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

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Protocole pour applications en télécommunications supportées par ordinateur (CSTA) en phase III

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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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 International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 18052 was prepared by ECMA (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.

Annex A forms a normative part of this International Standard.

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Introduction

This International Standard defines Phase III of Protocol for Computer Supported Telecommunications Applications (CSTA) for OSI Layer 7 communication between a computing network and a telecommunications network. This International Standard is part of a Suite of Standards and Technical Reports for Phase III of CSTA. All of the Standards and Technical Reports in the Suite are based on practical experience of ECMA member companies and each one represents a pragmatic and widely-based consensus.

The evolution of this Suite began with CSTA Phase I, which included the CSTA Services and Protocol Standards (ECMA-179 and ECMA-180). In Phase II, Technical Report ECMA TR/68 was added illustrating how CSTA services and events may be used in typical call scenarios.

Phase III of CSTA extends the previous Phase II Standards (ECMA-217 and ECMA-218) in major theme directions as well as numerous details. This incorporates technology based upon the *versit* CTI Encyclopedia (Version 1.0), which was contributed to ECMA by *versit*. Major areas of advancement include:

- New categories of services and events such as capabilities exchange, charging, media attachment services, call data recording (CDR), etc.
- Additional services and events for call and device control.
- Enhancement to existing services and events.
- Organization of services and events to reflect a grouping based on function (call control, device control, etc.).

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Information technology - Telecommunications and information exchange between systems - Protocol 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, *Information technology - Telecommunications and information exchange between systems - 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 26 inclusive contains CSTA-specific protocol details and forms the main part of this International Standard.

The protocol in this International Standard operates in the context of an application association.

2 Normative References

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

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 8650-1:1996, *Information technology - Open Systems Interconnection - Connection-oriented protocol for the Association Control Service Element: Protocol specification* (this corresponds to ITU-T Rec. X.227 4/95).

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

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

ISO/IEC 18051:2000, *Information technology - Telecommunications and information exchange between systems - Services for Computer Supported Telecommunications Applications (CSTA) Phase III*.

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*.

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ITU-T X.680,	*Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation.*
ITU-T X.690,	*Information technology - ASN.1 encoding rules - Specificaion of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER).*

3 Conformance

A manufacturer may select any part of the CSTA protocol, as specified in this International Standard, for implementation on a system as long as it satisfies the minimum conformance requirements as specified in clause 3 of ISO/IEC 18051.

A Protocol Implementation Conformance Statement (PICS) shall be used to specify the operations which are provided by a particular implementation. A PICS shall also specify the parameter options which are used.

3.1 Static Requirements

To conform to this International Standard, a system shall support the transfer syntax (derived from the encoding rules specified in ITU-T X.690) named {joint-iso-ccitt asn1(1) basic-encoding(1)}; for the purpose of generating and interpreting CSTA protocol information as defined by the abstract syntax “CSTA-ASN.1-Object-Descriptor” for the operations supported.

3.2 Dynamic Requirements

To conform to this International Standard, a system shall:

a. follow the procedures as specified in this International 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.

3.3 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.

4 Definitions and Abbreviations

CSTA-specific terminology is defined in ISO/IEC TR 18053. For the purposes of this International Standard, the following additional definitions, defined in other standards, shall 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.

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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, CSTA shall adopt 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, CSTA shall adopt 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, CSTA shall adopt the operations Class 5, defined in ISO/IEC 13712-2 as:

- Asynchronous, outcome not reported.

The protocol description for the particular service defines the relevant class of the operation used for that service.

CSTA 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 International 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 protocol in this International Standard is an OSI Application Layer protocol and uses the Remote Operations protocol defined in ISO/IEC 13712-3. The Remote Operations protocol assumes certain services are provided by the underlying layers, and these services are also assumed by the protocol for CSTA.

7 Security

This protocol also provides a mechanism for secure transmission of CSTA PDUs as defined in this International Standard.

