call-related

```

15.1.5 Call back message call-related

```

CSTA-call-back-message-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-message-call-related( 216) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };
callBackMessage OPERATION ::=
{  ARGUMENT      CallBackMessageArgument
   RESULT        CallBackMessageResult
   ERRORS        {universalFailure }
   CODE          local: 216 }

CallBackMessageArgument ::= SEQUENCE
{  callbackMessageConnection  ConnectionID,
   extensions                  CSTACommonArguments          OPTIONAL }

CallBackMessageResult ::= SEQUENCE
{  targetDevice      DeviceID          OPTIONAL,
   extensions        CSTACommonArguments  OPTIONAL }

END -- of CSTA-call-back-message-call-related

```

15.1.6 Camp on call

```

CSTA-camp-on-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) camp-on-call( 217) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

camponCall OPERATION ::=
{ ARGUMENT      CamponCallArgument
  RESULT        CamponCallResult
  ERRORS        {universalFailure }
  CODE          local: 217 }

CamponCallArgument ::= SEQUENCE
{  camponConnection  ConnectionID,
   extensions        CSTACommonArguments          OPTIONAL }

CamponCallResult ::= CHOICE
{  extensions        CSTACommonArguments,
   noData            NULL }

END -- of CSTA-camp-on-call

```

15.1.7 Clear call

```

CSTA-clear-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear-call( 4) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clearCall OPERATION ::=
{  ARGUMENT          ClearCallArgument
   RESULT            ClearCallResult
   ERRORS            {universalFailure}
   CODE              local: 4 }

ClearCallArgument ::= SEQUENCE
{  callToBeCleared    ConnectionID,
   userData           UserData          OPTIONAL,
   reason             EventCause       OPTIONAL,
   extensions         CSTACommonArguments OPTIONAL }

ClearCallResult ::= CHOICE
{  extensions         CSTACommonArguments,
   noData             NULL }

END -- of CSTA-clear-call

```

15.1.8 Clear Connection

```

CSTA-clear-connection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear-connection( 5) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clearConnection OPERATION ::=
{
  ARGUMENT          ClearConnectionArgument
  RESULT             ClearConnectionResult
  ERRORS             {universalFailure }
  CODE               local: 5 }

ClearConnectionArgument ::= SEQUENCE
{
  connectionToBeCleared ConnectionID,
  correlatorData         CorrelatorData          OPTIONAL,
  userData               UserData                OPTIONAL,
  reason                 EventCause              OPTIONAL,
  extensions              CSTACommonArguments    OPTIONAL }

ClearConnectionResult ::= CHOICE
{
  extensions             CSTACommonArguments,
  noData                 NULL }

END -- of CSTA-clear-connection

```

15.1.9 Conference call

```

CSTA-conference-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conference-call( 6) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CallLinkageDataList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

conferenceCall OPERATION ::=
{ ARGUMENT      ConferenceCallArgument
  RESULT        ConferenceCallResult
  ERRORS        {universalFailure}
  CODE          local: 6 }

ConferenceCallArgument ::= SEQUENCE
{ heldCall      ConnectionID,
  activeCall    ConnectionID,
  extensions    CSTACommonArguments OPTIONAL }

ConferenceCallResult ::= SEQUENCE
{ conferenceCall ConnectionID,
  connections    [0] IMPLICIT ConnectionList OPTIONAL,
  conferenceCallInfo [1] IMPLICIT ConnectionInformation OPTIONAL,
  callLinkageDataList [2] IMPLICIT CallLinkageDataList OPTIONAL,
  extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-conference-call

```

15.1.10 Consultation call

```

CSTA-consultation-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) consultation-call( 7) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, ConsultOptions, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

consultationCall OPERATION ::=
{ ARGUMENT ConsultationCallArgument
  RESULT ConsultationCallResult
  ERRORS {universalFailure }
  CODE local: 7 }

ConsultationCallArgument ::= SEQUENCE
{ existingCall [0] IMPLICIT ConnectionID,
  consultedDevice [1] DeviceID,
  connectionReservation [2] IMPLICIT BOOLEAN OPTIONAL,
  accountCode [3] IMPLICIT AccountInfo OPTIONAL,
  authCode [4] IMPLICIT AuthCode OPTIONAL,
  correlatorData [5] IMPLICIT CorrelatorData OPTIONAL,
  userData [6] IMPLICIT UserData OPTIONAL,
  callCharacteristics [7] IMPLICIT CallCharacteristics OPTIONAL,
  mediaCallCharacteristics [8] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callingConnectionInfo [9] IMPLICIT ConnectionInformation OPTIONAL,
  consultOptions [10] IMPLICIT ConsultOptions DEFAULT unrestricted,
  subjectOfCall [11] IMPLICIT SubjectOfCall OPTIONAL,
  languagePreferences [12] IMPLICIT LanguagePreferences OPTIONAL,
  extensions CSTACommonArguments OPTIONAL }

```

```
ConsultationCallResult ::= SEQUENCE
{
    initiatedCall          ConnectionID,
    mediaCallCharacteristics [0] IMPLICIT MediaCallCharacteristics OPTIONAL,
    initiatedCallInfo       [1] IMPLICIT ConnectionInformation    OPTIONAL,
    callLinkageData         [2] IMPLICIT CallLinkageData          OPTIONAL,
    extensions              CSTACommonArguments                  OPTIONAL }

END -- of CSTA-consultation-call
```

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15.1.11 Deflect call

```

CSTA-deflect-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) deflect-call( 218) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

deflectCall OPERATION ::=
{ ARGUMENT DeflectCallArgument
  RESULT DeflectCallResult
  ERRORS {universalFailure }
  CODE local: 218 }

DeflectCallArgument ::= SEQUENCE
{ callToBeDiverted ConnectionID,
  newDestination DeviceID,
  addNewDestinationsList DeviceIDList OPTIONAL,
  -- List of additional new Destinations
  correlatorData CorrelatorData OPTIONAL,
  userData UserData OPTIONAL,
  callCharacteristics [0] IMPLICIT CallCharacteristics OPTIONAL,
  subjectOfCall [1] IMPLICIT SubjectOfCall OPTIONAL,
  languagePreferences [2] IMPLICIT LanguagePreferences OPTIONAL,
  reason [3] IMPLICIT EventCause OPTIONAL,
  extensions CSTACommonArguments OPTIONAL }

```

```
DeflectCallResult ::= CHOICE
{
    extensions          CSTACCommonArguments,
    noData              NULL }
DeviceIDList ::= SEQUENCE OF DeviceID

END -- of CSTA-deflect-call
```

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15.1.12 Dial digits

```

CSTA-dial-digits
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) dial-digits( 219) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

dialDigits OPERATION ::=
{  ARGUMENT      DialDigitsArgument
   RESULT        DialDigitsResult
   ERRORS        {universalFailure}
   CODE          local: 219 }

DialDigitsArgument ::= SEQUENCE
{  diallingConnection  ConnectionID,
   diallingSequence    DeviceID,
   correlatorData      CorrelatorData          OPTIONAL,
   extensions          CSTACommonArguments     OPTIONAL }

DialDigitsResult ::= CHOICE
{  extensions          CSTACommonArguments,
   noData              NULL }

END -- of CSTA-dial-digits

```

15.1.13 Directed pickup call

```

CSTA-directed-pickup-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) directed-pickup-call( 220) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

directedPickupCall OPERATION ::=
{ ARGUMENT      DirectedPickupCallArgument
  RESULT        DirectedPickupCallResult
  ERRORS        {universalFailure }
  CODE          local: 220 }

DirectedPickupCallArgument ::= SEQUENCE
{ callToBePickedUp      ConnectionID,
  requestingDevice      DeviceID,
  correlatorData        CorrelatorData          OPTIONAL,
  userData              UserData                OPTIONAL,
  extensions            CSTACommonArguments     OPTIONAL }

DirectedPickupCallResult ::= SEQUENCE
{ pickedCall            ConnectionID              OPTIONAL,
  pickedCallInfo        ConnectionInformation     OPTIONAL,
  callLinkageData       [1] IMPLICIT CallLinkageData OPTIONAL,
  extensions            CSTACommonArguments     OPTIONAL }

END -- of CSTA-directed-pickup-call

```

15.1.14 Group pickup call

```

CSTA-group-pickup-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) group-pickup-call( 221) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

groupPickupCall OPERATION ::=
{ ARGUMENT      GroupPickupCallArgument
  RESULT        GroupPickupCallResult
  ERRORS        {universalFailure }
  CODE          local: 221 }

GroupPickupCallArgument ::=SEQUENCE
{ newDestination      DeviceID,
  pickGroup            DeviceID              OPTIONAL,
  correlatorData       CorrelatorData         OPTIONAL,
  userData             UserData              OPTIONAL,
  extensions           CSTACCommonArguments  OPTIONAL }

GroupPickupCallResult ::= SEQUENCE
{ pickedCall          ConnectionID            OPTIONAL,
  pickedCallInfo       ConnectionInformation   OPTIONAL,
  callLinkageData      [1] IMPLICIT CallLinkageData OPTIONAL,
  extensions           CSTACCommonArguments   OPTIONAL }

END -- of CSTA-group-pickup-call

```

15.1.15 Hold call

```

CSTA-hold-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) hold-call( 9) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

holdCall OPERATION ::=
{  ARGUMENT      HoldCallArgument
  RESULT        HoldCallResult
  ERRORS        {universalFailure }
  CODE          local: 9 }

HoldCallArgument ::= SEQUENCE
{  callToBeHeld      ConnectionID,
  connectionReservation  BOOLEAN                OPTIONAL,
  extensions         CSTACommonArguments        OPTIONAL }

HoldCallResult ::= CHOICE
{  extensions         CSTACommonArguments,
  noData              NULL }

END -- of CSTA-hold-call

```

15.1.16 Intrude call

```

CSTA-intrude-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) intrude-call( 222) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
ParticipationType, UserData FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
CallLinkageDataList FROM CSTA-call-control
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) media-services( 136) };

intrudeCall OPERATION ::=
{  ARGUMENT      IntrudeCallArgument
   RESULT        IntrudeCallResult
   ERRORS        {universalFailure }
   CODE          local: 222 }

IntrudeCallArgument ::= SEQUENCE
{  intrude          ConnectionID,
   participationType ParticipationType,
   userData         UserData,
   extensions       CSTACommonArguments }

IntrudeCallResult ::= SEQUENCE
{  conferencedCall      ConnectionID,
   conferencedCallInfo  ConnectionInformation,
   callLinkageDataList  [1] IMPLICIT CallLinkageDataList,
   extensions           CSTACommonArguments }

END -- of CSTA-intrude-call

```

15.1.17 Join call

```

CSTA-join-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) join-call( 223) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, ParticipationType, UserData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
AutoOriginate, CallLinkageDataList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

joinCall OPERATION ::=
{ ARGUMENT      JoinCallArgument
  RESULT        JoinCallResult
  ERRORS        {universalFailure }
  CODE          local: 223 }

JoinCallArgument ::= SEQUENCE
{  activeCall      ConnectionID,
   joiningDevice   DeviceID,
   autoOriginate   [0] IMPLICIT   AutoOriginate      DEFAULT prompt,
   participationType [1] IMPLICIT   ParticipationType  DEFAULT active,
   accountCode     [2] IMPLICIT   AccountInfo         OPTIONAL,
   authCode        [3] IMPLICIT   AuthCode            OPTIONAL,
   correlatorData  [4] IMPLICIT   CorrelatorData       OPTIONAL,
   userData        UserData       OPTIONAL,
   extensions      CSTACCommonArguments              OPTIONAL }

JoinCallResult ::= SEQUENCE
{  conferencedCall      ConnectionID,
   conferencedCallInfo  ConnectionInformation         OPTIONAL,
   callLinkageDataList  [1] IMPLICIT CallLinkageDataList OPTIONAL,
   extensions           CSTACCommonArguments         OPTIONAL }

END -- of CSTA-join-call

```


15.1.18 Make call

```

CSTA-make-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-call( 10) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makeCall OPERATION ::=
{ ARGUMENT    MakeCallArgument
  RESULT      MakeCallResult
  ERRORS      {universalFailure }
  CODE        local: 10 }

MakeCallArgument ::= SEQUENCE
{   callingDevice          DeviceID,
    calledDirectoryNumber  DeviceID,
    accountCode             [0] IMPLICIT AccountInfo             OPTIONAL,
    authCode                [1] IMPLICIT AuthCode                OPTIONAL,
    autoOriginate           [3] IMPLICIT AutoOriginate           DEFAULT prompt,
    correlatorData          [2] IMPLICIT CorrelatorData          OPTIONAL,
    userData                UserData                              OPTIONAL,
    callCharacteristics      CallCharacteristics                 OPTIONAL,
    mediaCallCharacteristics [4] IMPLICIT MediaCallCharacteristics OPTIONAL,
    callingConnectionInfo    [5] IMPLICIT ConnectionInformation  OPTIONAL,
    subjectOfCall            [6] IMPLICIT SubjectOfCall           OPTIONAL,

```

languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
reason	[8] IMPLICIT EventCause	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

MakeCallResult ::= SEQUENCE

{	callingDevice	ConnectionID,	
	mediaCallCharacteristics	[0] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	initiatedCallInfo	[1] IMPLICIT ConnectionInformation	OPTIONAL,
	callLinkageData	[2] IMPLICIT CallLinkageData	OPTIONAL,
	extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-make-call

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15.1.19 Make connection

```

CSTA-make-connection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-connection( 375) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makeConnection OPERATION ::=
{ ARGUMENT          MakeConnectionArgument
  RESULT            MakeConnectionResult
  ERRORS             {universalFailure }
  CODE               local: 375 }

MakeConnectionArgument ::= SEQUENCE
{  initiatingDevice      DeviceID,
   accountCode           [ 0] IMPLICIT AccountInfo           OPTIONAL,
   authCode              [ 1] IMPLICIT AuthCode              OPTIONAL,
   autoOriginate         [ 2] IMPLICIT AutoOriginate         DEFAULT prompt,
   correlatorData        [ 3] IMPLICIT CorrelatorData        OPTIONAL,
   callCharacteristics    [ 4] IMPLICIT CallCharacteristics   OPTIONAL,
   mediaCallCharacteristics [ 5] IMPLICIT MediaCallCharacteristics OPTIONAL,
   connectionInfo        [ 6] IMPLICIT ConnectionInformation OPTIONAL,

```

```

subjectOfCall          [ 7] IMPLICIT SubjectOfCall          OPTIONAL,
languagePreferences    [ 8] IMPLICIT LanguagePreferences    OPTIONAL,
reason                 [ 9] IMPLICIT EventCause              OPTIONAL,
maxDevices              [10] IMPLICIT INTEGER                OPTIONAL,
startTime              [11] IMPLICIT TimeInfo                 OPTIONAL,
duration                [12] IMPLICIT INTEGER                OPTIONAL,
extensions              CSTACommonArguments                  OPTIONAL }

MakeConnectionResult ::= SEQUENCE
{
    initiatingDevice      ConnectionID,
    mediaCallCharacteristics [0] IMPLICIT MediaCallCharacteristics OPTIONAL,
    initiatedCallInfo      [1] IMPLICIT ConnectionInformation  OPTIONAL,
    callLinkageData        [2] IMPLICIT CallLinkageData         OPTIONAL,
    extensions              CSTACommonArguments                  OPTIONAL }

END -- of CSTA-make-connection

```

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15.1.20 Make predictive call

```

CSTA-make-predictive-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) make-predictive-call( 11) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM
CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AutoOriginate, CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

makePredictiveCall OPERATION ::=
{ ARGUMENT      MakePredictiveCallArgument
  RESULT        MakePredictiveCallResult
  ERRORS        {universalFailure }
  CODE          local: 11 }

MakePredictiveCallArgument ::= SEQUENCE
{ callingDevice      DeviceID,
  calledDirectoryNumber DeviceID,
  signallingDetection [ 0] IMPLICIT SignallingDetection OPTIONAL,
  destinationDetection [ 1] IMPLICIT DestinationDetection OPTIONAL,
  defaultAction [ 2] IMPLICIT DefaultAction OPTIONAL,
  accountCode [ 3] IMPLICIT AccountInfo OPTIONAL,
  authCode [ 4] IMPLICIT AuthCode OPTIONAL,
  autoOriginate [ 5] IMPLICIT AutoOriginate DEFAULT prompt,
  alertTime [ 6] IMPLICIT INTEGER OPTIONAL,
  correlatorData [ 7] IMPLICIT CorrelatorData OPTIONAL,
  callCharacteristics [ 8] IMPLICIT CallCharacteristics OPTIONAL,
  userData UserData OPTIONAL,
  subjectOfCall [ 9] IMPLICIT SubjectOfCall OPTIONAL,

```

languagePreferences	[10] IMPLICIT LanguagePreferences	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

MakePredictiveCallResult ::= SEQUENCE

{ initiatedCall	ConnectionID,	
initiatedCallInfo	ConnectionInformation	OPTIONAL,
callLinkageData	[1] IMPLICIT CallLinkageData	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

SignallingDetection ::= SEQUENCE

{ signallingCondition	SignallingCondition,	
signallingConditionsAction	SignallingConditionsAction }	

SignallingCondition ::= ENUMERATED

{ callDelivered	(0),	
callEstablished	(1) }	

SignallingConditionsAction ::= ENUMERATED

{ destinationDetection	(0),	
remainConnected	(1) }	

DestinationDetection ::= SEQUENCE OF SEQUENCE

{ destinationCondition	DestinationCondition,	
detectionAction	DetectionAction }	

DestinationCondition ::= ENUMERATED

{ humanVoice	(0),	
answeringMachine	(1),	
facsimileMachine	(2) }	

DefaultAction ::= DetectionAction

DetectionAction ::= ENUMERATED

{ clearCalledConnection	(0),	
remainConnected	(1) }	

END -- of CSTA-make-predictive-call

15.1.21 Park call

```

CSTA-park-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) park-call( 18) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

parkCall OPERATION ::=
{ ARGUMENT      ParkCallArgument
  RESULT        ParkCallResult
  ERRORS        {universalFailure }
  CODE          local: 18 }

ParkCallArgument ::= SEQUENCE
{ parking          ConnectionID,
  parkTo           DeviceID,
  correlatorData   CorrelatorData
  OPTIONAL,
  subjectOfCall    [0] IMPLICIT SubjectOfCall
  OPTIONAL,
  languagePreferences [1] IMPLICIT LanguagePreferences
  OPTIONAL,
  extensions       CSTACommonArguments
  OPTIONAL }

ParkCallResult ::= SEQUENCE
{ parkedTo          ConnectionID
  OPTIONAL,
  callLinkageData   [1] IMPLICIT CallLinkageData
  OPTIONAL,
  extensions         CSTACommonArguments
  OPTIONAL }

END -- of CSTA-park-call

```

15.1.22 Reconnect call

```

CSTA-reconnect-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) reconnect-call( 13) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

reconnectCall OPERATION ::=
{  ARGUMENT      ReconnectCallArgument
  RESULT         ReconnectCallResult
  ERRORS         {universalFailure }
  CODE           local: 13 }

ReconnectCallArgument ::= SEQUENCE
{  activeCall      ConnectionID,
  heldCall         ConnectionID,
  extensions       CSTACommonArguments      OPTIONAL }

ReconnectCallResult ::= CHOICE
{  extensions       CSTACommonArguments,
  noData            NULL }

END -- of CSTA-reconnect-call

```


15.1.23 Retrieve call

```

CSTA-retrieve-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieve-call( 14) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

retrieveCall OPERATION ::=
{  ARGUMENT      RetrieveCallArgument
   RESULT        RetrieveCallResult
   ERRORS        {universalFailure }
   CODE          local: 14 }

RetrieveCallArgument ::= SEQUENCE
{  callToBeRetrieved      ConnectionID,
   extensions             CSTACCommonArguments          OPTIONAL }

RetrieveCallResult ::= CHOICE
{  extensions             CSTACCommonArguments,
   noData                 NULL }

END -- of CSTA-retrieve-call

```

15.1.24 Single step conference call

```

CSTA-single-step-conference
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) single-step-conference( 20) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, ParticipationType, UserData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallLinkageDataList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

singleStepConf OPERATION ::=
{ ARGUMENT      SingleStepConfArgument
  RESULT        SingleStepConfResult
  ERRORS        {universalFailure }
  CODE          local: 20 }

SingleStepConfArgument ::= SEQUENCE
{ activeCall      ConnectionID,
  deviceToJoin    DeviceID,
  participationType ParticipationType           DEFAULT active,
  accountCode     [0] IMPLICIT AccountInfo      OPTIONAL,
  authCode        [1] IMPLICIT AuthCode         OPTIONAL,
  correlatorData  [2] IMPLICIT CorrelatorData    OPTIONAL,
  userData        UserData                      OPTIONAL,
  subjectOfCall   [3] IMPLICIT SubjectOfCall     OPTIONAL,
  languagePreferences [4] IMPLICIT LanguagePreferences OPTIONAL,
  extensions      CSTACommonArguments           OPTIONAL }

```

```
SingleStepConfResult ::= SEQUENCE
{
  conferencedCall      ConnectionID,
  conferencedCallInfo  ConnectionInformation OPTIONAL,
  callLinkageDataList [1] IMPLICIT CallLinkageDataList OPTIONAL,
  extensions           CSTACommonArguments OPTIONAL }

END -- of CSTA-single-step-conference
```

15.1.25 Send Message

```

CSTA-send-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-message( 376) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
SubjectOfCall, LanguagePreferences, MessageInfo
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

sendMessage OPERATION ::=
{ ARGUMENT      SendMessageArgument
  RESULT        SendMessageResult
  ERRORS        {universalFailure }
  CODE          local: 376 }

SendMessageArgument ::= SEQUENCE
{   callingDevice          DeviceID,
    destinationDevices     DeviceListItems,
    messageInfo             MessageInfo,
    accountCode             [0] IMPLICIT AccountInfo             OPTIONAL,
    authCode                [1] IMPLICIT AuthCode                OPTIONAL,
    correlatorData          [2] IMPLICIT CorrelatorData           OPTIONAL,
    callCharacteristics     [3] IMPLICIT CallCharacteristics      OPTIONAL,
    mediaCallCharacteristics [4] IMPLICIT MediaCallCharacteristics OPTIONAL,
    subjectOfCall           [5] IMPLICIT SubjectOfCall            OPTIONAL,
    languagePreferences     [6] IMPLICIT LanguagePreferences     OPTIONAL,
    extensions              CSTACommonArguments                  OPTIONAL }

```

```

SendMessageResult ::= SEQUENCE
{
    connectionList          ConnectionListItems,
    mediaCallCharacteristics MediaCallCharacteristics OPTIONAL,
    listOfCallLinkageData   [1] IMPLICIT CallLinkageDataListItems OPTIONAL,
    extensions              CSTACommonArguments OPTIONAL }

DeviceListItems ::= SEQUENCE
{
    device          DeviceID }

ConnectionListItems ::= SEQUENCE
{
    connection          ConnectionID }

CallLinkageDataListItems ::= SEQUENCE
{
    callLinkageData          CallLinkageData }

END -- of CSTA-send-message

```

15.1.26 Single step transfer call

```

CSTA-single-step-transfer
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) single-step-conference( 50) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
AccountInfo, AuthCode, CorrelatorData, UserData
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
CallCharacteristics, CallLinkageDataList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

singleStepTrans OPERATION ::=
{ ARGUMENT      SingleStepTransArgument
  RESULT        SingleStepTransResult
  ERRORS        {universalFailure }
  CODE          local: 50 }

SingleStepTransArgument ::= SEQUENCE
{  activeCall      ConnectionID,
   transferredTo   DeviceID,
   accountCode     [0] IMPLICIT AccountInfo          OPTIONAL,
   authCode        [1] IMPLICIT AuthCode              OPTIONAL,
   correlatorData  [2] IMPLICIT CorrelatorData         OPTIONAL,
   userData        UserData                          OPTIONAL,
   callCharacteristics [3] IMPLICIT CallCharacteristics OPTIONAL,

```

subjectOfCall	[4] IMPLICIT SubjectOfCall	OPTIONAL,
languagePreferences	[5] IMPLICIT LanguagePreferences	OPTIONAL,
reason	[6] IMPLICIT EventCause	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

SingleStepTransResult ::= SEQUENCE

{	transferredCall	ConnectionID,	
	connections	[0] IMPLICIT ConnectionList	OPTIONAL,
	transferredCallInfo	[1] IMPLICIT ConnectionInformation	OPTIONAL,
	callLinkageDataList	[2] IMPLICIT CallLinkageDataList	OPTIONAL,
	extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-single-step-transfer

15.1.27 Transfer call

```

CSTA-transfer-call
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) transfer-call( 16) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionList FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CallLinkageDataList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

transferCall OPERATION ::=
{ ARGUMENT      TransferCallArgument
  RESULT        TransferCallResult
  ERRORS        {universalFailure }
  CODE          local: 16 }

TransferCallArgument ::= SEQUENCE
{  heldCall      ConnectionID,
   activeCall    ConnectionID,
   extensions    CSTACommonArguments OPTIONAL }

TransferCallResult ::= SEQUENCE
{  transferredCall      ConnectionID,
   connections          [0] IMPLICIT ConnectionList OPTIONAL,
   transferredCallInfo  [1] IMPLICIT ConnectionInformation OPTIONAL,
   callLinkageDataList  [2] IMPLICIT CallLinkageDataList OPTIONAL,
   extensions           CSTACommonArguments OPTIONAL }

END -- of CSTA-transfer-call

```


15.2 Events

15.2.1 Bridged

CSTA-bridged-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) bridged-event( 224) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

BridgedEvent ::= SEQUENCE

bridgedConnection	ConnectionID,	
bridgedAppearance	SubjectDeviceID,	
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
userData	UserData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
bridgedConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
languagePreferences	[6] IMPLICIT LanguagePreferences	OPTIONAL,

locationInfo	[7] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-bridged-event

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15.2.2 Call cleared

CSTA-call-cleared-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-cleared-event( 22) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

CallClearedEvent ::= SEQUENCE

{	clearedCall	ConnectionID,	
	correlatorData	[1] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
	callLinkageData	[4] IMPLICIT CallLinkageData	OPTIONAL,
	languagePreferences	[5] IMPLICIT LanguagePreferences	OPTIONAL,
	locationInfo	[6] IMPLICIT LocationInfoList	OPTIONAL,
	extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-call-cleared-event

15.2.3 Conferenced

CSTA-conferenced-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) conferenced-event( 23) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState, ConnectionList FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageDataList, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

ConferencedEvent ::= SEQUENCE

{	primaryOldCall	ConnectionID,	
	secondaryOldCall	ConnectionID	OPTIONAL,
	conferencingDevice	SubjectDeviceID,	
	addedParty	SubjectDeviceID,	
	conferenceConnections	ConnectionList,	
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[1] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[2] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[3] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
	callLinkageDataList	[6] IMPLICIT CallLinkageDataList	OPTIONAL,
	languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
	deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,

locationInfo	[9] IMPLICIT	LocationInfoList	OPTIONAL,
extensions	[5] IMPLICIT	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-conferenced-event

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15.2.4 Connection cleared

CSTA-connection-cleared-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-cleared-event( 24) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 128) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ChargingInfo FROM CSTA-charge-info

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

ConnectionClearedEvent ::= SEQUENCE

{	droppedConnection	ConnectionID,	
	releasingDevice	SubjectDeviceID,	
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	chargingInfo	[1] IMPLICIT ChargingInfo	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[2] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[3] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
	droppedConnectionInfo	[5] IMPLICIT ConnectionInformation	OPTIONAL,
	callLinkageData	[6] IMPLICIT CallLinkageData	OPTIONAL,
	languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,

deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[9] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-connection-cleared-event

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15.2.5 Delivered

CSTA-delivered-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delivered-event( 25) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,

AssociatedCalledDeviceID, AssociatedCallingDeviceID,

NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, SubjectOfCall,

MessageInfo, DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

DeliveredEvent ::= SEQUENCE

{	connection	ConnectionID,	
	alertingDevice	SubjectDeviceID,	
	callingDevice	CallingDeviceID,	
	calledDevice	CalledDeviceID,	
	lastRedirectionDevice	RedirectionDeviceID,	
	originatingNIDConnection	ConnectionID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
	networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
connectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[6] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[7] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-delivered-event

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15.2.6 Digits dialed

CSTA-digits-dialed-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-dialed-event( 225) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, DeviceID, AssociatedCalledDeviceID, AssociatedCallingDeviceID,

NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

DigitsDialedEvent ::= SEQUENCE

{ dialingConnection	ConnectionID,	
dialingDevice	SubjectDeviceID,	
dialingSequence	DeviceID,	
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
dialingConnectionInfo	[2] IMPLICIT ConnectionInformation	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
callLinkageData	[4] IMPLICIT CallLinkageData	OPTIONAL,

languagePreferences	[5] IMPLICIT LanguagePreferences	OPTIONAL,
locationInfo	[6] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-digits-dialed-event

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15.2.7 Diverted

CSTA-diverted-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) diverted-event( 26) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID , CallingDeviceID, CalledDeviceID, RedirectionDeviceID,

AssociatedCalledDeviceID, AssociatedCallingDeviceID,

NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, SubjectOfCall, MessageInfo,

DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

DivertedEvent ::= SEQUENCE

connection	ConnectionID,	
divertingDevice	SubjectDeviceID,	
newDestination	SubjectDeviceID,	
callingDevice	CallingDeviceID	OPTIONAL,
calledDevice	CalledDeviceID	OPTIONAL,
lastRedirectionDevice	RedirectionDeviceID,	
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
userData	UserData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,

callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
connectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[6] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[7] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-diverted-event

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15.2.8 Established

CSTA-established-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) established-event( 27) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CalledDeviceID, CallingDeviceID, RedirectionDeviceID,

AssociatedCalledDeviceID, AssociatedCallingDeviceID,

NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, SubjectOfCall, MessageInfo,

DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

EstablishedEvent ::= SEQUENCE

{	establishedConnection	ConnectionID,	
	answeringDevice	SubjectDeviceID,	
	callingDevice	CallingDeviceID,	
	calledDevice	CalledDeviceID,	
	lastRedirectionDevice	RedirectionDeviceID,	
	originatingNIDConnection	ConnectionID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[1] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[2] IMPLICIT ServicesPermitted	OPTIONAL,
	networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[3] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
establishedConnectionInfo	[5] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[6] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[7] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[8] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[9] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[10] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[11] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-established-event

15.2.9 Failed

CSTA-failed-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) failed-event( 28) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,

AssociatedCalledDeviceID, AssociatedCallingDeviceID,

NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, SubjectOfCall, MessageInfo,

DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

FailedEvent ::= SEQUENCE

{	failedConnection	ConnectionID,	
	failingDevice	SubjectDeviceID,	
	callingDevice	CallingDeviceID,	
	calledDevice	CalledDeviceID,	
	lastRedirectionDevice	RedirectionDeviceID,	
	originatingNIDConnection	ConnectionID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
	networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,

networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
failedConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
		--corrected 06/2001
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[6] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[7] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-failed-event

15.2.10 Held

CSTA-held-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) held-event( 29) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 128) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

HeldEvent ::= SEQUENCE

{	heldConnection	ConnectionID,	
	holdingDevice	SubjectDeviceID,	
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
	heldConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
	callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
	languagePreferences	[6] IMPLICIT LanguagePreferences	OPTIONAL,
	locationInfo	[7] IMPLICIT LocationInfoList	OPTIONAL,
	extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-held-event

15.2.11 Network capabilities changed

CSTA-network-capabilities-changed-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-capabilities-changed-event( 226) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CalledDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, NetworkCapability, ProgressIndicator,

ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

NetworkCapabilitiesChangedEvent ::= SEQUENCE

{	outboundConnection	ConnectionID,	
	networkInterfaceUsed	SubjectDeviceID,	
	calledDevice	CalledDeviceID,	
	progressIndicator	ProgressIndicator,	
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	networkCapability	[0] IMPLICIT NetworkCapability	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
	outboundConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
	callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,

languagePreferences	[6] IMPLICIT	LanguagePreferences	OPTIONAL,
locationInfo	[7] IMPLICIT	LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments		OPTIONAL }

END -- of CSTA-network-capabilities-changed-event

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15.2.12 Network reached

CSTA-network-reached-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) network-reached-event( 30) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID
FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, NetworkCapability,
ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

DeviceHistory, LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

NetworkReachedEvent ::= SEQUENCE

{	outboundConnection	ConnectionID,	
	networkInterfaceUsed	SubjectDeviceID,	
	callingDevice	CallingDeviceID,	
	calledDevice	CalledDeviceID,	
	lastRedirectionDevice	RedirectionDeviceID,	
	originatingNIDConneciton	ConnectionID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	networkCapability	[1] IMPLICIT NetworkCapability	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[2] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[3] IMPLICIT MediaCallCharacteristics	OPTIONAL,

callCharacteristics	[4] IMPLICIT CallCharacteristics	OPTIONAL,
outboundConnectionInfo	[5] IMPLICIT ConnectionInformation	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
callLinkageData	[6] IMPLICIT CallLinkageData	OPTIONAL,
languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[9] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-network-reached-event

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15.2.13 Offered

CSTA-offered-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) offered-event( 227) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, CallingDeviceID, CalledDeviceID, RedirectionDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

DeviceHistory, LanguagePreferences, SubjectOfCall,

MessageInfo FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

OfferedEvent ::= SEQUENCE

{	offeredConnection	ConnectionID,	
	offeredDevice	SubjectDeviceID,	
	callingDevice	CallingDeviceID,	
	calledDevice	CalledDeviceID,	
	lastRedirectionDevice	RedirectionDeviceID,	
	originatingNIDConnection	ConnectionID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	CorrelatorData	OPTIONAL,
	userData	UserData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[0] IMPLICIT ServicesPermitted	OPTIONAL,
	networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
	networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,

associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[1] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[2] IMPLICIT CallCharacteristics	OPTIONAL,
offeredConnectionInfo	[3] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[4] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[5] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[6] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[7] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[8] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[9] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-offered-event

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15.2.14 Originated

CSTA-originated-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) originated-event( 31) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

DeviceID, CallingDeviceID, CalledDeviceID, AssociatedCalledDeviceID,

AssociatedCallingDeviceID, NetworkCalledDeviceID, NetworkCallingDeviceID, SubjectDeviceID

FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACCommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, SubjectOfCall, MessageInfo FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

OriginatedEvent ::= SEQUENCE

{ originatedConnection	ConnectionID,	
callingDevice	SubjectDeviceID,	
calledDevice	CalledDeviceID,	
originatingDevice	DeviceID	OPTIONAL,
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[2] IMPLICIT CorrelatorData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[3] IMPLICIT ServicesPermitted	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[4] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[5] IMPLICIT CallCharacteristics	OPTIONAL,

originatedConnectionInfo	[6] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[7] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[8] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[9] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[10] IMPLICIT LanguagePreferences	OPTIONAL,
locationInfo	[11] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACCommonArguments	OPTIONAL }

END -- of CSTA-originated-event

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15.2.15 Queued

CSTA-queued-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queued-event( 32) }
```

DEFINITIONS::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

CalledDeviceID, CallingDeviceID, RedirectionDeviceID, SubjectDeviceID, AssociatedCalledDeviceID,
AssociatedCallingDeviceID, NetworkCalledDeviceID,
NetworkCallingDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

LocationInfoList, CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

DeviceHistory, CorrelatorData, UserData, LanguagePreferences,

SubjectOfCall, MessageInfo FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

QueuedEvent ::= SEQUENCE

queuedConnection	ConnectionID,	
queue	SubjectDeviceID,	
callingDevice	CallingDeviceID,	
calledDevice	CalledDeviceID,	
lastRedirectionDevice	RedirectionDeviceID,	
numberQueued	[0] IMPLICIT INTEGER	OPTIONAL,
callsInFront	[1] IMPLICIT INTEGER	OPTIONAL,
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[2] IMPLICIT CorrelatorData	OPTIONAL,
userData	UserData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[3] IMPLICIT ServicesPermitted	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
associatedCalledDevice	AssociatedCalledDeviceID	OPTIONAL,
mediaCallCharacteristics	[4] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[5] IMPLICIT CallCharacteristics	OPTIONAL,
queuedConnectionInfo	[6] IMPLICIT ConnectionInformation	OPTIONAL,

```

callLinkageData      [ 7] IMPLICIT CallLinkageData      OPTIONAL,
subjectOfCall        [ 8] IMPLICIT SubjectOfCall        OPTIONAL,
messageInfo          [ 9] IMPLICIT MessageInfo          OPTIONAL,
languagePreferences  [10] IMPLICIT LanguagePreferences  OPTIONAL,
deviceHistory        [11] IMPLICIT DeviceHistory        OPTIONAL,
locationInfo         [12] IMPLICIT LocationInfoList     OPTIONAL,
extensions           CSTACommonArguments               OPTIONAL }

END  -- of CSTA-queued-event

```

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15.2.16 Retrieved

CSTA-retrieved-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) retrieved-event( 33) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

RetrievedEvent ::= SEQUENCE

{ retrievedConnection	ConnectionID,	
retrievingDevice	SubjectDeviceID,	
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
cause	EventCause,	
servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,
retrievedConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
languagePreferences	[6] IMPLICIT LanguagePreferences	OPTIONAL,
locationInfo	[7] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-retrieved-event

15.2.17 Service initiated

CSTA-service-initiated-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-initiated-event( 34) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID, AssociatedCallingDeviceID, NetworkCalledDeviceID,

NetworkCallingDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

DeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

MessageInfo, SubjectOfCall, LanguagePreferences FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CalledDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

ServiceInitiatedEvent ::= SEQUENCE

{	initiatedConnection	ConnectionID,	
	initiatingDevice	SubjectDeviceID,	
	calledDevice	CalledDeviceID	OPTIONAL,
	localConnectionInfo	LocalConnectionState	OPTIONAL,
	correlatorData	[0] IMPLICIT CorrelatorData	OPTIONAL,
	cause	EventCause,	
	servicesPermitted	[1] IMPLICIT ServicesPermitted	OPTIONAL,
	mediaCallCharacteristics	[2] IMPLICIT MediaCallCharacteristics	OPTIONAL,
	callCharacteristics	[3] IMPLICIT CallCharacteristics	OPTIONAL,

initiatedConnectionInfo	[4] IMPLICIT ConnectionInformation	OPTIONAL,
networkCallingDevice	NetworkCallingDeviceID	OPTIONAL,
networkCalledDevice	NetworkCalledDeviceID	OPTIONAL,
associatedCallingDevice	AssociatedCallingDeviceID	OPTIONAL,
callLinkageData	[5] IMPLICIT CallLinkageData	OPTIONAL,
subjectOfCall	[7] IMPLICIT SubjectOfCall	OPTIONAL,
messageInfo	[8] IMPLICIT MessageInfo	OPTIONAL,
languagePreferences	[9] IMPLICIT LanguagePreferences	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-service-initiated-event

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15.2.18 Transferred

CSTA-transferred-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) transferred-event( 35) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

SubjectDeviceID FROM CSTA-device-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

LocalConnectionState, ConnectionList FROM CSTA-connection-states

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
```

CorrelatorData, UserData FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 128) }
```

CallCharacteristics, CallLinkageDataList, ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ChargingInfo FROM CSTA-charge-info

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) }
```

LocationInfoList FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

LanguagePreferences, DeviceHistory FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };
```

TransferredEvent ::= SEQUENCE

{ primaryOldCall	ConnectionID,	
secondaryOldCall	[0] IMPLICIT ConnectionID	OPTIONAL,
transferringDevice	SubjectDeviceID,	
transferredToDevice	SubjectDeviceID,	
transferredConnections	[1] IMPLICIT ConnectionList,	
localConnectionInfo	LocalConnectionState	OPTIONAL,
correlatorData	[2] IMPLICIT CorrelatorData	OPTIONAL,
userData	UserData	OPTIONAL,
chargingInfo	[3] IMPLICIT ChargingInfo	OPTIONAL,
cause	EventCause,	
servicesPermitted	[4] IMPLICIT ServicesPermitted	OPTIONAL,
mediaCallCharacteristics	[5] IMPLICIT MediaCallCharacteristics	OPTIONAL,
callCharacteristics	[6] IMPLICIT CallCharacteristics	OPTIONAL,

callLinkageDataList	[7] IMPLICIT CallLinkageDataList	OPTIONAL,
languagePreferences	[8] IMPLICIT LanguagePreferences	OPTIONAL,
deviceHistory	[9] IMPLICIT DeviceHistory	OPTIONAL,
locationInfo	[10] IMPLICIT LocationInfoList	OPTIONAL,
extensions	CSTACommonArguments	OPTIONAL }

END -- of CSTA-transferred-event

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16 Call associated features

16.1 Services

16.1.1 Associate data

```

CSTA-associate-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) associate-data( 230) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LanguagePreferences, SubjectOfCall FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CallCharacteristics, CallLinkageData, ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CallQualifyingData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

associateData OPERATION ::=
{ ARGUMENT AssociateDataArgument
  RESULT AssociateDataResult
  ERRORS {universalFailure }
  CODE local: 230 }

AssociateDataArgument ::= SEQUENCE
{ existingCall ConnectionID,
  accountCode [0] IMPLICIT AccountInfo OPTIONAL,
  authCode [1] IMPLICIT AuthCode OPTIONAL,
  correlatorData [2] IMPLICIT CorrelatorData OPTIONAL,
  callQualifyingData [3] IMPLICIT CallQualifyingData OPTIONAL,
  callCharacteristics [4] IMPLICIT CallCharacteristics OPTIONAL,
  subjectOfCall [5] IMPLICIT SubjectOfCall OPTIONAL,
  languagePreferences [6] IMPLICIT LanguagePreferences OPTIONAL,

```

```
deviceInfo      [7] IMPLICIT DeviceID      OPTIONAL,  
extensions      CSTACommonArguments        OPTIONAL }  
  
AssociateDataResult ::= CHOICE  
{ extensions CSTACommonArguments,  
  noData      NULL }  
  
END -- of CSTA-associate-data
```

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16.1.2 Cancel telephony tones

```

CSTA-cancel-telephony-tones
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) cancel-telephony-tones( 231) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

cancelTelephonyTones OPERATION ::=
{  ARGUMENT      CancelTelephonyTonesArgument
   RESULT        CancelTelephonyTonesResult
   ERRORS        {universalFailure }
   CODE          local: 231 }

CancelTelephonyTonesArgument ::= SEQUENCE
{  connectionToStopTone      ConnectionID,
   extensions                 CSTACCommonArguments          OPTIONAL }

CancelTelephonyTonesResult ::= CHOICE
{  extensions                 CSTACCommonArguments,
   noData                     NULL }

END -- of CSTA-cancel-telephony-tones

```

16.1.3 Change Connection Information

```

CSTA-change-connection-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) change-connection-information( 377) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) }
CSTACCommonArguments FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

changeConnectionInformation OPERATION ::=
{ ARGUMENT      ChangeConnectionInformationArgument
  RESULT        ChangeConnectionInformationResult
  ERRORS        {universalFailure }
  CODE          local: 377 }

ChangeConnectionInformationArgument ::= SEQUENCE
{ connectionToBeChanged      ConnectionID,
  requestedConnectionInfo    ConnectionInformation,
  extensions                  CSTACCommonArguments          OPTIONAL }

ChangeConnectionInformationResult ::= SEQUENCE
{ actualConnectionInfo      ConnectionInformation,
  extensions                  CSTACCommonArguments          OPTIONAL }

END -- of CSTA-change-connection-information

```

16.1.4 Generate digits

```

CSTA-generate-digits
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) generate-digits( 232) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

generateDigits OPERATION ::=
{ ARGUMENT GenerateDigitsArgument
  RESULT GenerateDigitsResult
  ERRORS {universalFailure }
  CODE local: 232 }

GenerateDigitsArgument ::= SEQUENCE
{ connectionToSendDigits ConnectionID,
  digitMode DigitMode OPTIONAL,
  charactersToSend IA5String,
  toneDuration [0] IMPLICIT INTEGER OPTIONAL,
  pulseRate [1] IMPLICIT INTEGER OPTIONAL,
  pauseDuration [2] IMPLICIT INTEGER OPTIONAL,
  extensions CSTACommonArguments OPTIONAL }

GenerateDigitsResult ::= CHOICE
{ extensions CSTACommonArguments,
  noData NULL }

DigitMode ::= ENUMERATED
{ rotaryPulse (0),
  dTMF (1) }

END -- of CSTA-generate-digits

```

16.1.5 Generate telephony tones

```

CSTA-generate-telephony-tones
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) generate-telephony-tones( 233) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-connection-identifiers( 124) }
TelephonyTone FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }

generateTelephonyTones    OPERATION ::=
{   ARGUMENT      GenerateTelephonyTonesArgument
    RESULT        GenerateTelephonyTonesResult
    ERRORS        {universalFailure }
    CODE          local: 233 }

GenerateTelephonyTonesArgument ::= SEQUENCE
{   connectionToSendTone    ConnectionID,
    toneToSend               TelephonyTone,
    toneDuration             INTEGER                               OPTIONAL,
    extensions               CSTACCommonArguments                OPTIONAL }

GenerateTelephonyTonesResult ::= CHOICE
{   extensions               CSTACCommonArguments,
    noData                   NULL }

END -- of CSTA-generate-telephony-tones

```

16.1.6 Send user information

```

CSTA-send-user-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-user-information( 234) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

sendUserInfo      OPERATION ::=
{  ARGUMENT      SendUserInfoArgument
  RESULT         SendUserInfoResult
  ERRORS         {universalFailure }
  CODE           local: 234 }

SendUserInfoArgument ::= SEQUENCE
{  existingCall      ConnectionID,
  userData           UserData,
  extensions         CSTACommonArguments OPTIONAL }

SendUserInfoResult ::= CHOICE
{  extensions         CSTACommonArguments,
  noData             NULL }

END -- of CSTA-send-user-information

```


16.2 Events

16.2.1 Call information

```

CSTA-call-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-information-event( 41) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
CallingDeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
AccountInfo, AuthCode, CorrelatorData, UserData FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageDataList, CallQualifyingData, ServicesPermitted
FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LanguagePreferences, SubjectOfCall FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

CallInformationEvent ::= SEQUENCE
{
  connection          ConnectionID,
  device              SubjectDeviceID,
  callingDevice       CallingDeviceID                      OPTIONAL,
  accountInfo         [0] IMPLICIT AccountInfo            OPTIONAL,
  authCode            [1] IMPLICIT AuthCode                OPTIONAL,
  correlatorData      [2] IMPLICIT CorrelatorData          OPTIONAL,
  servicesPermitted   [3] IMPLICIT ServicesPermitted       OPTIONAL,
  userData            UserData                              OPTIONAL,
  callQualifyingData  [4] IMPLICIT CallQualifyingData      OPTIONAL,
  connectionInfo      ConnectionInformation                OPTIONAL,
  callLinkageDataList [5] IMPLICIT CallLinkageDataList     OPTIONAL,
  callCharacteristics [6] IMPLICIT CallCharacteristics     OPTIONAL,
  subjectOfCall       [7] IMPLICIT SubjectOfCall           OPTIONAL,
  languagePreferences [8] IMPLICIT LanguagePreferences    OPTIONAL,
  deviceInfo          [9] IMPLICIT DeviceID                OPTIONAL,
  extensions           CSTACommonArguments                OPTIONAL }

END -- of CSTA-call-information-event