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8 Association Management

The protocol in this International Standard operates 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 of the protocol.

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 }
```


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```
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), -- CSTA protocol version defined in ECMA-180
        versionTwo              (1), -- CSTA protocol version defined in ECMA-218
        versionThree            (2), -- CSTA protocol version defined in ECMA-285
        versionFour             (3), -- CSTA protocol version defined in ISO/IEC 18052
        versionFive             (4), -- Reserved for future use
        versionSix              (5), -- Reserved for future use
        versionSeven            (6), -- Reserved for future use
        versionEight            (7), -- Reserved for future use
        versionNine             (8), -- Reserved for future use
        versionTen              (9), -- Reserved for future use
        versionEleven           (10), -- Reserved for future use
        versionTwelve           (11), -- Reserved for future use
        versionThirteen         (12), -- Reserved for future use
        versionFourteen         (13), -- Reserved for future use
        versionFifteen          (14), -- Reserved for future use
        versionSixteen          (15)} -- 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),
                    makePredictiveCall      (18),
                    parkCall                (19),
                    reconnectCall           (20),
                    retrieveCall            (21),
                    singleStepConference    (22),
                    singleStepTransfer      (23),
                    transferCall            (24)}


CallAssociatedServices ::= BIT STRING
{                   associateData           (0),
```

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```
                    cancelTelephonyTones    (1),
                    generateDigits          (2),
                    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
{                   concatenateMessage      (0),
                    deleteMessage           (1),
                    playMessage             (2),
                    queryVoiceAttribute     (3),
                    recordMessage           (4),
                    reposition              (5),
                    resume                  (6),
                    review                  (7),
                    setVoiceAttribute       (8),
                    stop                    (9),
                    suspend                 (10),
                    synthesizeMessage       (11)}

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),
```


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```
        displayUpdated          (2),
        hookswitch              (3),
        lampMode                (4),
        messageWaiting          (5),
        microphoneGain          (6),
        microphoneMute          (7),
        ringerStatus            (8),
        speakerMute             (9),
        speakerVolume           (10)}

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

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

VoiceUnitEvents ::= BIT STRING
        {           play                (1),
                    record              (3),
                    review              (5),
                    stop                (0),
                    suspendPlay         (2),
                    suspendRecord       (4),
                    voiceAttributesChange   (6)     }

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

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

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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
```


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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) };

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

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

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


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

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

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

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

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

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},
       mediaCallCharacteristics          MediaCallCharacteristics          OPTIONAL}

PublicTON ::= CHOICE
       {          unknown                [0] IMPLICIT          IA5String,
                  international          [1] IMPLICIT          IA5String,
                  national               [2] IMPLICIT          IA5String,
```

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```
                    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-identifiers
```


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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 (SIZE(0..8))

LocalDeviceID ::= CHOICE
        {       staticID        DeviceID,
                dynamicID       [3] IMPLICIT    OCTET STRING (SIZE(0..32)) }

END  -- of CSTA-call-connection-identifiers
```

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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}        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
```


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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;

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 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) }
;

MonitorObject ::= CSTAObject;

MonitorCrossRefID ::= [APPLICATION 21] IMPLICIT OCTET STRING (SIZE(0..4))

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)        }

MonitorMediaClass ::= BIT STRING
{       voice                   (0),
        data                    (1),
        image                   (2),
        audio                   (4),
        other                   (3)}
```

--`,,```,,,,````-`-`,,`,,`,`,,`---

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

SnapshotDeviceResponseInfo ::= SEQUENCE
{       connectionIdentifier              ConnectionID,
        localCallState                    CallState,
        servicesPermitted                 [0] IMPLICIT ServicesPermitted         OPTIONAL,
        mediaServiceInfoList              [1] IMPLICIT DeviceMediaInfoList       OPTIONAL,
        mediaCallCharacteristics          [2] IMPLICIT MediaCallCharacteristics  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
        }

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
```