```

16.2.2 Charging

```

CSTA-charging-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charging-event( 240) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ChargingInfo FROM CSTA-charge-info
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) charge-info( 133) };

ChargingEvent ::= SEQUENCE
{
  connection          ConnectionID,
  chargedDevice       DeviceID,
  chargingInfo        ChargingInfo,
  cause               EventCause          OPTIONAL,
  extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-charging-event

```

16.2.3 Digits generated

```

CSTA-digits-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) digits-generated-event( 241) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

DigitsGeneratedEvent ::= SEQUENCE
{
  connection          ConnectionID,
  digitGeneratedList  IA5String,
  digitDurationList   [0] IMPLICIT SEQUENCE OF INTEGER      OPTIONAL,
  pauseDurationList   [1] IMPLICIT SEQUENCE OF INTEGER      OPTIONAL,
  connectionInfo      ConnectionInformation                  OPTIONAL,
  extensions           CSTACommonArguments                   OPTIONAL }

END -- of CSTA-digits-generated-event

```

16.2.4 Telephony tones generated

```

CSTA-telephony-tones-generated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) telephony-tones-generated-event( 242) }

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
TelephonyTone FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

TelephonyTonesGeneratedEvent ::= SEQUENCE
{
  connection          ConnectionID,
  toneGenerated        TelephonyTone          OPTIONAL,
  toneFrequency        [0] IMPLICIT INTEGER   OPTIONAL,
  toneDuration         [1] IMPLICIT INTEGER   OPTIONAL,
  pauseDuration        [2] IMPLICIT INTEGER   OPTIONAL,
  connectionInfo       ConnectionInformation   OPTIONAL,
  extensions           CSTACommonArguments     OPTIONAL }

END -- of CSTA-telephony-tones-generated-event

```

16.2.5 Service completion failure

```

CSTA-service-completion-failure-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) service-completion-failure-event( 243) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

ServiceCompletionFailureEvent ::= SEQUENCE
{
  primaryCall          PrimaryOrSecondaryCall,
  secondaryCall        [0] IMPLICIT PrimaryOrSecondaryCall      OPTIONAL,
  otherDevsPrimaryCallList [1] IMPLICIT SEQUENCE OF OtherCall    OPTIONAL,
  otherDevsSecondaryCallList [2] IMPLICIT SEQUENCE OF OtherCall  OPTIONAL,
  mediaCallCharacteristics [3] IMPLICIT MediaCallCharacteristics  OPTIONAL,
  cause                EventCause,
  extensions            CSTACommonArguments                      OPTIONAL }

PrimaryOrSecondaryCall ::= SEQUENCE
{
  deviceID          DeviceID,
  connectionID      ConnectionID,
  localConnectionState LocalConnectionState,
  connectionInfo    ConnectionInformation                      OPTIONAL }

OtherCall ::= SEQUENCE
{
  deviceID          DeviceID,
  connectionID      ConnectionID,
  localConnectionState LocalConnectionState                  OPTIONAL,
  connectionInfo    ConnectionInformation                      OPTIONAL }

END -- of CSTA-service-completion-failure-event

```

17 Media attachment services and events

17.1 Services

17.1.1 Attach media service

```

CSTA-attach-media-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) attach-media-service( 244) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaServiceType, MediaServiceInstanceID, ConnectionMode,
ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

attachMediaService OPERATION ::=
{ ARGUMENT AttachMediaServiceArgument
  RESULT AttachMediaServiceResult
  ERRORS {universalFailure }
  CODE local: 244 }

AttachMediaServiceArgument ::= SEQUENCE
{ connection ConnectionID,
  mediaServiceType MediaServiceType,
  mediaServiceVersion INTEGER OPTIONAL,
  mediaServiceInstanceID MediaServiceInstanceID OPTIONAL,
  connectionMode ConnectionMode,
  requestedConnectionState LocalConnectionState OPTIONAL,
  extensions CSTACommonArguments OPTIONAL }

```

```
AttachMediaServiceResult ::= SEQUENCE
{
    mediaConnection      ConnectionID                OPTIONAL,
    mediaDevice           [0] IMPLICIT DeviceID      OPTIONAL,
    mediaServiceInstanceID MediaServiceInstanceID    OPTIONAL,
    mediaConnectionInfo   [1] IMPLICIT ConnectionInformation OPTIONAL,
    callLinkageData       [2] IMPLICIT CallLinkageData OPTIONAL,
    extensions            CSTACommonArguments        OPTIONAL }

END -- of CSTA-attach-media-service
```

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17.1.2 Detach media service

```

CSTA-detach-media-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) detach-media-service( 245) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaServiceType FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

detachMediaService OPERATION ::=
{ ARGUMENT DetachMediaServiceArgument
  RESULT DetachMediaServiceResult
  ERRORS { universalFailure }
  CODE local: 245 }

DetachMediaServiceArgument ::= SEQUENCE
{ connection ConnectionID,
  mediaServiceType MediaServiceType,
  extensions CSTACommonArguments OPTIONAL }

DetachMediaServiceResult ::= CHOICE
{ extensions CSTACommonArguments,
  noData NULL }

END -- of CSTA-detach-media-service

```


17.2 Events

17.2.1 Media attached

```

CSTA-media-attached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-attached-event( 246) }

DEFINITIONS ::=

BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
SubjectDeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) connection-states( 125) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-control( 130) }
MediaServiceType, MediaServiceInstanceID, MediaStreamID,
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) media-services( 136) };

MediaAttachedEvent ::= SEQUENCE
{
  mediaConnection          ConnectionID,
  mediaDevice              SubjectDeviceID,
  mediaServiceType         MediaServiceType,
  mediaServiceVersion      INTEGER OPTIONAL,
  mediaServiceInstanceID   [0] IMPLICIT MediaServiceInstanceID OPTIONAL,
  mediaStreamID            [1] IMPLICIT MediaStreamID OPTIONAL,
  mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics      CallCharacteristics OPTIONAL,
  localConnectionInfo      LocalConnectionState OPTIONAL,
  mediaConnectionInfo      [3] IMPLICIT ConnectionInformation OPTIONAL,
  extension                CSTACommonArguments OPTIONAL }

END -- of CSTA-media-attached-event

```

17.2.2 Media detached

```

CSTA-media-detached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-detached-event( 247) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
LocalConnectionState FROM CSTA-connection-states
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) connection-states( 125) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MediaServiceType, MediaServiceInstanceID, MediaStreamID,
MediaCallCharacteristics, ConnectionInformation FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

MediaDetachedEvent ::= SEQUENCE
{
  mediaConnection      ConnectionID,
  mediaDevice           SubjectDeviceID,
  mediaServiceType      MediaServiceType,
  mediaServiceVersion   INTEGER                                OPTIONAL,
  mediaServiceInstanceID [0] IMPLICIT MediaServiceInstanceID  OPTIONAL,
  mediaStreamID         [1] IMPLICIT MediaStreamID            OPTIONAL,
  mediaCallCharacteristics [2] IMPLICIT MediaCallCharacteristics OPTIONAL,
  callCharacteristics    CallCharacteristics                  OPTIONAL,
  localConnectionInfo    LocalConnectionState                OPTIONAL,
  mediaConnectionInfo    [3] IMPLICIT ConnectionInformation   OPTIONAL,
  extension              CSTACommonArguments                  OPTIONAL }

END -- of CSTA-media-detached-event

```

18 Routeing services

18.1 Registration services

18.1.1 Route register

```

CSTA-route-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register( 248) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
MediaClass FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

routeRegister OPERATION ::=
{ ARGUMENT      RouteRegisterArgument
  RESULT        RouteRegisterResult
  ERRORS        {universalFailure }
  CODE          local: 248 }

RouteRegisterArgument ::= SEQUENCE
{  routeingDevice      DeviceID                OPTIONAL,
   requestedRouteingMediaClass  MediaClass        OPTIONAL,
   extensions           CSTACommonArguments      OPTIONAL }

RouteRegisterResult ::= SEQUENCE
{  routeRegisterReqID   RouteRegisterReqID,
   actualRouteingMediaClass  MediaClass            OPTIONAL,
   extensions           CSTACommonArguments      OPTIONAL }

END -- of CSTA-route-register

```

18.1.2 Route register abort

```

CSTA-route-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register-abort( 249) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeRegisterAbort OPERATION ::=
{  ARGUMENT          RouteRegisterAbortArgument
  ERRORS             {universalFailure }
  ALWAYS RESPONDS    FALSE
  CODE               local: 249 }

RouteRegisterAbortArgument ::= SEQUENCE
{  routeRegisterReqID      RouteRegisterReqID,
  extensions                CSTACCommonArguments          OPTIONAL }

END -- of CSTA-route-register-abort

```

18.1.3 Route register cancel

```

CSTA-route-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-register-cancel( 250) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
RouteRegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeRegisterCancel OPERATION ::=
{ ARGUMENT      RouteRegisterCancelArgument
  RESULT        RouteRegisterCancelResult
  ERRORS        {universalFailure }
  CODE          local: 250 }

RouteRegisterCancelArgument ::= SEQUENCE
{ routeRegisterReqID  RouteRegisterReqID,
  extensions          CSTACommonArguments          OPTIONAL }

RouteRegisterCancelResult ::= CHOICE
{ extensions          CSTACommonArguments,
  noData              NULL }

END -- of CSTA-route-register-cancel

```

18.2 Services

18.2.1 Re-Route

```

CSTA-re-route-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) re-route-request( 82) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) };

reRouteRequest OPERATION ::=
{  ARGUMENT          ReRouteRequestArgument
  ERRORS             {universalFailure }
  ALWAYS RESPONDS    FALSE
  CODE                local: 32 }

ReRouteRequestArgument ::= SEQUENCE
{  crossRefIdentifier    RouteingCrossRefID,
  routeRegisterReqID    [0] IMPLICIT RouteRegisterReqID      OPTIONAL,
  replyTimeout          [1] IMPLICIT INTEGER                 OPTIONAL,
  correlatorData        [2] IMPLICIT CorrelatorData           OPTIONAL,
  callLinkageData       [3] IMPLICIT CallLinkageData          OPTIONAL,
  extensions             CSTACommonArguments                 OPTIONAL }

END -- of CSTA-re-route-request

```

18.2.2 Route end

```

CSTA-route-end-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-end-request( 85) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure, ErrorValue FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeEndRequest OPERATION ::=
{ ARGUMENT          RouteEndRequestArgument
  ERRORS            {universalFailure }
  ALWAYS RESPONDS   FALSE
  CODE              local: 35 }

RouteEndRequestArgument ::= SEQUENCE {
  crossRefIdentifier      RouteingCrossRefID,
  routeRegisterReqID     [ 0] IMPLICIT RouteRegisterReqID    OPTIONAL,
  errorValue              [ 1] ErrorValue                    OPTIONAL,
  correlatorData          [ 2] IMPLICIT CorrelatorData        OPTIONAL,
  extensions              CSTACommonArguments                OPTIONAL }

END -- of CSTA-route-end-request

```

18.2.3 Route reject

```

CSTA-route-reject
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-reject( 86) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

routeReject OPERATION ::=
{  ARGUMENT          RouteRejectArgument
   ERRORS             {universalFailure }
   ALWAYS RESPONDS    FALSE
   CODE               local: 36 }

RouteRejectArgument ::= SEQUENCE
{  crossRefIdentifier    RouteingCrossRefID,
   routeRegisterReqID    [0] IMPLICIT RouteRegisterReqID      OPTIONAL,
   rejectCause           [1] IMPLICIT RejectCause             OPTIONAL,
   correlatorData        [2] IMPLICIT CorrelatorData           OPTIONAL,
   extensions            CSTACommonArguments                   OPTIONAL }

RejectCause ::= ENUMERATED
{  busyOverflow          (1),
   queueTimeOverflow     (2),
   capacityOverflow      (3),
   calendarOverflow      (4),
   unknownOverflow       (5) }

END -- of CSTA-route-reject

```


18.2.4 Route request

```

CSTA-route-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-request( 81) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
AssociatedCallingDeviceID, AssociatedCalledDeviceID, CalledDeviceID,
CallingDeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CorrelatorData, SelectValue, RouteRegisterReqID, RouteingCrossRefID
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallCharacteristics, CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
MessageInfo, LanguagePreferences, SubjectOfCall, DeviceHistory
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionInformation, MediaCallCharacteristics FROM CSTA-media-services
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) media-services( 136) };

routeRequest OPERATION ::=
{ ARGUMENT          RouteRequestArgument
  ERRORS             {universalFailure }
  ALWAYS RESPONDS    FALSE
  CODE               local: 31 }

RouteRequestArgument ::= SEQUENCE
{  crossRefIdentifier      RouteingCrossRefID,
   routeRegisterReqID     [ 0] IMPLICIT RouteRegisterReqID      OPTIONAL,
   currentRoute           CalledDeviceID,
   callingDevice          CallingDeviceID                        OPTIONAL,
   routeingDevice         SubjectDeviceID                        OPTIONAL,
   routedCall             ConnectionID                           OPTIONAL,
   routeSelAlgorithm      [ 1] IMPLICIT SelectValue             OPTIONAL,
   associatedCallingDevice AssociatedCallingDeviceID             OPTIONAL,
   associatedCalledDevice AssociatedCalledDeviceID              OPTIONAL,
   priority               [ 2] IMPLICIT BOOLEAN                 OPTIONAL,
   replyTimeout           [ 3] IMPLICIT INTEGER                  OPTIONAL,

```

```

correlatorData          [ 4] IMPLICIT CorrelatorData          OPTIONAL,
mediaCallCharacteristics [ 5] IMPLICIT MediaCallCharacteristics OPTIONAL,
callCharacteristics      [ 6] IMPLICIT CallCharacteristics    OPTIONAL,
routeCallInfo           [ 7] IMPLICIT ConnectionInformation  OPTIONAL,
callLinkageData         [ 8] IMPLICIT CallLinkageData        OPTIONAL,
subjectOfCall           [ 9] IMPLICIT SubjectOfCall          OPTIONAL,
messageInfo             [10] IMPLICIT MessageInfo            OPTIONAL,
languagePreferences     [11] IMPLICIT LanguagePreferences    OPTIONAL,
deviceHistory           [12] IMPLICIT DeviceHistory          OPTIONAL,
extensions              CSTACCommonArguments                OPTIONAL }

END -- of CSTA-route-request

```

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18.2.5 Route select

```

CSTA-route-select-request
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) route-select-request( 83) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
CorrelatorData, RetryValue, RouteingCrossRefID, RouteRegisterReqID
FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }

routeSelectRequest OPERATION ::=
{   ARGUMENT          RouteSelectRequestArgument
    ERRORS             {universalFailure }
    ALWAYS RESPONDS    FALSE
    CODE               local: 33 }

RouteSelectRequestArgument ::= SEQUENCE
{   crossRefIdentifier  RouteingCrossRefID,
    routeRegisterReqID  [ 0] IMPLICIT RouteRegisterReqID      OPTIONAL,
    routeSelected       [ 1] DeviceID,
    alternateRoutes     [ 2] IMPLICIT SEQUENCE OF DeviceID    OPTIONAL,
    remainRetries       [ 3] RetryValue                        OPTIONAL,
    routeUsedReq        [ 4] IMPLICIT BOOLEAN                  OPTIONAL,
    correlatorData      [ 5] IMPLICIT CorrelatorData           OPTIONAL,
    extensions          CSTACCommonArguments                  OPTIONAL }

END -- of CSTA-route-select-request

```

18.2.6 Route used

```

CSTA-route-used-request
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) route-used-request( 84) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CallingDeviceID, CalledDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CorrelatorData, RouteRegisterReqID, RouteingCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CallLinkageData FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

routeUsedRequest OPERATION ::=
{ ARGUMENT      RouteUsedRequestArgument
  ERRORS        { universalFailure }
  ALWAYS RESPONDS FALSE
  CODE          local: 34 }

RouteUsedRequestArgument ::= SEQUENCE
{ crossRefIdentifier  RouteingCrossRefID,
  routeRegisterReqID [0] IMPLICIT RouteRegisterReqID      OPTIONAL,
  routeUsed          CalledDeviceID,
  callingDevice      CallingDeviceID                      OPTIONAL,
  domain             BOOLEAN                              OPTIONAL,
  correlatorData     [1] IMPLICIT CorrelatorData          OPTIONAL,
  callLinkageData    [2] IMPLICIT CallLinkageData         OPTIONAL,
  extensions         CSTACommonArguments                 OPTIONAL }

END -- of CSTA-route-used-request

```

19 Physical device features

19.1 Services

19.1.1 Button press

```

CSTA-button-press
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-press( 260) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) };

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) };

buttonPress OPERATION ::=
{  ARGUMENT      ButtonPressArgument,
   RESULT        ButtonPressResult,
   ERRORS        {universalFailure},
   CODE          local: 260 }

ButtonPressArgument ::= SEQUENCE
{  device          DeviceID,
   button          ButtonID,
   extensions      CSTACCommonArguments OPTIONAL }

ButtonPressResult ::= CHOICE
{  extensions      CSTACCommonArguments,
   noData          NULL }

END -- of CSTA-button-press

```

19.1.2 Get auditory apparatus information

```

CSTA-get-auditory-apparatus-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-auditory-apparatus-information( 261) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, AuditoryApparatusList FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) }

getAuditoryApparatusInformation OPERATION ::=
{  ARGUMENT      GetAuditoryApparatusInformationArgument
   RESULT        GetAuditoryApparatusInformationResult
   ERRORS        {universalFailure }
   CODE          local: 261 }

GetAuditoryApparatusInformationArgument ::= SEQUENCE
{  device          DeviceID,
   auditoryApparatus AuditoryApparatusID          OPTIONAL,
   extensions      CSTACCommonArguments          OPTIONAL }

GetAuditoryApparatusInformationResult ::= SEQUENCE
{  auditoryApparatusList AuditoryApparatusList,
   extensions            CSTACCommonArguments          OPTIONAL }

END -- of CSTA-get-auditory-apparatus-information

```

19.1.3 Get button information

```

CSTA-get-button-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-button-information( 262) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getButtonInformation OPERATION ::=
{ ARGUMENT      GetButtonInformationArgument
  RESULT        GetButtonInformationResult
  ERRORS        {universalFailure }
  CODE          local: 262 }

GetButtonInformationArgument ::= SEQUENCE
{ device          DeviceID,
  button          ButtonID,
  extensions      CSTACCommonArguments }

GetButtonInformationResult ::= SEQUENCE
{ buttonList      ButtonList,
  extensions      CSTACCommonArguments }

ButtonList ::= SEQUENCE OF SEQUENCE
{ button          ButtonID,
  buttonLabel      [0] IMPLICIT IA5String,
  buttonLabelSettable [1] IMPLICIT BOOLEAN,
  buttonFunction    [2] IMPLICIT IA5String,
  buttonAssociatedNumber [3] IMPLICIT DeviceID,
  buttonAssociatedNumberSettable [4] IMPLICIT BOOLEAN,
  buttonPressIndicator [5] IMPLICIT BOOLEAN,
  lampList          SEQUENCE OF LampID }

END -- of CSTA-get-button-information

```

19.1.4 Get display

```

CSTA-get-display
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-display( 263) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
DisplayID, CharacterSet FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) }

getDisplay OPERATION ::=
{  ARGUMENT      GetDisplayArgument
   RESULT        GetDisplayResult
   ERRORS        {universalFailure }
   CODE          local: 263 }

GetDisplayArgument ::= SEQUENCE
{  device          DeviceID,
   display         DisplayID,
   extensions      CSTACommonArguments }

GetDisplayResult ::= SEQUENCE
{  displayList     DisplayList,
   extensions      CSTACommonArguments }

DisplayList ::= SEQUENCE OF SEQUENCE
{  displayID       DisplayID,
   logicalRows     INTEGER,
   logicalColumns  INTEGER,
   physicalRows    [0] IMPLICIT INTEGER,
   physicalColumns [1] IMPLICIT INTEGER,
   physicalBaseRowNumber [2] IMPLICIT INTEGER,
   physicalBaseColumnNumber [3] IMPLICIT INTEGER,
   characterSet     CharacterSet,
   contentsOfDisplay IA5String }

END -- of CSTA-get-display

```


19.1.5 Get hookswitch status

```

CSTA-get-hookswitch-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-hookswitch-status( 264) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getHookswitchStatus OPERATION ::=
{ ARGUMENT      GetHookswitchStatusArgument
  RESULT        GetHookswitchStatusResult
  ERRORS        {universalFailure }
  CODE          local: 264 }

GetHookswitchStatusArgument ::= SEQUENCE
{ device          DeviceID,
  hookswitch      HookswitchID                      OPTIONAL,
  extensions      CSTACommonArguments                OPTIONAL }

GetHookswitchStatusResult ::= SEQUENCE
{ hookswitchStatusList HookswitchStatusList,
  extensions            CSTACommonArguments                OPTIONAL }

HookswitchStatusList ::= SEQUENCE OF SEQUENCE
{ hookswitch      HookswitchID,
  hookswitchOnHook    BOOLEAN }

END -- of CSTA-get-hookswitch-status

```

19.1.6 Get lamp information

```

CSTA-get-lamp-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-lamp-information( 265) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID, LampColor FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) }

getLampInformation OPERATION ::=
{ ARGUMENT      GetLampInformationArgument
  RESULT        GetLampInformationResult
  ERRORS        {universalFailure }
  CODE          local: 265 }

GetLampInformationArgument ::= SEQUENCE
{ device         DeviceID,
  lamp           LampID
  extensions     CSTACommonArguments
  OPTIONAL,
  OPTIONAL }

GetLampInformationResult ::= SEQUENCE
{ lampList       LampList,
  extensions     CSTACommonArguments
  OPTIONAL }

LampList ::= SEQUENCE OF SEQUENCE
{ lamp           LampID,
  lampLabel      [0] IMPLICIT OCTET STRING
  OPTIONAL,
  button         [1] IMPLICIT ButtonID
  OPTIONAL,
  lampColor      LampColor
  OPTIONAL }

END -- of CSTA-get-lamp-information

```

19.1.7 Get lamp mode

```

CSTA-get-lamp-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-lamp-mode( 266) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ButtonID, LampID, LampColor, LampMode, LampBrightness
FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) };

getLampMode OPERATION ::=
{ ARGUMENT      GetLampModeArgument
  RESULT        GetLampModeResult
  ERRORS        {universalFailure }
  CODElocal:    266 }

GetLampModeArgument ::= SEQUENCE
{ device          DeviceID,
  lamp            LampID,
  extensions      CSTACCommonArguments }

GetLampModeResult ::= SEQUENCE
{ lampModeList    LampModeList,
  lamp            LampID,
  extensions      CSTACCommonArguments }

LampModeList ::= SEQUENCE OF SEQUENCE
{ lamp            LampID,
  lampMode        LampMode,
  lampBrightness  [0] IMPLICIT LampBrightness,
  lampColor       [1] IMPLICIT LampColor,
  button          [2] IMPLICIT ButtonID }

END -- of CSTA-get-lamp-mode