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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,
RouteingCrossRefID, SelectValue, SysStatRegisterID, SystemStatus, TerminatingConditions,
ForwardingType, ForwardDefault, AttributeInfo,
EncodingAlgorithm, ControlData, UserData, TelephonyTone;

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) };

AccountInfo ::= OCTET STRING (SIZE(0..32))

AgentID ::= OCTET STRING (SIZE(0..32))

AgentPassword ::= OCTET STRING (SIZE(0..32))

AgentState ::= ENUMERATED
{       agentNotReady          (0),
       agentNull              (1),
       agentReady             (2),
       agentBusy              (3),
       agentWorkingAfterCall  (4)}

AuthCode ::= OCTET STRING (SIZE(0..32))

CorrelatorData ::= OCTET STRING (SIZE(0..32))

IOCrossRefID ::= CHOICE
{       switchProvided         [0] OCTET STRING (SIZE(0..4)),
       computerProvided       [1] OCTET STRING (SIZE(0..4))}

IORegisterReqID ::= OCTET STRING (SIZE(0..4))

MessageID ::=  OCTET STRING

ParticipationType ::= ENUMERATED
{       silent     (0),
       active     (1)        }

RouteRegisterReqID ::=  OCTET STRING (SIZE(0..4))

RouteingCrossRefID ::= [APPLICATION 24] IMPLICIT OCTET STRING (SIZE(0..4))

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    }
```

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```
SysStatRegisterID ::= OCTET STRING (SIZE(0..4))

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,
        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,
```


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```
        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)}


CurrentState ::= ENUMERATED
{       stop                    (0),
        play                    (1),
        record                  (2),
        suspendPlay             (3),
        suspendRecord           (4),
        review                  (5)}

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

UserData ::= [APPLICATION 29] OCTET STRING (SIZE(0..256))

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),
```

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```
        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),
```


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```
        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)}

END  -- of CSTA-device-feature-types
```

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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
```


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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
```

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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,
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),
        priorityCall            (1),
        maintainanceCall        (2),
        directAgent             (3),
        assistCall              (4),
        voiceUnitCall           (5)}

CallQualifyingData ::= OCTET STRING (SIZE(0..32))

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),
                        callCleared                     (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),
```


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```
                        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))  }


END  -- of CSTA-call-control
```

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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, FilterThreshold, ServiceCrossRefID,
DeviceCategory, GroupDeviceAttributes, NamedDeviceTypes, ACDModels, AgentLogOnModels,
AppearanceType, TransAndConfSetup, MediaServiceCapsList, LogDevServList, LogDevEvtsList;

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 (SIZE(0..4))

-- 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}

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
{       getLogicalDeviceInformation     [0] IMPLICIT GetLogicalDeviceInformation       OPTIONAL,
        getPhysicalDeviceInformation    [1] IMPLICIT GetPhysicalDeviceInformation      OPTIONAL,
      getSwitchingFunctionCaps        NULL,
        getSwitchingFunctionDevices     [2] IMPLICIT GetSwitchingFunctionDevices       OPTIONAL,
        switchingFunctionDevices        [3] IMPLICIT  SwitchingFunctionDevices         OPTIONAL}

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),
```


--`,,```,,,,````-`-`,,`,,`,`,,`---
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```
        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),
        requestedDeviceCategoryOtherGroup       ( 5),
        requestedDeviceCategoryNetwInterface    ( 6),
        requestedDeviceCategoryPark             ( 7),
        requestedDeviceCategoryRouteingDevice   ( 8),
        requestedDeviceCategoryStation          ( 9),
        requestedDeviceCategoryVoiceUnit        (10),
        requestedDeviceCategoryOther            (11),
        privateData                             (12),
        privateDataInAck                        (13)}

SwitchingFunctionDevices ::= BIT STRING
{       segmentID                      ( 0),
        deviceListDeviceCategory       ( 1),
        deviceListNamedDeviceTypes     ( 2),
        deviceListDeviceAttributes     ( 3),
        deviceListDeviceModelName      ( 4),
        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}