```

19.1.8 Get message waiting indicator

```

CSTA-get-message-waiting-indicator
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-message-waiting-indicator( 267) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

getMessageWaitingIndicator OPERATION ::=
{  ARGUMENT      GetMessageWaitingIndicatorArgument
   RESULT        GetMessageWaitingIndicatorResult
   ERRORS        {universalFailure }
   CODE          local: 267 }

GetMessageWaitingIndicatorArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACCommonArguments          OPTIONAL }

GetMessageWaitingIndicatorResult ::= SEQUENCE
{  messageWaitingOn    BOOLEAN,
   deviceForMessage    DeviceID          OPTIONAL,
   lampIsPresent       BOOLEAN          OPTIONAL,
   extensions          CSTACCommonArguments          OPTIONAL }

END -- of CSTA-get-message-waiting-indicator

```

19.1.9 Get microphone gain

```

CSTA-get-microphone-gain
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-microphone-gain( 268) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicGainAbs FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getMicrophoneGain OPERATION ::=
{ ARGUMENT      GetMicrophoneGainArgument
  RESULT        GetMicrophoneGainResult
  ERRORS        {universalFailure }
  CODE          local: 268 }

GetMicrophoneGainArgument ::= SEQUENCE
{ device          DeviceID,
  auditoryApparatus AuditoryApparatusID OPTIONAL,
  extensions       CSTACommonArguments OPTIONAL }

GetMicrophoneGainResult ::= SEQUENCE
{ microphoneGainList MicrophoneGainList,
  extensions         CSTACommonArguments OPTIONAL }

MicrophoneGainList ::= SEQUENCE OF SEQUENCE
{ auditoryApparatus AuditoryApparatusID,
  micGainAbs        MicGainAbs OPTIONAL }

END -- of CSTA-get-microphone-gain

```

19.1.10 Get microphone mute

```

CSTA-get-microphone-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-microphone-mute( 269) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getMicrophoneMute OPERATION ::=
{ ARGUMENT      GetMicrophoneMuteArgument
  RESULT        GetMicrophoneMuteResult
  ERRORS        {universalFailure }
  CODE          local: 269 }

GetMicrophoneMuteArgument ::= SEQUENCE
{ device          DeviceID,
  auditoryApparatus AuditoryApparatusID OPTIONAL,
  extensions       CSTACommonArguments OPTIONAL }

GetMicrophoneMuteResult ::= SEQUENCE
{ microphoneMuteList MicrophoneMuteList,
  extensions          CSTACommonArguments OPTIONAL }

MicrophoneMuteList ::= SEQUENCE OF SEQUENCE
{ auditoryApparatus AuditoryApparatusID,
  microphoneMuteOn  BOOLEAN }

END -- of CSTA-get-microphone-mute

```

19.1.11 Get ringer status

```

CSTA-get-ringer-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-ringer-status( 270) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

getRingerStatus OPERATION ::=
{
  ARGUMENT      GetRingerStatusArgument
  RESULT        GetRingerStatusResult
  ERRORS        {universalFailure }
  CODE          local: 270 }

GetRingerStatusArgument ::= SEQUENCE
{
  device          DeviceID,
  ringer          RingerID,
  extensions      CSTACCommonArguments
}

GetRingerStatusResult ::= SEQUENCE
{
  ringerStatusList RingerStatusList,
  extensions      CSTACCommonArguments
}

RingerStatusList ::= SEQUENCE OF SEQUENCE
{
  ringer          RingerID,
  ringMode        RingMode,
  ringCount       [0] IMPLICIT INTEGER (0..1000)
  ringDuration    [3] IMPLICIT INTEGER
  ringPattern     [1] IMPLICIT INTEGER
  ringVolAbs      [2] IMPLICIT INTEGER (0..100)
}

END -- of CSTA-get-ringer-status

```

19.1.12 Get speaker mute

```

CSTA-get-speaker-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-speaker-mute( 271) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

getSpeakerMute OPERATION ::=
{  ARGUMENT      GetSpeakerMuteArgument
   RESULT        GetSpeakerMuteResult
   ERRORS        {universalFailure }
   CODE          local: 271 }

GetSpeakerMuteArgument ::= SEQUENCE
{  device          DeviceID,
   auditoryApparatus AuditoryApparatusID          OPTIONAL,
   extensions      CSTACommonArguments            OPTIONAL }

GetSpeakerMuteResult ::= SEQUENCE
{  speakerMuteList SpeakerMuteList,
   extensions      CSTACommonArguments            OPTIONAL }

SpeakerMuteList ::= SEQUENCE OF SEQUENCE
{  auditoryApparatus AuditoryApparatusID,
   speakerMuteOn     BOOLEAN }

END -- of CSTA-get-speaker-mute

```


19.1.13 Get speaker volume

```

CSTA-get-speaker-volume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-speaker-volume( 272) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, VolAbs FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) };

getSpeakerVolume OPERATION ::=
{  ARGUMENT      GetSpeakerVolumeArgument
   RESULT        GetSpeakerVolumeResult
   ERRORS        {universalFailure }
   CODE          local: 272 }

GetSpeakerVolumeArgument ::= SEQUENCE
{  device          DeviceID,
   auditoryApparatus AuditoryApparatusID          OPTIONAL,
   extensions      CSTACommonArguments            OPTIONAL }

GetSpeakerVolumeResult ::= SEQUENCE
{  speakerVolumeList SpeakerVolumeList,
   extensions        CSTACommonArguments          OPTIONAL }

SpeakerVolumeList ::= SEQUENCE OF SEQUENCE
{  auditoryApparatus AuditoryApparatusID,
   speakerVolAbs     VolAbs                OPTIONAL }

END -- of CSTA-get-speaker-volume

```

19.1.14 Set button information

```

CSTA-set-button-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-button-information( 273) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

setButtonInformation OPERATION ::=
{  ARGUMENT      SetButtonInformationArgument
   RESULT        SetButtonInformationResult
   ERRORS        {universalFailure }
   CODE          local: 273 }

SetButtonInformationArgument ::= SEQUENCE
{  device          DeviceID,
   button          ButtonID,
   buttonLabel     IA5String (SIZE(0..64))           OPTIONAL,
   buttonAssociatedNumber DeviceID                     OPTIONAL,
   extensions      CSTACommonArguments              OPTIONAL }

SetButtonInformationResult ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

END -- of CSTA-set-button-information

```

19.1.15 Set display

```

CSTA-set-display
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-display( 274) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID, CharacterSet FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setDisplay OPERATION ::=
{ ARGUMENT      SetDisplayArgument
  RESULT        SetDisplayResult
  ERRORS        {universalFailure }
  CODE          local: 274 }

SetDisplayArgument ::= SEQUENCE
{ device          DeviceID,
  display          DisplayID
  physicalBaseRowNumber [0] IMPLICIT INTEGER
  physicalBaseColumnNumber [1] IMPLICIT INTEGER
  contentsOfDisplay IA5String (SIZE(0..240)),
  offset          [2] IMPLICIT INTEGER
  characterSet     [3] IMPLICIT CharacterSet
  extensions       CSTACCommonArguments }

SetDisplayResult ::= CHOICE
{ extensions       CSTACCommonArguments,
  noData           NULL }

END -- of CSTA-set-display

```

19.1.16 Set hookswitch status

```

CSTA-set-hookswitch-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-hookswitch-status( 275) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

setHookswitchStatus OPERATION ::=
{  ARGUMENT      SetHookswitchStatusArgument
   RESULT        SetHookswitchStatusResult
   ERRORS        {universalFailure }
   CODE          local: 275 }

SetHookswitchStatusArgument ::= SEQUENCE
{  device          DeviceID,
   hookswitch      HookswitchID,
   hookswitchOnHook  BOOLEAN,
   extensions      CSTACommonArguments OPTIONAL }

SetHookswitchStatusResult ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

END -- of CSTA-set-hookswitch-status

```

19.1.17 Set lamp mode

```

CSTA-set-lamp-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-lamp-mode( 276) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LampID, LampColor, LampMode, LampBrightness
FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setLampMode OPERATION ::=
{ ARGUMENT      SetLampModeArgument
  RESULT        SetLampModeResult
  ERRORS        {universalFailure }
  CODE          local: 276 }

SetLampModeArgument ::= SEQUENCE
{ device          DeviceID,
  lamp            LampID,
  lampMode        LampMode,
  lampBrightness  LampBrightness OPTIONAL,
  lampColor       LampColor OPTIONAL,
  extensions      CSTACCommonArguments OPTIONAL }

SetLampModeResult ::= CHOICE
{ extensions      CSTACCommonArguments,
  noData          NULL }

END -- of CSTA-set-lamp-mode

```

19.1.18 Set message waiting indicator

```

CSTA-set-message-waiting-indicator
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-message-waiting-indicator( 277) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setMessageWaitingIndicator OPERATION ::=
{  ARGUMENT      SetMessageWaitingIndicatorArgument
   RESULT        SetMessageWaitingIndicatorResult
   ERRORS        {universalFailure }
   CODE          local: 277 }

SetMessageWaitingIndicatorArgument ::= SEQUENCE
{  device          DeviceID,
   messageWaitingOn  BOOLEAN,
   deviceForMessage  DeviceID                                OPTIONAL,
   extensions       CSTACommonArguments                     OPTIONAL }

SetMessageWaitingIndicatorResult ::= CHOICE
{  extensions       CSTACommonArguments,
   noData           NULL }

END -- of CSTA-set-message-waiting-indicator

```

19.1.19 Set microphone gain

```

CSTA-set-microphone-gain
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-microphone-gain( 278) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicrophoneGain FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setMicrophoneGain OPERATION ::=
{ ARGUMENT      SetMicrophoneGainArgument
  RESULT        SetMicrophoneGainResult
  ERRORS        {universalFailure }
  CODE          local: 278 }

SetMicrophoneGainArgument ::= SEQUENCE
{ device          DeviceID,
  auditoryApparatus AuditoryApparatusID,
  microphoneGain   MicrophoneGain,
  extensions       CSTACommonArguments OPTIONAL }

SetMicrophoneGainResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-set-microphone-gain

```

19.1.20 Set microphone mute

```

CSTA-set-microphone-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-microphone-mute( 279) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

setMicrophoneMute OPERATION ::=
{ ARGUMENT      SetMicrophoneMuteArgument
  RESULT        SetMicrophoneMuteResult
  ERRORS        {universalFailure }
  CODE          local: 279 }

SetMicrophoneMuteArgument ::= SEQUENCE
{ device          DeviceID,
  auditoryApparatus AuditoryApparatusID,
  microphoneMuteOn BOOLEAN,
  extensions       CSTACommonArguments OPTIONAL }

SetMicrophoneMuteResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-set-microphone-mute

```


19.1.21 Set ringer status

```

CSTA-set-ringer-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-ringer-status( 280) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode, Volume FROM CSTA-physical-device-features
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-features( 137) };

setRingerStatus OPERATION ::=
{ ARGUMENT      SetRingerStatusArgument
  RESULT        SetRingerStatusResult
  ERRORS        {universalFailure }
  CODE          local: 280 }

SetRingerStatusArgument ::= SEQUENCE
{ device         DeviceID,
  ringer          RingerID,
  ringMode        RingMode,
  ringPattern     [1] IMPLICIT INTEGER,
  ringVolume      [2] Volume,
  extensions      CSTACommonArguments }

SetRingerStatusResult ::= CHOICE
{ extensions      CSTACommonArguments,
  noData          NULL }

END -- of CSTA-set-ringer-status

```

19.1.22 Set speaker mute

```

CSTA-set-speaker-mute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-speaker-mute( 281) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) }

setSpeakerMute OPERATION ::=
{ ARGUMENT      SetSpeakerMuteArgument
  RESULT        SetSpeakerMuteResult
  ERRORS        {universalFailure }
  CODE          local: 281 }

SetSpeakerMuteArgument ::= SEQUENCE
{ device          DeviceID,
  auditoryApparatus AuditoryApparatusID,
  speakerMuteOn    BOOLEAN,
  extensions       CSTACommonArguments OPTIONAL }

SetSpeakerMuteResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-set-speaker-mute

```

19.1.23 Set speaker volume

```

CSTA-set-speaker-volume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-speaker-volume( 282) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, Volume FROM CSTA-physical-device-feature
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) physical-device-feature( 137) };

setSpeakerVolume OPERATION ::=
{  ARGUMENT      SetSpeakerVolumeArgument
   RESULT        SetSpeakerVolumeResult
   ERRORS        {universalFailure }
   CODE          local: 282 }

SetSpeakerVolumeArgument ::= SEQUENCE
{  device          DeviceID,
   auditoryApparatus AuditoryApparatusID,
   speakerVolume   Volume,
   extensions      CSTACommonArguments          OPTIONAL }

SetSpeakerVolumeResult ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

END -- of CSTA-set-speaker-volume

```

19.2 Events

19.2.1 Button information

```

CSTA-button-information-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) button-information-event( 283) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

ButtonInformationEvent ::= SEQUENCE
{
  device                SubjectDeviceID,
  button                ButtonID,
  buttonLabel           IA5String (SIZE(0..64))    OPTIONAL,
  buttonAssociatedNumber DeviceID                   OPTIONAL,
  buttonPressIndicator  BOOLEAN                    OPTIONAL,
  extensions            CSTACommonArguments        OPTIONAL }

END -- of CSTA-button-information-event

```

19.2.2 Button press

```

CSTA-button-press-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) button-press-event( 284) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
ButtonID FROM CSTA-physical-device-feature
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) physical-device-feature( 137) };

ButtonPressEvent ::= SEQUENCE
{
    device                SubjectDeviceID,
    button                ButtonID,
    buttonLabel           IA5String (SIZE(0..64)) OPTIONAL,
    buttonAssociatedNumber DeviceID OPTIONAL,
    extensions            CSTACCommonArguments OPTIONAL }

END -- of CSTA-button-press-event

```

19.2.3 Display updated

```

CSTA-display-updated-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) display-updated-event( 285) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID, CharacterSet FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

DisplayUpdatedEvent ::= SEQUENCE
{ device                SubjectDeviceID,
  displayID              DisplayID
                        OPTIONAL,
  logicalRows            INTEGER,
  logicalColumns         INTEGER,
  physicalRows           [0] IMPLICIT INTEGER      OPTIONAL,
  physicalColumns        [1] IMPLICIT INTEGER      OPTIONAL,
  physicalBaseRowNumber  [2] IMPLICIT INTEGER      OPTIONAL,
  physicalBaseColumnNumber [3] IMPLICIT INTEGER    OPTIONAL,
  characterSet           CharacterSet              OPTIONAL,
  contentsOfDisplay      IA5String,
  extensions             CSTACommonArguments      OPTIONAL }

END -- of CSTA-display-updated-event

```

19.2.4 Hookswitch

```

CSTA-hookswitch-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) hookswitch-event( 286) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
HookswitchID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

HookswitchEvent ::= SEQUENCE
{
  device                SubjectDeviceID,
  hookswitch            HookswitchID,
  hookswitchOnHook      BOOLEAN,
  extensions            CSTACCommonArguments OPTIONAL }

END -- of CSTA-hookswitch-event

```

19.2.5 Lamp mode

```

CSTA-lamp-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) lamp-mode-event( 287) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LampID, LampMode, LampBrightness, LampColor
FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

LampModeEvent ::= SEQUENCE
{ device          SubjectDeviceID,
  lamp            LampID,
  lampLabel       OCTET STRING          OPTIONAL,
  lampMode        LampMode,
  lampBrightness  LampBrightness        OPTIONAL,
  lampColor       LampColor             OPTIONAL,
  extensions      CSTACommonArguments   OPTIONAL }

END -- of CSTA-lamp-mode-event

```


19.2.6 Message waiting

```

CSTA-message-waiting-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) message-waiting-event( 44) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

MessageWaitingEvent ::= SEQUENCE
{
  targetDevice          SubjectDeviceID,
  deviceForMessage      DeviceID,
  messageWaitingOn      BOOLEAN,
  extensions            CSTACommonArguments
}

END -- of CSTA-message-waiting-event

```

19.2.7 Microphone gain

```

CSTA-microphone-gain-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) microphone-gain-event( 288) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, MicrophoneGain FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

MicrophoneGainEvent ::= SEQUENCE
{   invokingDevice      SubjectDeviceID,
    auditoryApparatus    AuditoryApparatusID,
    microphoneGain       MicrophoneGain,
    extensions           CSTACommonArguments OPTIONAL }

END -- of CSTA-microphone-gain-event

```

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19.2.8 Microphone mute

```

CSTA-microphone-mute-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) microphone-mute-event( 45) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

MicrophoneMuteEvent ::= SEQUENCE
{   invokingDevice      SubjectDeviceID,
    auditoryApparatus   AuditoryApparatusID,
    microphoneMuteOn    BOOLEAN,
    extensions          CSTACommonArguments          OPTIONAL }

END -- of CSTA-microphone-mute-event

```

19.2.9 Ringer status

```

CSTA-ringer-status-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) ringer-status-event( 289) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
RingerID, RingMode, Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

RingerStatusEvent ::= SEQUENCE
{
  device          SubjectDeviceID,
  ringer          RingerID,
  ringMode        RingMode
  OPTIONAL,
  ringCount       [0] IMPLICIT INTEGER (0..1000)
  OPTIONAL,
  ringDuration    [3] IMPLICIT INTEGER
  OPTIONAL,
  ringPattern     [1] IMPLICIT INTEGER
  OPTIONAL,
  ringVolume      [2] Volume
  OPTIONAL,
  extensions      CSTACommonArguments
  OPTIONAL }

END -- of CSTA-ringer-status-event

```

19.2.10 Speaker mute

```

CSTA-speaker-mute-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) speaker-mute-event( 46) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

SpeakerMuteEvent ::= SEQUENCE
{   invokingDevice      SubjectDeviceID,
    auditoryApparatus    AuditoryApparatusID,
    speakerMuteOn        BOOLEAN,
    extensions           CSTACCommonArguments          OPTIONAL }

END -- of CSTA-speaker-mute-event

```

19.2.11 Speaker volume

```

CSTA-speaker-volume-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) speaker-volume-event( 47) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
AuditoryApparatusID, Volume FROM CSTA-physical-device-feature
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) physical-device-feature( 137) };

SpeakerVolumeEvent ::= SEQUENCE
{
    invokingDevice      SubjectDeviceID,
    auditoryApparatus   AuditoryApparatusID,
    speakerVolume       Volume,
    extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-speaker-volume-event

```

20 Logical device features

20.1 Services

20.1.1 Call back non-call-related

```

CSTA-call-back-non-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-non-call-related( 300) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) };

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

callBackNonCallRelated OPERATION ::=
{  ARGUMENT      CallBackNonCallRelatedArgument
   RESULT        CallBackNonCallRelatedResult
   ERRORS        {universalFailure }
   CODE          local: 300 }

CallBackNonCallRelatedArgument ::= SEQUENCE
{  originatingDevice  DeviceID,
   targetDevice       DeviceID,
   extensions         CSTACCommonArguments      OPTIONAL }

CallBackNonCallRelatedResult ::= CHOICE
{  extensions         CSTACCommonArguments,
   noData             NULL }

END -- of CSTA-call-back-non-call-related

```

20.1.2 Call back message non-call-related

```

CSTA-call-back-message-non-call-related
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-message-non-call-related( 301) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

callBackMessageNonCallRelated OPERATION ::=
{  ARGUMENT      CallBackMessageNonCallRelatedArgument
   RESULT        CallBackMessageNonCallRelatedResult
   ERRORS        {universalFailure }
   CODE          local: 301 }

CallBackMessageNonCallRelatedArgument ::= SEQUENCE
{  originatingDevice  DeviceID,
   targetDevice       DeviceID,
   extensions         CSTACommonArguments OPTIONAL }

CallBackMessageNonCallRelatedResult ::= CHOICE
{  extensions         CSTACommonArguments,
   noData             NULL }

END -- of CSTA-call-back-message-non-call-related

```


20.1.3 Cancel call back

```

CSTA-cancel-call-back
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) cancel-call-back( 302) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

cancelCallBack OPERATION ::=
{  ARGUMENT      CancelCallBackArgument
   RESULT        CancelCallBackResult
   ERRORS        {universalFailure }
   CODE          local: 302 }

CancelCallBackArgument ::= SEQUENCE
{  originatingDevice  DeviceID,
   targetDevice       DeviceID,
   extensions         CSTACommonArguments          OPTIONAL }

CancelCallBackResult ::= CHOICE
{  extensions         CSTACommonArguments,
   noData             NULL }

END -- of CSTA-cancel-call-back

```

20.1.4 Cancel call back message

```

CSTA-cancel-call-back-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) cancel-call-back-message( 303) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

cancelCallBackMessage OPERATION ::=
{ ARGUMENT      CancelCallBackMessageArgument
  RESULT        CancelCallBackMessageResult
  ERRORS        {universalFailure }
  CODE          local: 303 }

CancelCallBackMessageArgument ::= SEQUENCE
{ originatingDevice DeviceID,
  targetDevice       DeviceID,
  extensions          CSTACommonArguments OPTIONAL }

CancelCallBackMessageResult ::= CHOICE
{ extensions          CSTACommonArguments,
  noData              NULL }

END -- of CSTA-cancel-call-back-message

```

20.1.5 Get agent state

```

CSTA-get-agent-state
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) get-agent-state( 304) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentState, PendingAgentState FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }

getAgentState OPERATION ::=
{   ARGUMENT      GetAgentStateArgument
    RESULT         GetAgentStateResult
    ERRORS         {universalFailure }
    CODE           local: 304 }

GetAgentStateArgument ::= SEQUENCE
{   device          DeviceID,
    acdGroup         DeviceID,
    extensions       CSTACommonArguments
    OPTIONAL,
    OPTIONAL }

GetAgentStateResult ::= SEQUENCE
{   agentStateList  AgentStateList,
    extensions       CSTACommonArguments
    OPTIONAL }

AgentStateList ::= SEQUENCE SIZE (1..32) OF AgentStateEntry

AgentStateEntry ::= SEQUENCE
{   agentID          AgentID
    OPTIONAL,
    loggedOn          BOOLEAN,
    agentInfo          SEQUENCE OF AgentInfo
    OPTIONAL }

AgentInfo ::= SEQUENCE
{   acdGroup          DeviceID
    OPTIONAL,
    agentState         AgentState,
    pendingAgentState  [0] IMPLICIT PendingAgentState
    OPTIONAL,
    agentStateCondition [1] IMPLICIT AgentStateCondition
    OPTIONAL }

AgentStateCondition ::= ENUMERATED
{   forcedPause  (0),
    other         (1) }

END -- of CSTA-get-agent-state

```

20.1.6 Get auto answer

```

CSTA-get-auto-answer
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-auto-answer( 305) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getAutoAnswer OPERATION ::=
{  ARGUMENT      GetAutoAnswerArgument
   RESULT        GetAutoAnswerResult
   ERRORS        {universalFailure }
   CODE          local: 305 }

GetAutoAnswerArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments OPTIONAL }

GetAutoAnswerResult ::= SEQUENCE
{  autoAnswerOn    BOOLEAN,
   numberOfRings   INTEGER OPTIONAL,
   extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-get-auto-answer

```

20.1.7 Get auto work mode

```

CSTA-get-auto-work-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-auto-work-mode( 306) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getAutoWorkMode OPERATION ::=
{  ARGUMENT      GetAutoWorkModeArgument
   RESULT        GetAutoWorkModeResult
   ERRORS        {universalFailure }
   CODE          local: 306 }

GetAutoWorkModeArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

GetAutoWorkModeResult ::= SEQUENCE
{  autoWorkOn      BOOLEAN,
   autoWorkInterval INTEGER          OPTIONAL,
   extensions      CSTACommonArguments          OPTIONAL }

END -- of CSTA-get-auto-work-mode

```

20.1.8 Get Call Back

```

CSTA-get-call-back
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-call-back( 378) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getCallBack OPERATION ::=
{ ARGUMENT      GetCallBackArgument
  RESULT        GetCallBackResult
  ERRORS        {universalFailure }
  CODE          local: 378 }

GetCallBackArgument ::= SEQUENCE
{ device          DeviceID,
  extensions      CSTACCommonArguments          OPTIONAL }

GetCallBackResult ::= SEQUENCE
{ callBackList    CallBackList,
  extensions      CSTACCommonArguments          OPTIONAL }

CallBackList ::= SEQUENCE OF SEQUENCE
{ originatingDevice DeviceID,
  targetDevice      DeviceID,
  callBackMessageIndicator BOOLEAN          OPTIONAL }

END -- of CSTA-get-call-back

```

20.1.9 Get caller id status

```

CSTA-get-caller-id-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-caller-id-status( 307) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

getCallerIDStatus OPERATION ::=
{  ARGUMENT      GetCallerIDStatusArgument
   RESULT        GetCallerIDStatusResult
   ERRORS        {universalFailure }
   CODE          local: 307 }

GetCallerIDStatusArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

GetCallerIDStatusResult ::= SEQUENCE
{  callerIDProvided BOOLEAN,
   extensions      CSTACommonArguments          OPTIONAL }

END -- of CSTA-get-caller-id-status

```

20.1.10 Get do not disturb

```

CSTA-get-do-not-disturb
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-do-not-disturb( 308) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getDoNotDisturb OPERATION ::=
{  ARGUMENT      GetDoNotDisturbArgument
   RESULT        GetDoNotDisturbResult
   ERRORS        {universalFailure }
   CODE          local: 308 }

GetDoNotDisturbArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

GetDoNotDisturbResult ::= SEQUENCE
{  doNotDisturbOn    BOOLEAN,
   callOrigination   CallOrigination            OPTIONAL,
   callingDeviceList SEQUENCE OF DeviceID       OPTIONAL,
   extensions        CSTACommonArguments        OPTIONAL }

END -- of CSTA-get-do-not-disturb

```


20.1.11 Get forwarding

```

CSTA-get-forwarding
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-forwarding( 309) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardList FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

getForwarding OPERATION ::=
{  ARGUMENT      GetForwardingArgument
   RESULT        GetForwardingResult
   ERRORS        {universalFailure }
   CODE          local: 309 }

GetForwardingArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

GetForwardingResult ::= SEQUENCE
{  forwardingList  ForwardList,
   extensions      CSTACommonArguments          OPTIONAL }

END -- of CSTA-get-forwarding

```

20.1.12 Get last number dialed

```

CSTA-get-last-number-dialed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-last-number-dialed( 310) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getLastNumberDialed OPERATION ::=
{  ARGUMENT      GetLastNumberDialedArgument
   RESULT        GetLastNumberDialedResult
   ERRORS        {universalFailure }
   CODE          local: 310 }

GetLastNumberDialedArgument ::= SEQUENCE
{  device          DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

GetLastNumberDialedResult ::= SEQUENCE
{  numberDialed    DeviceID,
   extensions      CSTACommonArguments          OPTIONAL }

END -- of CSTA-get-last-number-dialed

```

20.1.13 Get presence state

```

CSTA-get-presence-state
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-presence-state( 550) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
PresenceState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getPresenceState OPERATION ::=
{ ARGUMENT      GetPresenceStateArgument
  RESULT        GetPresenceStateResult
  ERRORS        {universalFailure }
  CODE          local: 550 }

GetPresenceStateArgument ::= SEQUENCE
{ device          DeviceID,
  extensions      CSTACCommonArguments                OPTIONAL }

GetPresenceStateResult ::= SEQUENCE
{ presenceState   PresenceState,
  fromTime        [0] IMPLICIT TimeInfo                OPTIONAL,
  untilTime       [1] IMPLICIT TimeInfo                OPTIONAL,
  place           [2] IMPLICIT OCTET STRING            OPTIONAL,
  mood            [3] IMPLICIT OCTET STRING            OPTIONAL,
  namedPresenceState [4] IMPLICIT OCTET STRING        OPTIONAL,
  extensions      CSTACCommonArguments                OPTIONAL }

END -- of CSTA-get-presence-state

```

20.1.14 Get routing mode

```

CSTA-get-routing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-routing-mode( 311) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

getRoutingMode OPERATION ::=
{  ARGUMENT      GetRoutingModeArgument
  RESULT         GetRoutingModeResult
  ERRORS         {universalFailure }
  CODE           local: 311 }

GetRoutingModeArgument ::= SEQUENCE
{  device         DeviceID,
  extensions      CSTACommonArguments          OPTIONAL }

GetRoutingModeResult ::= SEQUENCE
{  routingMode    BOOLEAN,
  extensions      CSTACommonArguments          OPTIONAL }

END -- of CSTA-get-routing-mode

```

20.1.15 Set agent state

```

CSTA-set-agent-state
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-agent-state( 312) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

setAgentState OPERATION ::=
{ ARGUMENT      SetAgentStateArgument
  RESULT        SetAgentStateResult
  ERRORS        {universalFailure }
  CODE          local: 312 }

SetAgentStateArgument ::= SEQUENCE
{ device          DeviceID,
  requestedAgentState  ReqAgentState,
  agentID          [2] IMPLICIT AgentID          OPTIONAL,
  password         [3] IMPLICIT AgentPassword    OPTIONAL,
  group            DeviceID                      OPTIONAL,
  extensions       CSTACommonArguments          OPTIONAL }

SetAgentStateResult ::= SEQUENCE
{ pendingAgentState  PendingAgentState          OPTIONAL,
  extensions         CSTACommonArguments          OPTIONAL }

ReqAgentState ::= ENUMERATED
{ loggedOn          (0),
  loggedOff         (1),
  notReady          (2),
  ready             (3),
  workingAfterCall  (4) }

END -- of CSTA-set-agent-state

```

20.1.16 Set auto answer

```

CSTA-set-auto-answer
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-auto-answer( 313) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setAutoAnswer OPERATION ::=
{ ARGUMENT      SetAutoAnswerArgument
  RESULT        SetAutoAnswerResult
  ERRORS        {universalFailure }
  CODE          local: 313 }

SetAutoAnswerArgument ::= SEQUENCE
{ device          DeviceID,
  autoAnswerOn    BOOLEAN,
  numberOfRings   INTEGER                                OPTIONAL,
  extensions       CSTACommonArguments                  OPTIONAL }

SetAutoAnswerResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-set-auto-answer

```

20.1.17 Set auto work mode

```

CSTA-set-auto-work-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-auto-work-mode( 314) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

setAutoWorkMode OPERATION ::=
{  ARGUMENT      SetAutoWorkModeArgument
   RESULT        SetAutoWorkModeResult
   ERRORS        {universalFailure }
   CODE          local: 314 }

SetAutoWorkModeArgument ::= SEQUENCE
{  device          DeviceID,
   autoWorkOn      BOOLEAN,
   autoWorkInterval INTEGER (0..6000)           OPTIONAL,
   extensions      CSTACommonArguments         OPTIONAL }

SetAutoWorkModeResult ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

END -- of CSTA-set-auto-work-mode

```

20.1.18 Set caller id status

```

CSTA-set-caller-id-status
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-caller-id-status( 315) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setCallerIDStatus OPERATION ::=
{  ARGUMENT      SetCallerIDStatusArgument
   RESULT        SetCallerIDStatusResult
   ERRORS        {universalFailure }
   CODE          local: 315 }

SetCallerIDStatusArgument ::= SEQUENCE
{  device          DeviceID,
   callerIDProvided  BOOLEAN,
   extensions       CSTACommonArguments OPTIONAL }

SetCallerIDStatusResult ::= CHOICE
{  extensions       CSTACommonArguments,
   noData           NULL }

END -- of CSTA-set-caller-id-status

```


20.1.19 Set do not disturb

```

CSTA-set-do-not-disturb
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-do-not-disturb( 316) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

setDoNotDisturb OPERATION ::=
{ ARGUMENT      SetDoNotDisturbArgument
  RESULT        SetDoNotDisturbResult
  ERRORS        {universalFailure }
  CODE          local: 316 }

SetDoNotDisturbArgument ::= SEQUENCE
{ device          DeviceID,
  doNotDisturbOn   BOOLEAN,
  callOrigination  CallOrigination          OPTIONAL,
  callingDeviceList SEQUENCE OF DeviceID     OPTIONAL,
  extensions       CSTACommonArguments      OPTIONAL }

SetDoNotDisturbResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-set-do-not-disturb

```

20.1.20 Set forwarding

```

CSTA-set-forwarding
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-forwarding( 317) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardingType FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setForwarding OPERATION ::=
{ ARGUMENT      SetForwardingArgument
  RESULT        SetForwardingResult
  ERRORS        {universalFailure }
  CODE          local: 317 }

SetForwardingArgument ::= SEQUENCE
{ device          DeviceID,
  forwardingType   ForwardingType OPTIONAL,
  activateForward  BOOLEAN,
  forwardDN       DeviceID OPTIONAL,
  ringCount       INTEGER (1..100) OPTIONAL,
  ringDuration    [3] IMPLICIT INTEGER OPTIONAL,
  extensions      CSTACCommonArguments OPTIONAL }

SetForwardingResult ::= CHOICE
{ extensions      CSTACCommonArguments,
  noData          NULL }

END -- of CSTA-set-forwarding

```

20.1.21 Set presence state

```

CSTA-set-presence-state
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-presence-state( 551) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
PresenceState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setPresenceState OPERATION ::=
{ ARGUMENT      SetPresenceStateArgument,
  RESULT        SetPresenceStateResult,
  ERRORS        {universalFailure },
  CODE          local: 551 }

SetPresenceStateArgument ::= SEQUENCE
{ device          DeviceID,
  requestedPresenceState  PresenceState,
  fromTime         [0] IMPLICIT TimeInfo          OPTIONAL,
  untilTime        [1] IMPLICIT TimeInfo          OPTIONAL,
  place            [2] IMPLICIT OCTET STRING      OPTIONAL,
  mood             [3] IMPLICIT OCTET STRING      OPTIONAL,
  namedPresenceState [4] IMPLICIT OCTET STRING      OPTIONAL,
  extensions        CSTACommonArguments          OPTIONAL }

SetPresenceStateResult ::= CHOICE
{ extensions        CSTACommonArguments,
  noData            NULL }

END -- of CSTA-set-presence-state

```

20.1.22 Set routing mode

```

CSTA-set-routing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-routing-mode( 318) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

setRoutingMode OPERATION ::=
{  ARGUMENT      SetRoutingModeArgument
   RESULT        SetRoutingModeResult
   ERRORS        {universalFailure }
   CODE          local: 318 }

SetRoutingModeArgument ::= SEQUENCE
{  device          DeviceID,
   routingMode     BOOLEAN,
   extensions      CSTACommonArguments OPTIONAL }

SetRoutingModeResult ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

END -- of CSTA-set-routing-mode

```

20.2 Events

20.2.1 Agent busy

```

CSTA-agent-busy-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-busy-event( 319) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentBusyEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              AgentID,
  acdGroup             DeviceID,
  pendingAgentState    [2] IMPLICIT PendingAgentState,
  cause                [3] IMPLICIT EventCause,
  extensions           CSTACommonArguments
}

END -- of CSTA-agent-busy-event

```

20.2.2 Agent logged off

```

CSTA-agent-logged-off-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-logged-off-event( 320) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentLoggedOffEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              [2] IMPLICIT AgentID          OPTIONAL,
  acdGroup             DeviceID                      OPTIONAL,
  agentPassword        [3] IMPLICIT AgentPassword    OPTIONAL,
  cause               EventCause                    OPTIONAL,
  extensions           CSTACCommonArguments          OPTIONAL }

END -- of CSTA-agent-logged-off-event

```

20.2.3 Agent logged on

```

CSTA-agent-logged-on-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-logged-on-event( 321) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentLoggedOnEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              [2] IMPLICIT AgentID          OPTIONAL,
  acdGroup             DeviceID                      OPTIONAL,
  agentPassword        [3] IMPLICIT AgentPassword    OPTIONAL,
  cause               EventCause                    OPTIONAL,
  extensions           CSTACCommonArguments          OPTIONAL }

END -- of CSTA-agent-logged-on-event

```

20.2.4 Agent not ready

```

CSTA-agent-not-ready-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-not-ready-event( 322) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentNotReadyEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              AgentID
                        OPTIONAL,
  acdGroup             DeviceID
                        OPTIONAL,
  cause                EventCause
                        OPTIONAL,
  extensions           CSTACommonArguments
                        OPTIONAL }

END -- of CSTA-agent-not-ready-event

```


20.2.5 Agent ready

```

CSTA-agent-ready-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-ready-event( 323) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, AgentPassword FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentReadyEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              AgentID              OPTIONAL,
  acdGroup             DeviceID             OPTIONAL,
  cause                EventCause          OPTIONAL,
  extensions           CSTACommonArguments OPTIONAL }

END -- of CSTA-agent-ready-event

```

20.2.6 Agent working after call

```

CSTA-agent-working-after-call-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) agent-working-after-call-event( 324) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
AgentID, PendingAgentState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AgentWorkingAfterCallEvent ::= SEQUENCE
{
  agentDevice          SubjectDeviceID,
  agentID              AgentID                                OPTIONAL,
  acdGroup             DeviceID                                OPTIONAL,
  pendingAgentState    [2] IMPLICIT ENUMERATED
    {
      notReady         (0),
      ready             (1),
      null              (2) }                                OPTIONAL,
  cause                [3] IMPLICIT EventCause                OPTIONAL,
  extensions           CSTACommonArguments                    OPTIONAL }

END -- of CSTA-agent-working-after-call-event

```

20.2.7 Auto answer

```

CSTA-auto-answer-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-answer-event( 40) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AutoAnswerEvent ::= SEQUENCE
{   invokingDevice      SubjectDeviceID,
    autoAnswerOn        BOOLEAN,
    numberOfRings        INTEGER                                OPTIONAL,
    extensions           CSTACommonArguments                    OPTIONAL }

END -- of CSTA-auto-answer-event

```

20.2.8 Auto work mode

```

CSTA-auto-work-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) auto-work-mode-event( 326) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

AutoWorkModeEvent ::= SEQUENCE
{   invokingDevice          SubjectDeviceID,
    autoWorkOn              BOOLEAN,
    autoWorkInterval        INTEGER,
    extensions               CSTACommonArguments OPTIONAL }

END -- of CSTA-auto-work-mode-event

```

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20.2.9 Call back

```

CSTA-call-back-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-back-event( 327) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

CallBackEvent ::= SEQUENCE
{
  originatingDevice      SubjectDeviceID,
  targetDevice           SubjectDeviceID,
  callBackSetCanceled    BOOLEAN,
  extensions             CSTACommonArguments OPTIONAL }

END -- of CSTA-call-back-event

```

20.2.10 Call back message

```

CSTA-call-back-message-event
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-back-message-event( 328) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

CallBackMessageEvent ::= SEQUENCE
{
    originatingDevice      SubjectDeviceID,
    targetDevice            SubjectDeviceID,
    callBackMsgSetCanceled  BOOLEAN,
    extensions              CSTACommonArguments OPTIONAL }

END -- of CSTA-call-back-message-event

```

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20.2.11 Caller id status

```

CSTA-caller-id-status-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) caller-id-status-event( 329) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

CallerIDStatusEvent ::= SEQUENCE
{
  device          DeviceID,
  callerIDProvided  BOOLEAN,
  extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-caller-id-status-event

```

20.2.12 Do not disturb

```

CSTA-do-not-disturb-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) do-not-disturb-event( 42) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CallOrigination FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

DoNotDisturbEvent ::= SEQUENCE
{
  device                SubjectDeviceID,
  doNotDisturbOn        BOOLEAN,
  callOrigination        CallOrigination OPTIONAL,
  callingDeviceList      SEQUENCE OF DeviceID OPTIONAL,
  extensions             CSTACCommonArguments OPTIONAL }

END -- of CSTA-do-not-disturb-event

```


20.2.13 Forwarding

```

CSTA-forwarding-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) forwarding-event( 43) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ForwardingType, ForwardDefault FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ForwardingEvent ::= SEQUENCE
{
  device                SubjectDeviceID,
  forwardingType         ForwardingType,                OPTIONAL,
  forwardStatus          BOOLEAN,
  forwardTo              DeviceID,                      OPTIONAL,
  forwardDefault         ForwardDefault,                OPTIONAL,
  ringCount              INTEGER (1..100),              OPTIONAL,
  ringDuration           [4] IMPLICIT INTEGER,          OPTIONAL,
  extensions             CSTACommonArguments            OPTIONAL }

END -- of CSTA-forwarding-event

```

20.2.14 Presence state

```

CSTA-presence-state-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) presence-state-event( 552) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
PresenceState FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
TimeInfo FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

PresenceStateEvent ::= SEQUENCE
{
  device                SubjectDeviceID,
  presenceState          PresenceState,
  fromTime               [0] IMPLICIT TimeInfo          OPTIONAL,
  untilTime              [1] IMPLICIT TimeInfo          OPTIONAL,
  place                  [2] IMPLICIT OCTET STRING      OPTIONAL,
  mood                   [3] IMPLICIT OCTET STRING      OPTIONAL,
  namedPresenceState     [4] IMPLICIT OCTET STRING      OPTIONAL,
  extensions              CSTACommonArguments           OPTIONAL }

END -- of CSTA-presence-state-event

```

20.2.15 Routing mode

```

CSTA-routing-mode-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) routing-mode-event( 332) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

RoutingModeEvent ::= SEQUENCE
{
  device          SubjectDeviceID,
  routingMode     BOOLEAN,
  extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-routing-mode-event

```

21 Device maintenance events

21.1 Events

21.1.1 Back in service

```

CSTA-back-in-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) back-in-service-event( 333) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

BackInServiceEvent ::= SEQUENCE
{
  device          SubjectDeviceID,
  cause           EventCause          OPTIONAL,
  extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-back-in-service-event

```

21.1.2 Device capabilities changed

```

CSTA-device-capabilities-changed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-capabilities-changed-event( 334) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

DeviceCapsChangedEvent ::= SEQUENCE
{   device          SubjectDeviceID,
    cause           EventCause          OPTIONAL,
    extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-device-capabilities-changed-event

```

21.1.3 Out of service

```

CSTA-out-of-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) out-of-service-event( 335) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

OutOfServiceEvent ::= SEQUENCE
{  device          SubjectDeviceID,
   cause           EventCause          OPTIONAL,
   extensions      CSTACommonArguments OPTIONAL }

END -- of CSTA-out-of-service-event

```

21.1.4 Partially in Service

```

CSTA-partially-in-service-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) partially-in-service( 379) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
SubjectDeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

PartiallyInServiceEvent ::= SEQUENCE
{
  device          SubjectDeviceID,
  cause           EventCause
                  OPTIONAL,
  extensions      CSTACommonArguments
                  OPTIONAL }

END -- of CSTA-partially-in-service-event

```

22 I/O services

22.1 Registration services

22.1.1 I/O register

```

CSTA-io-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register( 340) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegister      OPERATION ::=
{   ARGUMENT      IORegisterArgument
    RESULT        IORegisterResult
    ERRORS        {universalFailure }
    CODE          local: 340 }

IORegisterArgument ::= SEQUENCE
{   ioDevice      DeviceID                      OPTIONAL,
    extensions    CSTACommonArguments          OPTIONAL }

IORegisterResult ::= SEQUENCE
{   ioRegisterReqID  IORegisterReqID,
    extensions       CSTACommonArguments          OPTIONAL }

END -- of CSTA-io-register

```


22.1.2 I/O register abort

```

CSTA-io-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register-abort( 341) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegisterAbort OPERATION ::=
{
  ARGUMENT          IORegisterAbortArgument
  ERRORS             {universalFailure }
  ALWAYS RESPONDS    FALSE
  CODE               local: 341 }

IORegisterAbortArgument ::= SEQUENCE
{
  ioRegisterReqID    IORegisterReqID,
  extensions          CSTACommonArguments          OPTIONAL }

END -- of CSTA-io-register-abort

```

22.1.3 I/O register cancel

```

CSTA-io-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) io-register-cancel( 342) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

ioRegisterCancel OPERATION ::=
{ ARGUMENT      IORegisterCancelArgument
  RESULT        IORegisterCancelResult
  ERRORS        {universalFailure }
  CODE          local: 342 }

IORegisterCancelArgument ::= SEQUENCE
{ ioRegisterReqID      IORegisterReqID,
  extensions            CSTACommonArguments      OPTIONAL }

IORegisterCancelResult ::= CHOICE
{ extensions            CSTACommonArguments,
  noData                NULL }

END -- of CSTA-io-register-cancel

```

22.2 Services

22.2.1 Data path resumed

```

CSTA-data-path-resumed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-path-resumed( 118) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

dataPathResumed OPERATION ::=
{  ARGUMENT      DataPathResumedArgument
   RESULT        DataPathResumedResult
   ERRORS        {universalFailure }
   CODE          local: 118 }

DataPathResumedArgument ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID
   ioRegisterReqID   IORegisterReqID
   extensions        CSTACommonArguments
                     OPTIONAL,
                     OPTIONAL }

DataPathResumedResult ::= CHOICE
{  extensions        CSTACommonArguments,
   noData            NULL }

END -- of CSTA-data-path-resumed

```

22.2.2 Data path suspended

```

CSTA-data-path-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-path-suspended( 116) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

dataPathSuspended OPERATION ::=
{  ARGUMENT      DataPathSuspendedArgument
   RESULT        DataPathSuspendedResult
   ERRORS        {universalFailure }
   CODE          local: 116 }

DataPathSuspendedArgument ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID,
   ioReqRegisterID   IORegisterReqID          OPTIONAL,
   extensions        CSTACommonArguments      OPTIONAL }

DataPathSuspendedResult ::= CHOICE
{  extensions        CSTACommonArguments,
   noData            NULL }

END -- of CSTA-data-path-suspended

```

22.2.3 Fast data

```

CSTA-fast-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) fast-data( 119) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DataPathType, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

fastData OPERATION ::=
{  ARGUMENT      FastDataArgument
   RESULT        FastDataResult
   ERRORS        {universalFailure }
   CODE          local: 119 }

FastDataArgument ::= SEQUENCE
{  ioRegisterReqID  IORegisterReqID          OPTIONAL,
   object           CSTAObject,
   dataPathType     DataPathType             OPTIONAL,
   displayAttributes DisplayAttribute         OPTIONAL,
   ioData           OCTET STRING,             --corrected 12/2000
   extensions       CSTACommonArguments      OPTIONAL }

FastDataResult ::= CHOICE
{  extensions       CSTACommonArguments,
   noData           NULL }

DisplayAttribute ::= SEQUENCE
{  displayID        DisplayID                OPTIONAL,
   physicalBaseRowNumber [0] IMPLICIT INTEGER OPTIONAL,
   physicalBaseColumnNumber [1] IMPLICIT INTEGER OPTIONAL,
   offset           [2] IMPLICIT INTEGER     OPTIONAL }

END -- of CSTA-fast-data

```

22.2.4 Resume data path

```

CSTA-resume-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-data-path( 117) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

resumeDataPath OPERATION ::=
{  ARGUMENT      ResumeDataPathArgument
   RESULT        ResumeDataPathResult
   ERRORS        {universalFailure }
   CODE          local: 117 }

ResumeDataPathArgument ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID,
   ioRegisterReqID   IORegisterReqID                OPTIONAL,
   extensions        CSTACCommonArguments           OPTIONAL }

ResumeDataPathResult ::= CHOICE
{  extensions        CSTACCommonArguments,
   noData            NULL }

END -- of CSTA-resume-data-path