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
```

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```
        privateDataInAck                                (10)}   -- optional parameters

SystemRegister ::= BIT STRING
{       requestTypesSystemStatus                    ( 0),   -- optional parameters
        requestTypesRequestSystemStatus             ( 1),   -- optional parameters
        requestTypesSwitchingFunctionCapsChanged    ( 2),   -- optional parameters
        requestTypesSwitchingFuncionDevicesChanged  ( 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

MonitoringServList ::= SEQUENCE
```


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```
{       changeMonitorFilter             [ 0] IMPLICIT ChangeMonitorFilter             OPTIONAL,
        monitorStart                    [ 1] IMPLICIT MonitorStart                    OPTIONAL,
        monitorStop                     [ 2] IMPLICIT MonitorStop                     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
        monitorExistingCallsInAck               (10),       -- optional parameters
        privateDataInAck                        (11),       -- optional parameters
        callIDOnly                              (12),       -- miscellaneous characteristics
        swDomainDefaultForMonitorTypeIsDevice   (13)}       -- miscellaneous characteristics

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

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
        privateDataInAck                            (11),   -- optional parameters
        callIDOnly                                  (12),   -- miscellaneous characteristics
        reportsWithSnapsCallData                    (13)}   -- 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
```

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```
        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

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
        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,
        makePredictiveCall      [18] IMPLICIT MakePredictiveCall        OPTIONAL,
        parkCall                [19] IMPLICIT ParkCall                  OPTIONAL,
        reconnectCall           [20] IMPLICIT ReconnectCall             OPTIONAL,
        retrieveCall            [21] IMPLICIT RetrieveCall              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
```


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```
        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
        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

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
```

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```
        userData                        ( 7),   -- 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
        callCharacteristicsPriorityCall                 ( 7),   -- optional parameters
        callCharacteristicsMaintenanceCall              ( 8),   -- optional parameters
        callCharacteristicsDirectAgent                  ( 9),   -- optional parameters
        callCharacteristicsAssistCall                   (10),   -- optional parameters
        callCharacteristicsVoiceUnitCall                (11),   -- optional parameters
        mediaCallCharacteristics                        (12),   -- optional parameters
        callingConnectionInfo                           (13),   -- optional parameters
        flowDirectionTransmit                           (14),   -- optional parameters
        flowDirectionReceive                            (15),   -- optional parameters
        flowDirectionTransmitAndReceive                 (16),   -- optional parameters
        numberOfChannels                                (17),   -- optional parameters
        consultOptionConsultOnly                        (18),   -- optional parameters
        consultOptionTransferOnly                       (19),   -- optional parameters
        consultOptionConferenceOnly                     (20),   -- optional parameters
        consultOptionUnrestricted                       (21),   -- 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
        privateData                     ( 7),   -- optional parameters
        privateDataInAck                ( 8),   -- optional parameters
        deviceIDOnly                    ( 9),   -- misc characteristics
        ackModelMultiStep               (10)}   -- misc characteristics

DialDigits ::= BIT STRING
{       correlatorData                  ( 0),   -- optional parameters
        privateData                     ( 1),   -- optional parameters
```


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```
        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
```

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```
        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
        callCharacteristicsPriorityCall         (10),   -- optional parameters
        callCharacteristicsMaintenanceCall      (11),   -- optional parameters
        callCharacteristicsDirectAgent          (12),   -- optional parameters
        callCharacteristicsAssistCall           (13),   -- optional parameters
        callCharacteristicsVoiceUnitCall        (14),   -- optional parameters
        mediaCallCharacteristics                (15),   -- optional parameters
        callingConnectionInfo                   (16),   -- 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

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
        callCharacteristicsPriorityCall                         (21),   -- optional parameters
        callCharacteristicsMaintenanceCall                      (22),   -- optional parameters
        callCharacteristicsDirectAgent                          (23),   -- optional parameters
        callCharacteristicsAssistCall                           (24),   -- optional parameters
        callCharacteristicsVoiceUnitCall                        (25),   -- 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
```


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```
        reservesCallingDevice                                   (33),   -- misc characteristics
        ackModelMultiStep                                       (34)}   -- misc characteristics

ParkCall ::= BIT STRING
{       hold                            ( 0),   -- initial states
        connected                       ( 1),   -- initial states
        correlatorData                  ( 2),   -- 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

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
        privateData                             ( 4),   -- optional parameters
        connectionParameterInAck                ( 5),   -- optional parameters
        endpointDeviceID                        ( 6),   -- optional parameters
        resultionConnectionInformation          ( 7),   -- optional parameters
        transferredCollInfoInAck                ( 8),   -- optional parameters
        privateDataInAck                        ( 9),   -- optional parameters
        deviceIDOnly                            (10),   -- misc characteristics
        multipleDevices                         (11),   -- misc characteristics
        ackModelMultiStep                       (12)}   -- 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
```

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```
        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
        callLinkageData                 ( 7),   -- optional parameters
        privateData                     ( 6)}   -- 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
        privateData                                     ( 7)}   -- 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
```


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```
        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
        privateData                         (19)}   -- 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
        privateData                         ( 8)}   -- 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
        privateData                         ( 5)}   -- 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
        privateData                         ( 9),   -- optional parameters
        sendsDivertedToAll                  (10)}   -- 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
        privateData                         ( 8)}   -- 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
        privateData                         ( 8),   -- optional parameters
        callIDOnly                          ( 9)}   -- miscellaneous characteristics

Held ::= BIT STRING
{       correlatorData                      ( 0),   -- optional parameters
        servicesPermitted                   ( 1),   -- optional parameters
```

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```
        mediaCallCharacteristics              ( 2),   -- optional parameters
        callCharacteristics                   ( 3),   -- optional parameters
        heldConnectionInfo                    ( 4),   -- optional parameters
        callLinkageData                       ( 6),   -- optional parameters
        privateData                           ( 5)}   -- 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
        privateData                           (42)}   -- 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
```


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```
        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
        privateData                       (32)}       -- 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
        privateData                           ( 8)}   -- 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
        privateData                           ( 7)}   -- 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
        privateData                           ( 9)}   -- 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
        privateData                           ( 5)}   -- 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
        privateData                           ( 6)}   -- optional parameters
```

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```
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
        privateData                                     (20)}   -- optional parameters

CallAssociatedServList ::= SEQUENCE
{       associateData                   [0] IMPLICIT AssociateData              OPTIONAL,
        cancelTelephonyTones            [1] IMPLICIT CancelTelephonyTones       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
        privateData                             ( 4),   -- optional parameters
        privateDataInAck                        ( 5),   -- optional parameters
        deviceIDOnly                            ( 6),   -- misc characteristics
        rejectsRequestsWithOldConnectionID      ( 7),   -- misc characteristics
        ackModelMultiStep                       ( 8)}   -- misc characteristics

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

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
```


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```
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
```

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```
        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
```

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```
{       callingDevice                           ( 0),   -- optional parameters
        accountInfo                             ( 1),   -- optional parameters
        authorisatinonCode                      ( 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
        privateData                             ( 8),   -- optional parameters
        genCallInfoForOutdatedConnID            ( 9)}   -- misc characteristics

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
```

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```
        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
```


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```
        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
```

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```
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
        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
```


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```
        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
        calledDevice                            ( 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
        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                        ( 1),   -- optional parameters
        ackModelMultiStep                       ( 2)}   -- misc characteristics
```

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```
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
```


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```
        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
```

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```
        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
```