```

22.2.5 Send broadcast data

```

CSTA-send-broadcast-data
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) send-broadcast-data( 114) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
DataPathType, DisplayAttributeList FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };

sendBroadcastData OPERATION ::=
{   ARGUMENT      SendBroadcastDataArgument
    RESULT        SendBroadcastDataResult
    ERRORS        {universalFailure }
    CODE          local: 114 }

SendBroadcastDataArgument ::= SEQUENCE
{   ioData          OCTET STRING,
    dataPathType     DataPathType                OPTIONAL,
    displayAttributes DisplayAttributeList         OPTIONAL,
    extensions       CSTACommonArguments          OPTIONAL }

SendBroadcastDataResult ::= CHOICE
{   extensions       CSTACommonArguments,
    noData           NULL }

END -- of CSTA-send-broadcast-data

```

22.2.6 Send data

```

CSTA-send-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-data( 112) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
IOCrossRefID, IORegisterReqID, DisplayAttributeList FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

sendData OPERATION ::=
{ ARGUMENT      SendDataArgument
  RESULT        SendDataResult
  ERRORS        {universalFailure }
  CODE          local: 112 }

SendDataArgument ::= SEQUENCE
{ ioCrossRefID      IOCrossRefID,
  ioRegisterReqID   [0] IMPLICIT IORegisterReqID      OPTIONAL,
  displayAttributes DisplayAttributeList              OPTIONAL,
  ioData            OCTET STRING,
  ioCause           EventCause                        OPTIONAL,
  extensions        CSTACCommonArguments              OPTIONAL }

SendDataResult ::= CHOICE
{ extensions        CSTACCommonArguments,
  noData            NULL }

END -- of CSTA-send-data

```


22.2.7 Send multicast data

```

CSTA-send-multicast-data
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) send-multicast-data( 113) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, DisplayAttributeList FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

sendMulticastData OPERATION ::=
{ ARGUMENT      SendMulticastDataArgument
  RESULT        SendMulticastDataResult
  ERRORS        {universalFailure }
  CODE          local: 113 }

SendMulticastDataArgument ::= SEQUENCE
{ ioCrossRefIDList  SEQUENCE OF IOCrossRefID,
  ioData            OCTET STRING,
  displayAttributes DisplayAttributeList,
  extensions        CSTACCommonArguments }

SendMulticastDataResult ::= CHOICE
{ extensions        CSTACCommonArguments,
  noData            NULL }

END -- of CSTA-send-multicast-data

```

22.2.8 Start data path

```

CSTA-start-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-data-path( 110) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTAObject FROM CSTA-switching-function-objects
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) switching-function-objects( 122) }
DataPathType, IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DisplayID FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

startDataPath      OPERATION ::=
{  ARGUMENT      StartDataPathArgument
  RESULT         StartDataPathResult
  ERRORS         {universalFailure }
  CODE           local: 110 }

StartDataPathArgument ::= SEQUENCE
{  ioRegisterReqID      IORegisterReqID          OPTIONAL,
  object                CSTAObject,
  dataPathDirection     [0] IMPLICIT DataPathDirection  OPTIONAL,
  dataPathType          [1] IMPLICIT DataPathType        OPTIONAL,
  displayID             DisplayID                  OPTIONAL,
  numberOfCharactersToCollect [2] IMPLICIT INTEGER        OPTIONAL,
  terminationCharacter   IA5String (SIZE(1..1))         OPTIONAL,
  timeout               [3] IMPLICIT INTEGER            OPTIONAL,
  extensions             CSTACCommonArguments          OPTIONAL }

StartDataPathResult ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID,
  numberOfCharactersToCollect [0] IMPLICIT INTEGER        OPTIONAL,
  terminationCharacter   IA5String (SIZE(1..1))         OPTIONAL,
  timeout               [1] IMPLICIT INTEGER            OPTIONAL,
  extensions             CSTACCommonArguments          OPTIONAL }

DataPathDirection ::= ENUMERATED
{  computeFunctionToObject      (0),
  objectToComputeFunction      (1),
  bidirectional                 (2) }

END -- of CSTA-start-data-path

```

22.2.9 Stop data path

```

CSTA-stop-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-data-path( 111) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) };

stopDataPath OPERATION ::=
{ ARGUMENT      StopDataPathArgument
  RESULT        StopDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 111
}

StopDataPathArgument ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID,
   ioRegisterReqID   IORegisterReqID          OPTIONAL,
   extensions        CSTACCommonArguments     OPTIONAL }

StopDataPathResult ::= CHOICE
{  extensions        CSTACCommonArguments,
   noData            NULL }

END -- of CSTA-stop-data-path

```

22.2.10 Suspend data path

```

CSTA-suspend-data-path
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-data-path( 115) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
IOCrossRefID, IORegisterReqID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

suspendDataPath OPERATION ::=
{ ARGUMENT      SuspendDataPathArgument
  RESULT        SuspendDataPathResult
  ERRORS        {universalFailure }
  CODE          local: 115 }

SuspendDataPathArgument ::= SEQUENCE
{  ioCrossRefID      IOCrossRefID,
   ioRegisterReqID   IORegisterReqID          OPTIONAL,
   extensions        CSTACommonArguments      OPTIONAL }

SuspendDataPathResult ::= CHOICE
{  extensions        CSTACommonArguments,
   noData            NULL }

END -- of CSTA-suspend-data-path

```

23 Data Collection Services

23.1 Services

23.1.1 Data Collected

```

CSTA-data-collected
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collected( 343) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
ConnectionInformation FROM CSTA-media-services
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) media-services( 136) }
DcollCrossRefID FROM CSTA-data-collection
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) data-collection( 138) };

dataCollected OPERATION ::=
{ ARGUMENT      DataCollectedArgument
  RESULT        DataCollectedResult
  ERRORS        {universalFailure }
  CODE          local: 343 }

DataCollectedArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  digitsData           [0] IMPLICIT DigitsData           OPTIONAL,
  telTonesData         [1] IMPLICIT TelTonesData          OPTIONAL,
  connectionInformation [2] IMPLICIT ConnectionInformation OPTIONAL,
  dcollCause           DcollCause                         OPTIONAL,
  extensions           CSTACCommonArguments              OPTIONAL }

DataCollectedResult ::= CHOICE
{ extensions           CSTACCommonArguments,
  noData              NULL }

DigitsData ::= SEQUENCE
{ digitsDetected      IA5String (SIZE(0..64)),
  digitsDuration       [0] IMPLICIT SEQUENCE OF INTEGER  OPTIONAL,
  digitsPauseDuration [1] IMPLICIT SEQUENCE OF INTEGER  OPTIONAL }

```

```

TelTonesData ::= SEQUENCE
{
    toneDetected      ToneDetected,
    toneFrequency      [0] IMPLICIT INTEGER           OPTIONAL,
    toneDuration       [1] IMPLICIT INTEGER           OPTIONAL,
    tonePauseDuration  [2] IMPLICIT INTEGER           OPTIONAL }

ToneDetected ::= ENUMERATED
{
    beep              ( 0 ),
    billing            ( 1 ),
    busy              ( 2 ),
    carrier            ( 3 ),
    confirmation       ( 4 ),
    dial              ( 5 ),
    faxCNG             ( 6 ),
    hold              ( 7 ),
    howler            ( 8 ),
    intrusion          ( 9 ),
    modemCNG          (10 ),
    park              (11 ),
    recordWarning      (12 ),
    reorder           (13 ),
    ringback          (14 ),
    silence            (15 ),
    sitVC             (16 ),
    sitIC             (17 ),
    sitRO             (18 ),
    sitNC             (19 ),
    other              (20) }

DcollCause ::= ENUMERATED
{
    flushCharReceived ( 0 ),
    charCountReached  ( 1 ),
    timeout           ( 2 ),
    sfTerminated      ( 3 ) }

END -- of CSTA-data-collected

```

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23.1.2 Data Collection Resumed

```

CSTA-data-collection-resumed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection-resumed( 344) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) data-collection( 138) };

dataCollectionResumed OPERATION ::=
{  ARGUMENT      DataCollectionResumedArgument
   RESULT        DataCollectionResumedResult
   ERRORS        {universalFailure }
   CODE          local: 344 }

DataCollectionResumedArgument ::= SEQUENCE
{  dcollCrossRefID      DcollCrossRefID,
   extensions           CSTACCommonArguments             OPTIONAL }

DataCollectionResumedResult ::= CHOICE
{  extensions           CSTACCommonArguments,
   noData               NULL }

END -- of CSTA-data-collection-resumed

```

23.1.3 Data Collection Suspended

```

CSTA-data-collection-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection-suspended( 345) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

dataCollectionSuspended OPERATION ::=
{  ARGUMENT      DataCollectionSuspendedArgument
   RESULT        DataCollectionSuspendedResult
   ERRORS        {universalFailure }
   CODE          local: 345 }

DataCollectionSuspendedArgument ::= SEQUENCE
{  dcollCrossRefID      DcollCrossRefID,
   extensions           CSTACCommonArguments          OPTIONAL }

DataCollectionSuspendedResult ::= CHOICE
{  extensions           CSTACCommonArguments,
   noData               NULL }

END -- of CSTA-data-collection-suspended

```


23.1.4 Resume Data Collection

```

CSTA-resume-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-data-collection( 346) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) data-collection( 138) };

resumeDataCollection OPERATION ::=
{  ARGUMENT      ResumeDataCollectionArgument
   RESULT        ResumeDataCollectionResult
   ERRORS        {universalFailure }
   CODE          local: 346 }

ResumeDataCollectionArgument ::= SEQUENCE
{  dcollCrossRefID      DcollCrossRefID,
   extensions           CSTACCommonArguments OPTIONAL }

ResumeDataCollectionResult ::= CHOICE
{  extensions           CSTACCommonArguments,
   noData               NULL }

END -- of CSTA-resume-data-collection

```

23.1.5 Start Data Collection

```

CSTA-start-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-data-collection( 347) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

startDataCollection OPERATION ::=
{ ARGUMENT      StartDataCollectionArgument
  RESULT        StartDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 347 }

StartDataCollectionArgument ::= SEQUENCE
{ object          CallObject,
  dataCollType    DataCollType          OPTIONAL,
  digitsReportingCriteria DigitsReportingCriteria  OPTIONAL,
  extensions      CSTACommonArguments    OPTIONAL }

StartDataCollectionResult ::= SEQUENCE
{ dcollCrossRefID DcollCrossRefID,
  extensions      CSTACommonArguments    OPTIONAL }

CallObject ::= CHOICE
{ device          DeviceID,
  call            ConnectionID }

DataCollType ::= ENUMERATED
{ digits          (0),
  telTones        (1) }

DigitsReportingCriteria ::= SEQUENCE
{ numChars        [0] IMPLICIT INTEGER          OPTIONAL,
  flushChar       IA5String (SIZE(1..1))        OPTIONAL,
  timeout         [1] IMPLICIT INTEGER          OPTIONAL }

END -- of CSTA-start-data-collection

```

23.1.6 Stop Data Collection

```

CSTA-stop-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-data-collection( 348) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) data-collection( 138) };

stopDataCollection OPERATION ::=
{  ARGUMENT      StopDataCollectionArgument
   RESULT        StopDataCollectionResult
   ERRORS        {universalFailure }
   CODE          local: 348 }

StopDataCollectionArgument ::= SEQUENCE
{  dcollCrossRefID      DcollCrossRefID,
   extensions           CSTACCommonArguments          OPTIONAL }

StopDataCollectionResult ::= CHOICE
{  extensions           CSTACCommonArguments,
   noData               NULL }

END -- of CSTA-stop-data-collection

```

23.1.7 Suspend Data Collection

```

CSTA-suspend-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-data-collection( 349) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DcollCrossRefID FROM CSTA-data-collection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) data-collection( 138) };

suspendDataCollection OPERATION ::=
{ ARGUMENT      SuspendDataCollectionArgument
  RESULT        SuspendDataCollectionResult
  ERRORS        {universalFailure }
  CODE          local: 349 }

SuspendDataCollectionArgument ::= SEQUENCE
{ dcollCrossRefID      DcollCrossRefID,
  extensions            CSTACommonArguments          OPTIONAL }

SuspendDataCollectionResult ::= CHOICE
{ extensions            CSTACommonArguments,
  noData                NULL }

END -- of CSTA-suspend-data-collection

```

24 Voice unit services and events

24.1 Services

24.1.1 Activate

```

CSTA-activate
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) activate( 512) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

activate OPERATION ::=
{ ARGUMENT      ActivateArgument
  RESULT        ActivateResult
  ERRORS        {universalFailure }
  CODE          local: 512 }

ActivateArgument ::= SEQUENCE
{ overConnection  ConnectionID,
  resource         [0] IMPLICIT ResourceID              OPTIONAL,
  ruleName        [1] IMPLICIT IA5String,
  grammarName     [2] IMPLICIT IA5String              OPTIONAL,
  extensions       CSTACCommonArguments                OPTIONAL }

ActivateResult ::= SEQUENCE
{ extensions       CSTACCommonArguments                OPTIONAL }

END -- of CSTA-activate

```

24.1.2 Clear

```

CSTA-clear
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) clear( 513) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

clear OPERATION ::=
{  ARGUMENT      ClearArgument
   RESULT        ClearResult
   ERRORS        {universalFailure }
   CODE          local: 513 }

ClearArgument ::= SEQUENCE
{  overConnection      ConnectionID,
   resource             [0] IMPLICIT ResourceID      OPTIONAL,
   extensions           CSTACommonArguments           OPTIONAL }

ClearResult ::= SEQUENCE
{  extensions           CSTACommonArguments           OPTIONAL }

END -- of CSTA-clear

```

24.1.3 Concatenate message

```

CSTA-concatenate-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) concatenate-message( 500) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

concatenateMessage OPERATION ::=
{ ARGUMENT      ConcatenateMessageArgument
  RESULT        ConcatenateMessageResult
  ERRORS        {universalFailure }
  CODE          local: 500 }

ConcatenateMessageArgument ::= SEQUENCE
{ messagesToConcatenate  SEQUENCE OF MessageID,
  extensions              CSTACommonArguments          OPTIONAL }

ConcatenateMessageResult ::= SEQUENCE
{ concatenatedMessage    MessageID,
  extensions              CSTACommonArguments          OPTIONAL }

END -- of CSTA-concatenate-message

```

24.1.4 Deactivate

```

CSTA-deactivate
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) deactivate( 514) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

deactivate OPERATION ::=
{ ARGUMENT    DeactivateArgument
  RESULT      DeactivateResult
  ERRORS      {universalFailure }
  CODE        local: 514 }

DeactivateArgument ::= SEQUENCE
{ overConnection    ConnectionID,
  resource           [0] IMPLICIT ResourceID           OPTIONAL,
  ruleName           IA5String,
  grammarName        [1] IMPLICIT IA5String             OPTIONAL,
  extensions         [2] IMPLICIT CSTACCommonArguments  OPTIONAL }

DeactivateResult ::= SEQUENCE
{ extensions         CSTACCommonArguments              OPTIONAL }

END -- of CSTA-deactivate

```


24.1.5 Delete message

```

CSTA-delete-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) delete-message( 501) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

deleteMessage OPERATION ::=
{ ARGUMENT      DeleteMessageArgument
  RESULT        DeleteMessageResult
  ERRORS        {universalFailure }
  CODE          local: 501 }

DeleteMessageArgument ::= SEQUENCE
{ messageToBeDeleted  MessageID,
  extensions           CSTACCommonArguments OPTIONAL }

DeleteMessageResult ::= CHOICE
{ extensions          CSTACCommonArguments,
  noData              NULL }

END -- of CSTA-delete-message

```

24.1.6 Play message

```

CSTA-play-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) play-message( 502) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID, TerminatingConditions FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

playMessage OPERATION ::=
{  ARGUMENT      PlayMessageArgument
   RESULT        PlayMessageResult
   ERRORS        {universalFailure }
   CODE          local: 502 }

PlayMessageArgument ::= SEQUENCE
{  messageToBePlayed  MessageID,
   overConnection     ConnectionID,
   duration            INTEGER                                OPTIONAL,
   termination        TerminatingConditions                OPTIONAL,
   extensions          CSTACommonArguments                   OPTIONAL }

PlayMessageResult ::= CHOICE
{  extensions          CSTACommonArguments,
   noData              NULL }

END -- of CSTA-play-message

```

24.1.7 Query voice attribute

```

CSTA-query-voice-attribute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) query-voice-attribute( 503) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, AttributeInfo, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

queryVoiceAttribute OPERATION ::=
{ ARGUMENT      QueryVoiceAttributeArgument
  RESULT        QueryVoiceAttributeResult
  ERRORS        {universalFailure }
  CODE          local: 503 }

QueryVoiceAttributeArgument ::= SEQUENCE
{  messageToQuery      MessageID,
   attributeToQuery    AttributeToQuery,
   resource             [0] IMPLICIT ResourceID             OPTIONAL,
   connection          ConnectionID                         OPTIONAL,
   extensions           CSTACCommonArguments                 OPTIONAL }

QueryVoiceAttributeResult ::= SEQUENCE
{  attribute          AttributeInfo,
   extensions         CSTACCommonArguments                 OPTIONAL }

AttributeToQuery ::= ENUMERATED
{  encodingAlgorithm      ( 0),
   samplingRate           ( 1),
   duration               ( 2),
   fileName               ( 3),
   currentPosition        ( 4),
   currentSpeed            ( 5),
   currentVolume           ( 6),
   currentLevel            ( 7),
   currentState            ( 8),
   grammars                ( 9),
   language                (10),
   mode                    (11),
   retainAudio             (12),
   silenceTimeout          (13),

```

```
maxTimeout          (14),  
babbleTimeout       (15),  
endSilence          (16),  
rejectionThreshold  (17),  
autoInterruptible   (18),  
innerXml            (19),  
interDigitTimeout   (20),  
preflush            (21) }
```

```
END -- of CSTA-query-voice-attribute
```

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24.1.8 Queue

```

CSTA-queue
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) queue( 515) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

queue OPERATION ::=
{ ARGUMENT      QueueArgument
  RESULT        QueueResult
  ERRORS        {universalFailure }
  CODE          local: 515 }

QueueArgument ::= SEQUENCE
{ overConnection      ConnectionID,
  message              MessageID,
  resource              [0] IMPLICIT ResourceID              OPTIONAL,
  text                  [1] IMPLICIT IA5String                OPTIONAL,
  extensions            CSTACCommonArguments                  OPTIONAL }

QueueResult ::= SEQUENCE
{ extensions            CSTACCommonArguments                  OPTIONAL }

END -- of CSTA-queue

```

24.1.9 Record message

```

CSTA-record-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) record-message( 511) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID, EncodingAlgorithm, TerminatingConditions
FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

recordMessage OPERATION ::=
{ ARGUMENT    RecordMessageArgument
  RESULT      RecordMessageResult
  ERRORS      {universalFailure }
  CODE        local: 511 }

RecordMessageArgument ::= SEQUENCE
{  callToBeRecorded    ConnectionID,
   resource             [2] IMPLICIT ResourceID          OPTIONAL,
   samplingRate         [0] IMPLICIT INTEGER              OPTIONAL,
   encodingAlgorithm    EncodingAlgorithm                OPTIONAL,
   maxDuration          [1] IMPLICIT INTEGER              OPTIONAL,
   termination          TerminatingConditions           OPTIONAL,
   extensions           CSTACommonArguments              OPTIONAL }

RecordMessageResult ::= SEQUENCE
{  resultingMessage    MessageID,
   extensions          CSTACommonArguments              OPTIONAL }

END -- of CSTA-record-message

```

24.1.10 Reposition

```

CSTA-reposition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) reposition( 504) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

reposition OPERATION ::=
{ ARGUMENT      RepositionArgument
  RESULT        RepositionResult
  ERRORS        {universalFailure }
  CODE          local: 504 }

RepositionArgument ::= SEQUENCE
{ connection      ConnectionID,
  periodOfReposition      Period,
  messageToReposition      MessageID
  resource            [0] IMPLICIT ResourceID
  extensions          CSTACCommonArguments
  OPTIONAL,          --corrected 06/2001
  OPTIONAL,
  OPTIONAL }

RepositionResult ::= CHOICE
{ extensions          CSTACCommonArguments,
  noData              NULL }

Period ::= CHOICE
{ absolutePosition      ENUMERATED
  { startOfMessage      (0),
    endOfMessage        (1) },
  relativePosition      INTEGER }

END -- of CSTA-reposition

```

24.1.11 Resume

```

CSTA-resume
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume( 505) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

resume OPERATION ::=
{ ARGUMENT ResumeArgument
  RESULT ResumeResult
  ERRORS {universalFailure }
  CODE local: 505 }

ResumeArgument ::= SEQUENCE
{ connection ConnectionID,
  messageToResume MessageID OPTIONAL, --corrected 06/2001
  resource [0] IMPLICIT ResourceID OPTIONAL,
  duration INTEGER OPTIONAL,
  extensions CSTACommonArguments OPTIONAL }

ResumeResult ::= CHOICE
{ extensions CSTACommonArguments,
  noData NULL }

END -- of CSTA-resume

```


24.1.12 Review

```

CSTA-review
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) review( 506) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

review OPERATION ::=
{ ARGUMENT      ReviewArgument
  RESULT        ReviewResult
  ERRORS        {universalFailure }
  CODE          local: 506 }

ReviewArgument ::= SEQUENCE
{ connection      ConnectionID,
  periodToReview  PeriodToReview,
  messageToReview MessageID
  resource        [0] IMPLICIT ResourceID
  extensions      CSTACCommonArguments
  OPTIONAL, --corrected 06/2001
  OPTIONAL,
  OPTIONAL }

ReviewResult ::= CHOICE
{ extensions      CSTACCommonArguments,
  noData          NULL }

PeriodToReview ::= CHOICE
{ startOfMessage  NULL,
  lengthOfReview  INTEGER }

END -- of CSTA-review

```

24.1.13 Set voice attribute

```

CSTA-set-voice-attribute
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-voice-attribute( 507) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
Volume FROM CSTA-physical-device-feature
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };

setVoiceAttribute OPERATION ::=
{ ARGUMENT      SetVoiceAttributeArgument
  RESULT        SetVoiceAttributeResult
  ERRORS        {universalFailure }
  CODE          local: 507 }

SetVoiceAttributeArgument ::= SEQUENCE
{ connection      ConnectionID,
  attributeToSet   AttributeToSet,
  message          MessageID                      OPTIONAL,
  resource         [0] IMPLICIT ResourceID        OPTIONAL,
  extensions       CSTACommonArguments            OPTIONAL }

SetVoiceAttributeResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

AttributeToSet ::= CHOICE
{ currentSpeed      [ 0] IMPLICIT INTEGER,
  currentVolume     [ 1] Volume,
  currentGain       [ 2] IMPLICIT INTEGER (0 .. 100),
  grammars          [ 3] IMPLICIT IA5String,
  language          [ 4] IMPLICIT IA5String,
  mode              [ 5] IMPLICIT ENUMERATED
    { automatic     (0),
      single        (1),
      multiple      (2) },
  retainAudio       [ 6] IMPLICIT BOOLEAN,
  silenceTimeout    [ 7] IMPLICIT INTEGER,
  maxTimeout        [ 8] IMPLICIT INTEGER,

```

```
babbleTimeout          [ 9] IMPLICIT INTEGER,  
endSilence             [10] IMPLICIT INTEGER,  
rejectionThreshold     [11] IMPLICIT INTEGER,  
autoInterruptible      [12] IMPLICIT BOOLEAN,  
innerXML               [13] IMPLICIT IA5String,  
interDigitTimeout      [14] IMPLICIT INTEGER,  
preflush               [15] IMPLICIT BOOLEAN }  
  
END -- of CSTA-set-voice-attribute
```