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```
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 parameter
lampBrightnessNormal        (101),   -- optional parameter
lampBrightnessDim           (102),   -- optional parameter
lampBrightnessBright        (103),   -- optional parameter
lampColorNoColor            (104),   -- optional parameter
lampColorRed                (105),   -- optional parameter
lampColorYellow             (106),   -- optional parameter
lampColorGreen              (107),   -- optional parameter
lampColorBlue               (108),   -- optional parameter
lampColorReserved           (109),   -- optional parameter
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
```

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```
        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
```

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```
        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

PhysDevEvtsList ::= 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 parameter
```

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```
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
```


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```
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 parameter
lampBrightnessNormal        (101),   -- optional parameter
lampBrightnessDim           (102),   -- optional parameter
lampBrightnessBright        (103),   -- optional parameter
lampColorNoColor            (104),   -- optional parameter
lampColorRed                (105),   -- optional parameter
lampColorYellow             (106),   -- optional parameter
lampColorGreen              (107),   -- optional parameter
lampColorBlue               (108),   -- optional parameter
lampColorReserved           (109),   -- optional parameter
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
```

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```
        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
```


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```
        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,
        getDoNotDisturb         [ 8] IMPLICIT GetDoNotDisturb               OPTIONAL,
        getForwarding           [ 9] IMPLICIT GetForwarding                 OPTIONAL,
        getLastNumberDialed     [10] IMPLICIT GetLastNumberDialed           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,
        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
```

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```
        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

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

GetRouteingMode ::= BIT STRING
```


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```
{       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
```

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```
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,
        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
```


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```
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)}

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

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

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

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```
        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
```


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```
        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
```

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```
        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),
        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
{       concatenateMsg          [ 0] IMPLICIT ConcatenateMsg    OPTIONAL,
        deleteMsg               [ 1] IMPLICIT DeleteMsg         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,
        setVoiceAttrib          [ 8] IMPLICIT SetVoiceAttrib    OPTIONAL,
        stop                    [ 9] IMPLICIT Stop              OPTIONAL,
        suspend                 [10] IMPLICIT Suspend           OPTIONAL,
        synthesizeMsg           [11] IMPLICIT SynthesizeMsg     OPTIONAL}
```


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

RecordMsg ::= BIT STRING
{       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
```

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```
        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
        duration                ( 1),   -- optional parameters
        privateData             ( 2),   -- optional parameters
        privateDataInAck        ( 3)}   -- optional parameters

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

SetVoiceAttrib::= BIT STRING
{       currentSpeed                        ( 0),   -- optional parameters
        currentVolumeAbs                    ( 1),   -- optional parameters
        currentVolumeInc                    ( 2),   -- 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

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

Suspend ::= BIT STRING
{       message                 ( 0),   -- 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
{       play                    [ 0] IMPLICIT Play                      OPTIONAL,
        record                  [ 1] IMPLICIT Record                    OPTIONAL,
        review                  [ 2] IMPLICIT ReviewEvent               OPTIONAL,
        stop                    [ 3] IMPLICIT StopEvent                 OPTIONAL,
        suspendPlay             [ 4] IMPLICIT SuspendPlay               OPTIONAL,
        suspendRecord           [ 5] IMPLICIT SuspendRecord             OPTIONAL,
        voiceAttribChanged      [ 6] IMPLICIT VoiceAttribChanged        OPTIONAL}

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

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
```


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

StopEvent ::= 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

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

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

VoiceAttribChanged ::= BIT STRING
{       playVolumeAbs           ( 0), -- optional parameters
        playVolumeInc           ( 1), -- optional parameters
        recordGain              ( 2), -- optional parameters
        speed                   ( 3), -- optional parameters
        currentPosition         ( 4), -- optional parameters
        cause                   ( 5), -- optional parameters
        privateData             ( 6)} -- 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 parameter
        recordCreationTime                      ( 4),   -- optional parameter
        callingDevice                           ( 5),   -- optional parameter
        calledDevice                            ( 6),   -- optional parameter
        assocCallingDevice                      ( 7),   -- optional parameter
        assocCalledDevice                       ( 8),   -- optional parameter
        netwCallingDevice                       ( 9),   -- optional parameter
        netwCalledDevice                        (10),   -- optional parameter
        callCharacteristics                     (11),   -- optional parameter
        mediaCallCharacteristics                (12),   -- optional parameter
        chargedDeviceOperator                   (13),   -- optional parameter
```