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24.1.14 Start

```

CSTA-start
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) start( 516) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
ResourceID, MessageID FROM CSTA-device-feature-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-feature-types( 127) }
ConnectionID FROM CSTA-call-connection-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) };
start OPERATION ::=
{   ARGUMENT StartArgument
    RESULT      StartResult
    ERRORS      {universalFailure }
    CODE        local: 516 }

StartArgument ::= SEQUENCE
{   overConnection  ConnectionID,
    resource         [0] IMPLICIT ResourceID          OPTIONAL,
    text             [1] IMPLICIT IA5String           OPTIONAL,
    extensions       CSTACommonArguments              OPTIONAL }

StartResult ::= SEQUENCE
{   extensions       CSTACommonArguments              OPTIONAL }

END -- of CSTA-start

```

24.1.15 Stop

```

CSTA-stop
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop( 508) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }

stop OPERATION ::=
{  ARGUMENT      StopArgument
   RESULT        StopResult
   ERRORS        {universalFailure }
   CODE          local: 508 }

StopArgument ::= SEQUENCE
{  connection      ConnectionID,
   messageToBeStopped MessageID          OPTIONAL,
   resource         [0] IMPLICIT ResourceID  OPTIONAL,
   extensions       CSTACommonArguments     OPTIONAL }

StopResult ::= CHOICE
{  extensions       CSTACommonArguments,
   noData           NULL }

END -- of CSTA-stop

```

24.1.16 Suspend

```

CSTA-suspend
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend( 509) }

DEFINITIONS ::=
BEGIN
IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

suspend OPERATION ::=
{ ARGUMENT      SuspendArgument
  RESULT        SuspendResult
  ERRORS        {universalFailure }
  CODE          local: 509 }

SuspendArgument ::= SEQUENCE
{ connection      ConnectionID,
  message          MessageID
  resource         [0] IMPLICIT ResourceID
  extensions       CSTACommonArguments
  OPTIONAL, --corrected 06/2001
  OPTIONAL,
  OPTIONAL }

SuspendResult ::= CHOICE
{ extensions       CSTACommonArguments,
  noData           NULL }

END -- of CSTA-suspend

```

24.1.17 Synthesize message

```

CSTA-synthesize-message
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) synthesize-message( 510) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
ControlData, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

synthesizeMessage OPERATION ::=
{ ARGUMENT      SynthesizeMessageArgument
  RESULT        SynthesizeMessageResult
  ERRORS        {universalFailure }
  CODE          local: 510 }

SynthesizeMessageArgument ::= SEQUENCE
{  textToBeSynthesized      IA5String,
   control                  ControlData          OPTIONAL,
   extensions               CSTACCommonArguments OPTIONAL }

SynthesizeMessageResult ::= SEQUENCE
{  synthesizedMessage      MessageID,
   extensions              CSTACCommonArguments OPTIONAL }

END -- of CSTA-synthesize-message

```

24.2 Events

24.2.1 Bookmark Reached

```

CSTA-bookmark-reached-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) bookmark-reached-event( 517) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

BookmarkReachedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID OPTIONAL,
  bookmark            IA5String,
  cause               EventCause OPTIONAL,
  servicesPermitted   ServicesPermitted OPTIONAL,
  extensions          CSTACommonArguments OPTIONAL }

END -- of CSTA-bookmark-reached-event

```


24.2.2 Completed

```

CSTA-completed-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) completed-event( 518) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

CompletedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID             OPTIONAL,
  cause               EventCause                           OPTIONAL,
  servicesPermitted   ServicesPermitted                     OPTIONAL,
  extensions          CSTACommonArguments                   OPTIONAL }

END -- of CSTA-completed-event

```

24.2.3 DTMF Detected

```

CSTA-dtmf-detected-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) dtmf-detected-event( 519) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

DtmfDetectedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID           OPTIONAL,
  dtmfChar            IA5String,
  cause               EventCause                         OPTIONAL,
  servicesPermitted   ServicesPermitted                  OPTIONAL,
  extensions          CSTACommonArguments               OPTIONAL }

END -- of CSTA-dtmf-detected-event

```

24.2.4 Emptied

```

CSTA-emptied-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) emptied-event( 520) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

EmptiedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID          OPTIONAL,
  cause               EventCause                        OPTIONAL,
  servicesPermitted   ServicesPermitted                 OPTIONAL,
  extensions          CSTACommonArguments              OPTIONAL }

END -- of CSTA-emptied-event

```

24.2.5 Interruption Detected

```

CSTA-interruption-detected-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) interruption-detected-event( 521) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

InterruptionDetectedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID             OPTIONAL,
  cause               EventCause                           OPTIONAL,
  servicesPermitted   ServicesPermitted                    OPTIONAL,
  extensions          CSTACommonArguments                  OPTIONAL }

END -- of CSTA-interruption-detected-event

```

24.2.6 Not Recognized

```

CSTA-not-recognized-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) not-recognized-event( 522) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

NotRecognizedEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID,           OPTIONAL,
  result              IA5String,
  cause               EventCause,                         OPTIONAL,
  servicesPermitted    ServicesPermitted,                 OPTIONAL,
  extensions           CSTACommonArguments                OPTIONAL }

END -- of CSTA-not-recognized-event

```

24.2.7 Play

```

CSTA-play-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) play( 75) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
ResourceID, MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

PlayEvent ::=SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource             [3] IMPLICIT ResourceID          OPTIONAL,
  length              [0] IMPLICIT INTEGER              OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER              OPTIONAL,
  speed               [2] IMPLICIT INTEGER              OPTIONAL,
  cause               EventCause                        OPTIONAL,
  servicesPermitted   ServicesPermitted                 OPTIONAL,
  extensions           CSTACCommonArguments              OPTIONAL }

END -- of CSTA-play-event

```

24.2.8 Recognized

```

CSTA-recognized-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) recognized-event( 523) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

RecognizedEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID          OPTIONAL,
  result              IA5String,
  text                IA5String,
  cause               EventCause                        OPTIONAL,
  servicesPermitted   ServicesPermitted                 OPTIONAL,
  extensions          CSTACommonArguments               OPTIONAL }

END -- of CSTA-recognized-event

```

24.2.9 Record

```

CSTA-record-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) record( 76) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }

RecordEvent ::= SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource            [2] IMPLICIT ResourceID          OPTIONAL,
  length              [0] IMPLICIT INTEGER             OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER             OPTIONAL,
  cause               EventCause                       OPTIONAL,
  servicesPermitted   ServicesPermitted                OPTIONAL,
  extensions          CSTACommonArguments              OPTIONAL }

END -- of CSTA-record-event

```


24.2.10 Review

```

CSTA-review-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) review( 77) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

ReviewEvent ::= SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource             [2] IMPLICIT ResourceID      OPTIONAL,
  length              [0] IMPLICIT INTEGER          OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER          OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACCommonArguments          OPTIONAL }

END -- of CSTA-review-event

```

24.2.11 Silence Timeout Expired

```

CSTA-silence-timeout-expired-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) silence-timeout-expired-event( 524) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SilenceTimeoutExpiredEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID      OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACommonArguments            OPTIONAL }

END -- of CSTA-silence-timeout-expired-event

```

24.2.12 Speech Detected

```

CSTA-speech-detected-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) speech-detected-event( 525) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SpeechDetectedEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID      OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACommonArguments            OPTIONAL }

END -- of CSTA-speech-detected-event

```

24.2.13 Started

```

CSTA-started-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) started-event( 526) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

StartedEvent ::= SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID      OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACommonArguments            OPTIONAL }

END -- of CSTA-started-event

```

24.2.14 Stop

```

CSTA-stop-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop( 78) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

StopEvent ::= SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource             [2] IMPLICIT ResourceID      OPTIONAL,
  length              [0] IMPLICIT INTEGER          OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER          OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted             OPTIONAL,
  extensions          CSTACommonArguments           OPTIONAL }

END -- of CSTA-stop-event

```

24.2.15 Suspend play

```

CSTA-suspend-play-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-play( 79) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }

SuspendPlayEvent ::= SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource             [2] IMPLICIT ResourceID           OPTIONAL,
  length              [0] IMPLICIT INTEGER               OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER               OPTIONAL,
  cause               EventCause                         OPTIONAL,
  servicesPermitted   ServicesPermitted                  OPTIONAL,
  extensions          CSTACommonArguments                OPTIONAL }

END -- of CSTA-suspend-play-event

```

24.2.16 Suspend record

```

CSTA-suspend-record-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-record( 80) }
DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
MessageID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

SuspendRecordEvent ::= SEQUENCE
{
  connection          ConnectionID,
  message             MessageID,
  resource             [2] IMPLICIT ResourceID      OPTIONAL,
  length              [0] IMPLICIT INTEGER          OPTIONAL,
  currentPosition     [1] IMPLICIT INTEGER          OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACommonArguments            OPTIONAL }

END -- of CSTA-suspend-record-event

```

24.2.17 Voice attribute changed

CSTA-voice-attributes-change-event

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) voice-attributes-change-event( 74) }
```

DEFINITIONS ::=

BEGIN

IMPORTS

-- Data Types --

EventCause FROM CSTA-event-causes

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
```

ConnectionID FROM CSTA-call-connection-identifiers

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
```

MessageID FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

CSTACommonArguments FROM CSTA-extension-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
```

ServicesPermitted FROM CSTA-call-control

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }
```

ResourceID FROM CSTA-device-feature-types

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
```

Volume FROM CSTA-physical-device-feature

```
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) physical-device-feature( 137) };
```

VoiceAttributesChangeEvent ::= SEQUENCE

connection	ConnectionID,	
message	MessageID,	
resource	[4] IMPLICIT ResourceID	OPTIONAL,
playVolume	[0], Volume	OPTIONAL,
recordingGain	[1] IMPLICIT INTEGER (0 .. 100)	OPTIONAL,
speed	[2] IMPLICIT INTEGER	OPTIONAL,
currentPosition	[3] IMPLICIT INTEGER	OPTIONAL,
grammars	[5] IMPLICIT IA5String	OPTIONAL,
language	[6] IMPLICIT IA5String	OPTIONAL,
mode	[7] IMPLICIT ENUMERATED	
	{ automatic (0),	
	single (1),	
	multiple (2) }	OPTIONAL,
retainAudio	[8] IMPLICIT BOOLEAN	OPTIONAL,
silenceTimeout	[9] IMPLICIT INTEGER	OPTIONAL,
maxTimeout	[10] IMPLICIT INTEGER	OPTIONAL,
babbleTimeout	[11] IMPLICIT INTEGER	OPTIONAL,
endSilence	[12] IMPLICIT INTEGER	OPTIONAL,
rejectionThreshold	[13] IMPLICIT INTEGER	OPTIONAL,
autoInterruptible	[14] IMPLICIT BOOLEAN	OPTIONAL,
innerXML	[15] IMPLICIT IA5String	OPTIONAL,
interDigitTimeout	[16] IMPLICIT INTEGER	OPTIONAL,
preflush	[17] IMPLICIT BOOLEAN	OPTIONAL,
cause	EventCause	OPTIONAL,

servicesPermitted
extensions

ServicesPermitted
CSTACommonArguments

OPTIONAL,
OPTIONAL }

END -- of CSTA-voice-attributes-change-event

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24.2.18 VoiceErrorOccurred

```

CSTA-voice-error-occured-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) voice-error-occured-event( 527) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) }
ConnectionID FROM CSTA-call-connection-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-connection-identifiers( 124) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
ResourceID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
ServicesPermitted FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

VoiceErrorOccuredEvent ::=SEQUENCE
{
  overConnection      ConnectionID,
  resource             [0] IMPLICIT ResourceID      OPTIONAL,
  cause               EventCause                    OPTIONAL,
  servicesPermitted   ServicesPermitted              OPTIONAL,
  extensions          CSTACommonArguments            OPTIONAL }

END -- of CSTA-voice-error-occured-event

```

25 Call detail record services

25.1 Services

25.1.1 Call detail records notification

```

CSTA-call-detail-records-notification
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-records-notification( 360) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRReason FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

CDRNotification OPERATION ::=
{  ARGUMENT      CDRNotificationArgument
   RESULT        CDRNotificationResult
   ERRORS        {universalFailure }
   CODE          local: 360
}

CDRNotificationArgument ::= SEQUENCE
{  cdrCrossRefID  CDRCrossRefID,
   cdrReason      CDRReason,
   extensions     CSTACCommonArguments }

CDRNotificationResult ::= CHOICE
{  extensions     CSTACCommonArguments,
   noData         NULL }

END -- of CSTA-call-detail-records-notification

```

25.1.2 Call detail records report

```

CSTA-call-detail-records-report
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-records-report( 361) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRInfo FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

CDRReport OPERATION ::=
{  ARGUMENT      CDRReportArgument
  RESULT         CDRReportResult
  ERRORS         {universalFailure }
  CODE           local: 361 }

CDRReportArgument ::= SEQUENCE
{  cdrCrossRefID      CDRCrossRefID,      --corrected 06/2001
  numberOfRecordsSent INTEGER (1..128),
  cdrInfo             CDRInfo,
  lastStoredCDRReportSent BOOLEAN          OPTIONAL,
  extensions           CSTACommonArguments OPTIONAL }

CDRReportResult ::= CHOICE
{  extensions          CSTACommonArguments,
  noData               NULL }

END -- of CSTA-call-detail-records-report

```

25.1.3 Send stored call detail records

```

CSTA-send-stored-call-detail-records
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) send-stored-call-detail-records( 362) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTIMEPERIOD FROM CSTA-call-detail-record
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) call-detail-record( 132) };

sendStoredCDR OPERATION ::=
{   ARGUMENT      SendStoredCDRArgument
    RESULT        SendStoredCDRResult
    ERRORS        {universalFailure }
    CODE          local: 362 }

SendStoredCDRArgument ::= SEQUENCE
{   cdrCrossRefID      CDRCrossRefID,           --corrected 06/2001
    timePeriod         CDRTIMEPERIOD             OPTIONAL,
    extensions         CSTACommonArguments       OPTIONAL }

SendStoredCDRResult ::= CHOICE
{   extensions         CSTACommonArguments,
    noData             NULL }

END -- of CSTA-send-stored-call-detail-records

```

25.1.4 Start call detail records transmission

```

CSTA-start-call-detail-records-transmission
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-call-detail-records-transmission( 363) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTransferMode FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

startCDRTransmission OPERATION ::=
{ ARGUMENT      StartCDRTransmissionArgument
  RESULT        StartCDRTransmissionResult
  ERRORS        {universalFailure }
  CODE          local: 363 }

StartCDRTransmissionArgument ::= SEQUENCE
{  transferMode      CDRTransferMode,
   extensions        CSTACommonArguments          OPTIONAL }

StartCDRTransmissionResult ::= SEQUENCE
{  cdrCrossRefID     CDRCrossRefID,          --corrected 06/2001
   extensions        CSTACommonArguments          OPTIONAL }

END -- of CSTA-start-call-detail-records-transmission

```

25.1.5 Stop call detail records transmission

```

CSTA-stop-call-detail-records
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-call-detail-records( 364) }
DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
CDRCrossRefID, CDRTermReason FROM CSTA-call-detail-record
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-detail-record( 132) };

stopCDRTransmission OPERATION ::=
{ ARGUMENT      StopCDRTransmissionArgument
  RESULT        StopCDRTransmissionResult
  ERRORS        {universalFailure }
  CODE          local: 364 }

StopCDRTransmissionArgument ::= SEQUENCE
{  cdrCrossRefID      CDRCrossRefID,      --corrected 06/2001
  cdrTermReason       CDRTermReason        OPTIONAL,
  extensions          CSTACCommonArguments OPTIONAL }

StopCDRTransmissionResult ::= CHOICE
{  extensions          CSTACCommonArguments,
  noData               NULL }

END -- of CSTA-stop-call-detail-records

```

26 Location Services

26.1 Services

26.1.1 Get Location Information

```

CSTA-get-location-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-information( 530) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationInfo FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) }

getLocationInformation OPERATION ::=
{ ARGUMENT      GetLocationInformationArgument
  RESULT        GetLocationInformationResult
  ERRORS        {universalFailure }
  CODE          local: 530 }

GetLocationInformationArgument ::= SEQUENCE
{ device        DeviceID,
  extensions    CSTACommonArguments OPTIONAL }

GetLocationInformationResult ::= SEQUENCE
{ locationInfo  LocationInfo,
  extensions    CSTACommonArguments OPTIONAL }

END -- of CSTA-get-location-information

```


26.1.2 Set Location Information

```

CSTA-set-location-information
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) set-location-information( 531) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationInfo FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

setLocationInformation OPERATION ::=
{ ARGUMENT      SetLocationInformationArgument
  RESULT        SetLocationInformationResult
  ERRORS        {universalFailure }
  CODE          local: 531 }

SetLocationInformationArgument ::= SEQUENCE
{ device         DeviceID,
  locationInfo   LocationInfo,
  replaceMode    ReplaceMode,
  extensions     CSTACCommonArguments }

SetLocationInformationResult ::= SEQUENCE
{ extensions     CSTACCommonArguments }

ReplaceMode ::= ENUMERATED
{ replaceAll     (0),
  replacePortion (1) }

END -- of CSTA-set-location-information

```

26.1.3 Location tracking session resumed

```

CSTA-location-tracking-session-resumed
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-tracking-session-resumed( 532) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID, LocReason FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

locationTrackingSessionResumed OPERATION ::=
{  ARGUMENT      LocationTrackingSessionResumedArgument
   RESULT        LocationTrackingSessionResumedResult
   ERRORS        {universalFailure }
   CODE          local: 532 }

LocationTrackingSessionResumedArgument ::= SEQUENCE
{  locCrossRefID  LocCrossRefID,
   locReason      LocReason          OPTIONAL,
   extensions     CSTACCommonArguments  OPTIONAL }

LocationTrackingSessionResumedResult ::= SEQUENCE
{  extensions     CSTACCommonArguments  OPTIONAL }

END -- of CSTA-location-tracking-session-resumed

```

26.1.4 Location tracking session suspended

```

CSTA-location-tracking-session-suspended
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-tracking-session-suspended( 533) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID, LocReason FROM CSTA-device-feature-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) call-control( 130) };

locationTrackingSessionSuspended OPERATION ::=
{  ARGUMENT      LocationTrackingSessionSuspendedArgument
   RESULT        LocationTrackingSessionSuspendedResult
   ERRORS        {universalFailure }
   CODE          local: 533 }

LocationTrackingSessionSuspendedArgument ::= SEQUENCE
{  locCrossRefID      LocCrossRefID,
   locReason          LocReason,
   locationInfoList   LocationInfoList,
   extensions         CSTACCommonArguments }

LocationTrackingSessionSuspendedResult ::= SEQUENCE
{  extensions         CSTACCommonArguments }

END -- of CSTA-location-tracking-session-suspended

```

26.1.5 Resume Location tracking session

```

CSTA-resume-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) resume-location-tracking-session( 534) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

resumeLocationTrackingSession OPERATION ::=
{  ARGUMENT      ResumeLocationTrackingSessionArgument
  RESULT         ResumeLocationTrackingSessionResult
  ERRORS         {universalFailure }
  CODE           local: 534 }

ResumeLocationTrackingSessionArgument ::= SEQUENCE
{  locCrossRefID      LocCrossRefID,
  extensions          CSTACommonArguments          OPTIONAL }

ResumeLocationTrackingSessionResult ::= SEQUENCE
{  extensions          CSTACommonArguments          OPTIONAL }

END -- of CSTA-resume-location-tracking-session

```

26.1.6 Location Information Report

```

CSTA-location-information-report
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) location-information-report( 535) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
LocationInfoList FROM CSTA-call-control
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) call-control( 130) };

locationInformationReport OPERATION ::=
{
  ARGUMENT      LocationInformationReportArgument
  RESULT        LocationInformationReportResult
  ERRORS        {universalFailure }
  CODE          local: 535 }

LocationInformationReportArgument ::= SEQUENCE
{
  locCrossRefID      LocCrossRefID,
  device              DeviceID,
  locationInfoList   LocationInfoList
  extensions          CSTACommonArguments
  OPTIONAL,
  OPTIONAL }

LocationInformationReportResult ::= SEQUENCE
{
  extensions          CSTACommonArguments
  OPTIONAL }

END -- of CSTA-location-information-report

```

26.1.7 Start Location Tracking Session

```

CSTA-start-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) start-location-tracking-session( 536) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

startLocationTrackingSession OPERATION ::=
{ ARGUMENT      StartLocationTrackingSessionArgument
  RESULT        StartLocationTrackingSessionResult
  ERRORS        {universalFailure }
  CODE          local: 536 }

StartLocationTrackingSessionArgument ::= SEQUENCE
{  locDevice      DeviceID,
   collectionType [0] IMPLICIT CollectionType      OPTIONAL,
   collectionInterval [1] IMPLICIT INTEGER          OPTIONAL,
   maxCollections  [2] IMPLICIT INTEGER            OPTIONAL,
   collectionFilter [3] IMPLICIT CollectionFilter    OPTIONAL,
   reportingType   [4] IMPLICIT ReportingType       OPTIONAL,
   reportingInterval [5] IMPLICIT INTEGER           OPTIONAL,
   reportingCount  [6] IMPLICIT INTEGER            OPTIONAL,
   extensions      CSTACommonArguments             OPTIONAL }

StartLocationTrackingSessionResult ::= SEQUENCE
{  locCrossRefID   LocCrossRefID,
   pidProfile      PIDProfile                      OPTIONAL,
   extensions      CSTACommonArguments             OPTIONAL }

CollectionType ::= ENUMERATED
{  periodic          (0),
   periodicWithUpdates (1),
   updatesOnly       (2) }

CollectionFilter ::= SEQUENCE
{  horizontalMovement [0] IMPLICIT INTEGER          OPTIONAL,
   verticalMovement   [1] IMPLICIT INTEGER          OPTIONAL,
   civicAddressChange [2] IMPLICIT INTEGER          OPTIONAL }

```

```
ReportingType ::= ENUMERATED
{
    immediate          (0),
    periodic            (1),
    count               (2) }

PIDProfile ::= ENUMERATED
{
    pidProfileOption1   (0),
    pidProfileOption2   (1) }

END -- of CSTA-start-location-tracking-session
```

26.1.8 Stop Location Tracking Session

```

CSTA-stop-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) stop-location-tracking-session( 537) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) }
EventCause FROM CSTA-event-causes
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) event-causes( 121) };

stopLocationTrackingSession OPERATION ::=
{ ARGUMENT      StopLocationTrackingSessionArgument
  RESULT        StopLocationTrackingSessionResult
  ERRORS        {universalFailure }
  CODE          local: 537 }

StopLocationTrackingSessionArgument ::= SEQUENCE
{  locCrossRefID   LocCrossRefID,
   reason          EventCause                               OPTIONAL,
   extensions      CSTACommonArguments                     OPTIONAL }

StopLocationTrackingSessionResult ::= SEQUENCE
{  extensions      CSTACommonArguments                     OPTIONAL }

END -- of CSTA-stop-location-tracking-session