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```
        chargedDeviceNonOperator                (14),   -- optional parameters
        recordedCall                            (15),   -- optional parameters
        nodeNumberArea0                         (16),   -- optional parameters
        nodeNumberArea1                         (17),   -- optional parameters
        nodeNumberArea2                         (18),   -- optional parameters
        tarifTable                              (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
        suppServiceInfoConsultationCall         (35),   -- optional parameters
        suppServiceInfoTransferCall             (36),   -- optional parameters
        suppServiceInfoCallCompletion           (37),   -- optional parameters
        suppServiceInfoCallForwarding           (38),   -- optional parameters
        suppServiceInfoCallDiversion            (39),   -- optional parameters
        suppServiceInfoConferencing             (40),   -- optional parameters
        suppServiceInfoIntrusion                (41),   -- optional parameters
        suppServiceInfoUserUserInfo             (42),   -- optional parameters
        suppServiceInfoOther                    (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

VendorSpecificServList ::= SEQUENCE
{       escapeRegister              [ 0] IMPLICIT EscapeRegister            OPTIONAL,
```


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```
        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
{
dialableDigitsAsterix           ( 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),
deviceNumber                    (30)}

SwDomainFeatures ::= BIT STRING
```

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```
{       isForwardingBefore                      ( 0),
        isForwardingAfter                       ( 1),
        swFunctionDefaultSettings               ( 2),
        userSpecific                            ( 3),
        userSpecificDefaultFowardingType        ( 4),
        userSpecificDefaultForwardDestination   ( 5),
        negativeAcknowledgment                  ( 6),
        supportFailedWithAssConn                ( 7),
        supportFailedWithoutAssConn             ( 8),
        supportFailedWithAssConnNotReportet     ( 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)}

FilterThreshold ::= SEQUENCE
{       getLogicalDeviceInformation     INTEGER,
        getPhysicalDeviceInformation    INTEGER,
        getSwitchingFunctionCaps        INTEGER,
        getSwitchingFunctionDevices     INTEGER,
        switchingFunctionDevices        INTEGER,
        changeSystemStatusFilter        INTEGER,
```


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```
    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,
```

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```
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,
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,
```

--`,,```,,,,````-`-`,,`,,`,`,,`---

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```
        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),
        other                   ( 7)}

GroupDeviceAttributes ::= BIT STRING
{       acd     ( 0),
        hunt    ( 1),
        pick    ( 2),
        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),
```

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```
                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 (SIZE(0..4))

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

CDRInfo ::= SEQUENCE OF CDRInformationItem

CDRInformationItem ::= SEQUENCE
{       recordNumber            INTEGER (1..128)                        OPTIONAL,
        recordCreationTime      TimeInfo,
        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,
```

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```
        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
```


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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
```

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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
```


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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 (SIZE(0..4))

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),
       cstaIVRScript1                               ( 9),
       cstaIVRScript2                               (10),
       cstaIVRScript3                               (11),
       cstaIVRScript4                               (12),
       cstaIVRScript5                               (13),
       cstaIVRScript6                               (14),
       cstaIVRScript7                               (15),
       cstaIVRScript8                               (16),
       cstaIVRScript9                               (17),
       cstaIVRScript10                              (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 (SIZE(0..64))

ConnectionInformation ::= SEQUENCE
{      flowDirection          ENUMERATED
                              {          transmit               (0),
                                         receive                (1),
                                         transmitAndReceive (2)
                              } OPTIONAL,
       numberOfChannels       INTEGER    DEFAULT 1   }