```


26.1.9 Suspend Location Tracking Session

```

CSTA-suspend-location-tracking-session
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) suspend-location-tracking-session( 538) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

suspendLocationTrackingSession OPERATION ::=
{ ARGUMENT      SuspendLocationTrackingSessionArgument
  RESULT        SuspendLocationTrackingSessionResult
  ERRORS        {universalFailure }
  CODE          local: 538 }

SuspendLocationTrackingSessionArgument ::= SEQUENCE
{  locCrossRefID  LocCrossRefID,
   extensions     CSTACommonArguments OPTIONAL }

SuspendLocationTrackingSessionResult ::= SEQUENCE
{  extensions     CSTACommonArguments OPTIONAL }

END -- of CSTA-suspend-location-tracking-session

```

26.1.10 Get Location Tracking Capabilities

```

CSTA-get-location-tracking-capabilities
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-tracking-capabilities( 539) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{ joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definitioneq
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocCrossRefID FROM CSTA-device-feature-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-feature-types( 127) };

getLocationTrackingCapabilities OPERATION ::=
{ ARGUMENT      GetLocationTrackingCapabilitiesArgument
  RESULT        GetLocationTrackingCapabilitiesResult
  ERRORS        { universalFailure }
  CODE          local: 539 }

GetLocationTrackingCapabilitiesArgument ::= SEQUENCE
{ device        DeviceID,
  extensions    CSTACCommonArguments OPTIONAL }

GetLocationTrackingCapabilitiesResult ::= SEQUENCE
{ collectionTypeDefault      ENUMERATED
  { periodic                  (0),
    updatesOnly               (1),
    periodicWithUpdates       (2) },
  collectionTypePeriodic     BOOLEAN,
  collectionTypeUpdatesOnly  BOOLEAN,
  collectionTypePeriodicWithUpdates  BOOLEAN,
  collectionIntervalDefault  INTEGER,
  collectionIntervalMin      INTEGER,
  collectionIntervalMax      INTEGER,
  maxCollectionsDefault      INTEGER,
  maxCollectionsMin          INTEGER,
  maxCollectionsMax          INTEGER,
  collectionFilterDefault    ENUMERATED
  { horizontalMovement       (0),
    verticalMovement         (1),
    civicAddressChange        (2),
    none                      (3) },
  collectionFilterHorizontal  BOOLEAN,
  collectionFilterVertical    BOOLEAN,
  collectionFilterCivicAddress  BOOLEAN,
  reportingTypeDefault        ENUMERATED

```

```

        {   immediate           (0),
            periodic            (1),
            count               (2) },

reportingTypeImmediate      BOOLEAN,
reportingTypePeriodic      BOOLEAN,
reportingTypeCount         INTEGER,
reportingIntervalDefault   INTEGER,
reportingIntervalMin       INTEGER,
reportingIntervalMax       INTEGER,
reportingCountDefault      INTEGER,
reportingCountMin          INTEGER,
reportingCountMax          INTEGER,
supportsSuspendingTracking BOOLEAN,
supportsResumingTracking   BOOLEAN,
extensions                  CSTACommonArguments OPTIONAL }

END -- of CSTA-get-location-tracking-capabilities

```

26.1.11 Get Location Tracking Sessions

```

CSTA-get-location-tracking-sessions
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) get-location-tracking-sessions( 540) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) device-identifiers( 123) }
LocationSessionInfoList FROM CSTA-status-reporting
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) capability-exchange( 131) };

getLocationTrackingSessions OPERATION ::=
{ ARGUMENT      GetLocationTrackingSessionsArgument
  RESULT        GetLocationTrackingSessionsResult
  ERRORS        {universalFailure }
  CODE          local: 540 }

GetLocationTrackingSessionsArgument ::= SEQUENCE
{ extensions          CSTACCommonArguments                      OPTIONAL }

GetLocationTrackingSessionsResult ::= SEQUENCE
{ crossRefIDorRegistrationData CHOICE
  { serviceCrossRefID      ServiceCrossRefID,
    locationSessionInfoList LocationSessionInfoList },
  extensions              CSTACCommonArguments                      OPTIONAL }

END -- of CSTA-get-location-tracking-sessions

```

26.1.12 Location Session Info

```

CSTA-location-session-info
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) location-session-info( 541) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
    {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) error-definition( 120) }
CSTACCommonArguments FROM CSTA-extension-types
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) extension-types( 129) }
DeviceID FROM CSTA-device-identifiers
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) device-identifiers( 123) }
LocationSessionInfoList FROM CSTA-status-reporting
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) status-reporting( 126) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso( 1) identified-organization( 3) icd-ecma( 12)
      standard( 0) csta3( 285) capability-exchange( 131) };

locationSessionInfoReport OPERATION ::=
{   ARGUMENT      LocationSessionInfoArgument
    ERRORS        {universalFailure }
    CODE          local: 541 }

LocationSessionInfoArgument ::= SEQUENCE
{   serviceCrossRefID      ServiceCrossRefID              OPTIONAL,
    segmentID              INTEGER                        OPTIONAL,
    lastSegment             BOOLEAN,
    locationSessionInfoList LocationSessionInfoList,
    extensions              CSTACCommonArguments          OPTIONAL }

END -- of CSTA-location-session-info

```

27 Vendor specific extensions services and events

27.1 Registration services

27.1.1 Escape register

```

CSTA-escape-register
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register( 365) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escapeRegister OPERATION ::=
{  ARGUMENT      EscapeRegisterArgument
   RESULT        EscapeRegisterResult
   ERRORS        {universalFailure }
   CODE          local: 365 }

EscapeRegisterArgument ::= CHOICE
{  extensions      CSTACommonArguments,
   noData          NULL }

EscapeRegisterResult ::= SEQUENCE
{  escapeRegisterID  EscapeRegisterID,
   extensions        CSTACommonArguments OPTIONAL }

END -- of CSTA-escape-register

```

27.1.2 Escape register abort

```

CSTA-escape-register-abort
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register-abort( 366) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
  {joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
  { iso( 1) identified-organization( 3) icd-ecma( 12)
    standard( 0) csta3( 285) escape-types( 135) };

escapeRegisterAbort OPERATION ::=
{  ARGUMENT          EscapeRegisterAbortArgument
  ERRORS             {universalFailure }
  ALWAYS RESPONDS    FALSE
  CODE               local: 366 }

EscapeRegisterAbortArgument ::= SEQUENCE
{  escapeRegisterID    EscapeRegisterID,
  extensions           CSTACommonArguments          OPTIONAL }

END -- of CSTA-escape-register-abort

```

27.1.3 Escape register cancel

```

CSTA-escape-register-cancel
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-register-cancel( 367) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escapeRegisterCancel OPERATION ::=
{  ARGUMENT      EscapeRegisterCancelArgument
  RESULT         EscapeRegisterCancelResult
  ERRORS         {universalFailure }
  CODE           local: 367 }

EscapeRegisterCancelArgument ::= SEQUENCE
{  escapeRegisterID      EscapeRegisterID,
  extensions              CSTACommonArguments      OPTIONAL }

EscapeRegisterCancelResult ::= CHOICE
{  extensions              CSTACommonArguments,
  noData                   NULL }

END -- of CSTA-escape-register-cancel

```


27.2 Services

27.2.1 Escape

```

CSTA-escape-service
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-service( 91) }

DEFINITIONS ::=
BEGIN

IMPORTS

OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTASecurityData FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTACCommonArguments, CSTAPrivateData FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) }
EscapeRegisterID FROM CSTA-escape-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) escape-types( 135) };

escape OPERATION ::=
{ ARGUMENT      EscapeArgument
  RESULT        EscapeResult
  ERRORS        {universalFailure }
  CODE          local: 51 }

EscapeArgument ::= SEQUENCE
{  escapeRegisterID  EscapeRegisterID          OPTIONAL,
   security          CSTASecurityData          OPTIONAL,
   privateData       CSTAPrivateData            }

EscapeResult ::= CHOICE
{  extensions        CSTACCommonArguments,
   noData            NULL }

END -- of CSTA-escape-service

```

27.2.2 Private data version selection

```

CSTA-private-data-version-selection
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) private-data-version-selection( 368) }

DEFINITIONS ::=
BEGIN

IMPORTS
OPERATION, ERROR FROM Remote-Operations-Information-Objects
{joint-iso-itu-t remote-operations(4) informationObjects(5) version1(0) }

-- Data Types --
universalFailure FROM CSTA-error-definition
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) error-definition( 120) }
CSTACommonArguments FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

privateDataVersionSelection OPERATION ::=
{  ARGUMENT      PrivateDataVersionSelectionArgument
  RESULT         PrivateDataVersionSelectionResult
  ERRORS         {universalFailure }
  CODE           local: 368 }

PrivateDataVersionSelectionArgument ::= INTEGER

PrivateDataVersionSelectionResult ::= CHOICE
{  extensions      CSTACommonArguments,
  noData           NULL }

END -- of CSTA-private-data-version-selection

```

27.3 Events

27.3.1 Private event

```

CSTA-private-event
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) private-event( 71) }

DEFINITIONS ::=
BEGIN

IMPORTS

-- Data Types --
CSTAsecurityData FROM CSTA-security
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) security( 128) }
CSTAprivateData FROM CSTA-extension-types
{ iso( 1) identified-organization( 3) icd-ecma( 12)
  standard( 0) csta3( 285) extension-types( 129) };

PrivateEvent ::= SEQUENCE
{
  security          CSTAsecurityData          OPTIONAL,
  privateData       CSTAprivateData}

END -- of CSTA-private-event

```

Annex A (normative)

Protocol Implementation Conformance Statement (PICS) Proforma

A.1 Introduction

The Protocol Implementation Conformance Statement (PICS) is a statement of which capabilities and options of the protocol have been implemented. The PICS can have a number of uses, including use:

- by the implementor, as a check-list to reduce the risk of failure to conform to the standard through oversight;
- by the supplier and acquirer (or potential acquirer) of the implementation, as a detailed indication of the capabilities of the implementation, stated relative to the common basis for understanding provided by the standard PICS proforma;
- by the user (or potential user) of the implementation, as a basis for initially checking the possibility of interworking with another implementation (note that, while interworking cannot be guaranteed, failure to interwork can often be predicted from incompatible PICS);
- by a tester, as the basis for selecting appropriate tests against which to assess the claim for conformance of the implementation.

A.2 Conformance

The supplier of a protocol implementation which is claimed to conform to this Standard shall complete a copy of the Protocol Implementation Conformance Statement (PICS) proforma in A.5, PICS proforma

A.3 Instructions for completing the PICS proforma

The first part of the PICS proforma, the Implementation Identification (Implementation identification), is to be completed as indicated with the information necessary to identify fully both the supplier and the implementation. The main part of the PICS proforma, PICS proforma

is a fixed format questionnaire divided into subclauses each containing a group of individual items. These items represent options specified in ISO/IEC 18051 (mandatory items are not represented). Answers to the questionnaire items are to be provided in the appropriate columns by marking an answer to indicate a restricted choice (Yes or No), and optionally clarifying this response with a comment.

Where a service or event is not supported, as indicated by entering No for the first entry in a table, any parameters or dependent service components in the rest of that table are not applicable, it is then not necessary to complete items in any subsidiary entries in the table.

Note that ISO/IEC 18051 should be used as a reference when completing the PICS proforma.

A.4 Implementation identification

Supplier	
Protocol Version	ASN.1 Protocol for CSTA Phase III, 4 th Edition
Date of Statement	
Contact point for queries about the PICS	
Implementation Name(s) and Version(s)	
Other information necessary for full identification - e.g. Name(s) and Version(s) for machines and/or operating systems; system name(s)	

The first five items are required for all implementations; other information may be completed as appropriate in meeting the requirement for full identification.

The terms Name and Version should be interpreted appropriately to correspond with a supplier's terminology (e.g. Type ,Series ,Model).

A.5 PICS proforma

A.5.1 CSTA Profiles

CSTA Profiles group together services and events, where each profile specifies a set of services and events that are supported by the implementation. Switching Function implementors shall indicate support for one or more profiles in the table below. Specifying support for a profile shall be accompanied by specifying support for the services and events encompassed by the profile, as well as any other services and events that the implementation supports.

Refer to ISO/IEC 18051 for a description of the CSTA Services and Events that must be supported for a specific CSTA profile.

Description: Profile(s) Supported	Supported ?		Comments
	Yes	No	
Basic Telephony Profile			
Routeing Profile			
Level 1a Voice Browser Profile			
Level 1b Voice Browser Profile			
Level 2 Voice Browser Profile			
Minimal uaCSTA Call Control Profile			
Basic uaCSTA Call Control Profile			
Advanced uaCSTA Call Control Profile			
Conferencing uaCSTA Call Control Profile			
Basic uaCSTA Device Feature Profile			
Speaker uaCSTA Device Feature Profile			
Basic Speech Service Profile			
Advanced Speech Service Profile			

A.5.2 Capability Exchange Services

A.5.2.1 Get CSTA Features

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get CSTA Features			
Service Request optional parameters			
security			
privateData			
Service Request optional parameters			
security			
privateData			

A.5.2.2 Get Logical Device Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Logical Device Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
groupDeviceAttributes			

namedDeviceTypes			
shortFormDeviceID			
agentLogOnModels			
appearanceList			
otherPhysicalDeviceList			
miscMonitorCaps			
associatedGroupList			
maxCallbacks			
maxAutoAnswerRings			
maxActiveCalls			
maxHeldCalls			
maxFwdSettings			
maxDevicesInConf			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
mediaClassSupport			
mediaServiceCapsList			

connectionRateList			
delayToleranceList			
numberOfChannels			
maxChannelBind			
routeingServList			
logDevServList			
logDevEvtsList			
deviceMaintEvtsList			
security			
privateData			

A.5.2.3 Get Physical Device Information

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Physical Device Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
groupDeviceAttributes			
namedDeviceTypes			

otherLogicalDeviceList			
deviceModelName			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
maxDisplays			
maxButtons			
maxLamps			
maxRingPatterns			
physDevServList			
physDevEvtsList			
security			
privateData			

A.5.2.4 Get Switching Function Capabilities

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Switching Function Capabilities			
Service Request optional parameters			
security			

privateData			
Service Response optional parameters			
callCharacteristicsSupported			
mediaClassSupport			
numberOfChannels			
maxChannelBind			
miscMediaCallCharacteristics			
connectionRateList			
delayToleranceRateList			
pauseTime			
currentTime			
messageSeqNumbers			
timeStampMode			
securityMode			
securityFormat			
privateDataFormat			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			

callOnConnectionMonitorFilter			
miscMonitorCaps			
correlatorDataSupported			
dynamicFeatureSupported			
callLinkageOptionsSupported			
acdModels			
agentLogonModels			
agentStateModels			
maxLengthParametersContinued			
routeingServList			
logDevServList			
logDevEvtsList			
physDevServList			
physDevEvtsList			
deviceMaintEvtsList			
statusReportingServList			
capExchangeServList			
cdrServList			
vendorSpecificServList			
vendorSpecificEvtsList			

privateDataVersionList			
systemStatusTimer			
simpleThreshold			
filterThreshold			
mediaServiceCapsList			
maxDeviceHistoryEntries			
maxDestinationDevicesForDeflect			
security			
privateData			

A.5.2.5 Get Switching Function Devices

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Switching Function Devices			
Service Request optional parameters			
requestedDeviceID			
requestedDeviceCategory			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.2.6 Switching Function Devices

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Devices			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.3 System Services

A.5.3.1 Change System Status Filter

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Change System Status Filter			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.2 System Register

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register			
Service Request optional parameters			
requestedStatusFilter			
security			
privateData			
Service Response optional parameters			
actualStatusFilter			
security			
privateData			

A.5.3.3 System Register Abort

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.3.4 System Register Cancel

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.5 Request System Status

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Request System Status			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.6 System Status

The System Status service shall be supported as part of the Application Association Initialisation as specified in Clause 7 of ISO/IEC 18051.

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
System Status			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.7 Switching Function Capabilities Changed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Capabilities Changed			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.8 Switching Function Devices Changed

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Switching Function Devices Changed			
Service Request optional parameters			
sysStatRegisterID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.3.9 Get Registrations

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Registrations			
Service Request optional parameters			
requestedRegTypes			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.3.10 Registration Info

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Registration Info			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.4 Monitoring Services

A.5.4.1 Change Monitor Filter

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Change Monitor Filter			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
actualFilterList			
security			
privateData			

A.5.4.2 Monitor Start

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Start			
Service Request optional parameters			
requestedMonitorFilter			
monitorType			
requestedMonitorMediaClass			
security			
privateData			
Service Response optional parameters			
actualMonitorFilter			
actualMonitorMediaClass			
monitorExistingCalls			
security			
privateData			

A.5.4.3 Monitor Stop

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Stop			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.4.4 Get Monitors

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Get Monitors			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.4.5 Monitor Info

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Monitor Info			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.5 Snapshot Services**A.5.5.1 Snapshot Call**

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
serviceCrossRefID			
snapshotData			
mediaCallCharacteristics			

callCharacteristics			
callingDevice			
calledDevice			
associatedCallingDevice			
associatedCalledDevice			
correlatorData			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.5.2 Snapshot Device

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot Device			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
serviceCrossRefID			
snapshotData			
security			
privateData			

A.5.5.3 Snapshot CallData

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot CallData			
Service Request optional parameters			
segmentID			
security			
privateData			

A.5.5.4 Snapshot DeviceData

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Snapshot DeviceData			
Service Request optional parameters			
segmentID			

security			
privateData			

A.5.6 Call Control Services

A.5.6.1 Accept Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Accept Call			
Service Request optional parameters			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.2 Alternate Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Alternate Call			
Service Request optional parameters			
connectionReservation			
consultOptions			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.3 Answer Call

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Answer Call			
Service Request optional parameters			
correlatorData			
userData			

security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.4 Call Back Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Call-Related			
Service Request optional parameters			
callCharateristics			
security			
subjectOfCall			
languagePreferences			
privateData			
Service Response optional parameters			
targetDevice			
security			
privateData			

A.5.6.5 Call Back Message Call-Related

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Call Back Message Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
targetDevice			
security			
privateData			

A.5.6.6 Camp On Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Camp On Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.7 Clear Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Clear Call			
Service Request optional parameters			
userData			
reason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.8 Clear Connection

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Clear Connection			
Service Request optional parameters			
correlatorData			

userData			
reason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.9 Conference Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Conference Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
connections			
conferenceCallInfo			
callLinkageDataList			
security			
privateData			

A.5.6.10 Consultation Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Consultation Call			
Service Request optional parameters			
connectionReservation			
accountCode			
authCode			
correlatorData			
userData			
callCharacteristics			
mediaCallCharacteristics			
callingConnectionInfo			
consultOptions			
subjectOfCall			
languagePreferences			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			

callLinkageData			
security			
privateData			

A.5.6.11 Deflect Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Deflect Call			
Service Request optional parameters			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
reason			
callCharacteristics			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.12 Dial Digits

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Dial Digits			
Service Request optional parameters			
correlatorData			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.13 Directed Pickup Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Directed Pickup Call			
Service Request optional parameters			
correlatorData			
userData			
security			
privateData			

Service Response optional parameters			
pickedCall			
pickedCallInfo			
callLinkageData			
security			
privateData			

A.5.6.14 Group Pickup Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Group Pickup Call			
Service Request optional parameters			
pickGroup			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
pickedCall			
pickedCallInfo			
callLinkageData			

security			
privateData			

A.5.6.15 Hold Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Hold Call			
Service Request optional parameters			
connectionReservation			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.16 Intrude Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Intrude Call			

Service Request optional parameters			
participationType			
userData			
security			
privateData			
Service Response optional parameters			
conferencedCall			
conferencedCallInfo			
callLinkageDataList			
security			
privateData			

A.5.6.17 Join Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Join Call			
Service Request optional parameters			
autoOriginate			
participationType			
accountCode			
authCode			

correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
conferencedCallInfo			
callLinkageDataList			
security			
privateData			

A.5.6.18 Make Call

This service must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Call			
Service Request optional parameters			
accountCode			
authCode			
autoOriginate			
correlatorData			
userData			

callCharacteristics			
mediaCallCharacteristics			
callingConnectionInfo			
subjectOfCall			
languagePreferences			
reason			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
callLinkageData			
security			
privateData			

A.5.6.19 Make Connection

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Connection			

Service Request optional parameters			
accountCode			
authCode			
autoOriginate			
correlatorData			
callCharacteristics			
mediaCallCharacteristics			
connectionInfo			
subjectOfCall			
languagePreferences			
reason			
maxDevices			
startTime			
duration			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
callLinkageData			

security			
privateData			

A.5.6.20 Make Predictive Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Make Predictive Call			
Service Request optional parameters			
signallingDetection			
destinationDetection			
defaultAction			
accountCode			
authCode			
autoOriginate			
alertTime			
correlatorData			
callCharacteristics			
subjectOfCall			
languagePreferences			
userData			
security			

privateData			
Service Response optional parameters			
initiatedCallInfo			
callLinkageData			
security			
privateData			

A.5.6.21 Park Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Park Call			
Service Request optional parameters			
correlatorData			
subjectOfCall			
languagePreferences			
security			
privateData			
Service Response optional parameters			
parkedTo			
callLinkageData			

security			
privateData			

A.5.6.22 Reconnect Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Reconnect Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.6.23 Retrieve Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Retrieve Call			
Service Request optional parameters			
security			
privateData			

Service Response optional parameters			
security			
privateData			

A.5.6.24 Send Message

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Send Message			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
callCharacteristics			
mediaCallCharacteristics			
subjectOfCall			
languagePreferences			
security			
privateData			

Service Response optional parameters			
listOfCallLinkageData			
security			
privateData			

A.5.6.25 Single Step Conference Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Single Step Conference Call			
Service Request optional parameters			
participationType			
accountCode			
authCode			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
security			
privateData			

Service Response optional parameters			
conferencedCallInfo			
callLinkageDataList			
security			
privateData			

A.5.6.26 Single Step Transfer Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Single Step Transfer Call			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
userData			
subjectOfCall			
languagePreferences			
reason			
callCharacteristics			
callLinkageDataList			
security			

privateData			
Service Response optional parameters			
connections			
transferredCallInfo			
security			
privateData			

A.5.6.27 Transfer Call

Description: Service, optional parameters	Supported ?		Comments
	Yes	No	
Transfer Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
connections			
transferredCallInfo			
callLinkageDataList			
security			
privateData			

A.5.7 Call Control Events

A.5.7.1 Bridged

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Bridged			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
bridgedConnectionInfo			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.2 Call Cleared

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Call Cleared			
correlatorData			
userData			
mediaCallCharacteristics			
callCharacteristics			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.3 Conferenced

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Conferenced			
secondaryOldCall			
localConnectionInfo			
correlatorData			

userData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.4 Connection Cleared

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Connection Cleared			
localConnectionInfo			
correlatorData			
userData			
chargingInfo			
servicesPermitted			
mediaCallCharateristics			

callCharacteristics			
droppedConnectionInfo			
callLinkageData			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.5 Delivered

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Delivered			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			

associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
connectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.6 Digits Dialed

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Digits Dialed			
localConnectionInfo			
correlatorData			
servicesPermitted			
networkCallingDevice			

networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
diallingConnectionInfo			
callCharacteristics			
languagePreferences			
locationInfoList			
security			
privateData			

A.5.7.7 Diverted

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Diverted			
callingDevice			
calledDevice			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
mediaCallCharacteristics			

callCharacteristics			
connectionInfo			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.8 Established

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Established			
originatingNIDConnection			
localConnectionInfo			

correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
establishConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			
security			
privateData			

A.5.7.9 Failed

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Failed			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
failedConnectionInfo			
subjectOfCall			
messageInfo			
languagePreferences			
deviceHistory			
locationInfoList			

security			
privateData			

A.5.7.10 Held

Description: Event, optional parameters	Supported ?		Comments
	Yes	No	
Held			
localConnectionInfo			
correlatorData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
heldConnectionInfo			
callLinkageData			
languagePreferences			
locationInfoList			
security			
privateData			