ConnectionMode ::= ENUMERATED
{      consultationConference             (0),
       consultationConferenceHold         (1),
```


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```
        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,
        switchingSubDomainCCIEType      [3] IMPLICIT ENUMERATED {
                                                        isdn        (0),
                                                        atm         (1),
                                                        isoEthernet (2),
                                                        rsvp        (3),
                                                        other       (4)
                                                        } 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)}

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 (SIZE(0..4))

ButtonID ::= OCTET STRING (SIZE(0..4))

CharacterSet ::= ENUMERATED
{       ascii           (0),
        unicode         (1),
        proprietary     (2)}

DisplayID ::= OCTET STRING (SIZE(0..4))

HookswitchID ::= OCTET STRING (SIZE(0..4))

LampBrightness ::= ENUMERATED
{       unspecified     (0),
        dim             (1),
        bright          (2)}
```


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

LampID ::= OCTET STRING (SIZE(0..4))

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 (SIZE(0..4))

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
```

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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 (SIZE(0..4))

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
-- a general list of cause codes
--                                      Present in  Added in    Added in
--                                      Version 1   Version 2   Version 3
{       aCDBusy                                                 (57),
        aCDForward                                              (58),
        aCDSaturated                                            (59),
        activeParticipation             (1),
        alertTimeExpired                                        (60),
        alternate                       (2),
        autoWork                                                (61),
        blocked                                     (35),
        busy                            (3),
        callBack                        (4),
        callCancelled                   (5),
        callForward                     (9),
        callForwardImmediate            (6),
        callForwardBusy                 (7),
        callForwardNoAnswer             (8),
        callNotAnswered                 (10),
        callPickup                      (11),
        campOn                          (12),
        campOnTrunks                                            (62),
        characterCountReached                       (36),
        conference                                              (63),
        consultation                                (37),
        destDetected                                            (64),
        destNotObtainable               (13),
        destOutOfOrder                                          (65),
        distributed                                 (38),
        distributionDelay                                       (66),
        doNotDisturb                    (14),
        dTMFDigitDetected                           (39),
        durationExceeded                            (40),
        endOfMessageDetected                        (41),
        enteringDistribution                        (42),
        forcedPause                                 (43),
        forcedTransition                                        (67),
        incompatibleDestination         (15),
        intrude                                                 (68),
        invalidAccountCode              (16),
        invalidNumberFormat                                     (69),
        joinCall                                                (70),
        keyOperation                    (17),
        keyOperationInUse                                       (71),
        lockout                         (18),
        maintenance                     (19),
        makeCall                                    (44),
        makePredictiveCall                                      (72),
        messageDurationExceeded                                 (73),
        messageSizeExceeded                         (45),
        multipleAlerting                                        (74),
        multipleQueuing                                         (75),
        networkCongestion               (20),
        networkDialling                                         (76),
        networkNotObtainable            (21),
        networkOutOfOrder                                       (77),
```

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```
        networkSignal                                   (46),
        newCall                         (22),
        nextMessage                                     (47),
        noAvailableAgents               (23),
        normal                                                  (78),
        normalClearing                                  (48),
        noSpeechDetected                                (49),
        notAvaliableBearerService                               (79),
        notSupportedBearerService                               (80),
        numberChanged                                   (50),
        numberUnallocated                                       (81),
        overflow                        (26),
        override                        (24),
        park                            (25),
        queueCleared                                            (82),
        recall                          (27),
        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)}
--      voiceUnitInitiator              (34) }
--      *** note that the voiceUnitOriginator (34) is no longer used (commented out) ***

END  -- of event-cause-definitions
```


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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),
```

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```
        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),
```


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```
        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),
        connectionReservoationOutOfRange                        (164),
        consultPurposeOutOfRange                                (165),
        correlatorDataOutOfRange                                (166),
        delayToleranceOutOfRange                                (167),
        destinationDetectOutOfRange                             (168),
        digitModeOutOfRange                                     (169),
```

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```
        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),
        routeingAlgorithmOutOfRange                             (188),
        speakerMuteOutOfRange                                   (189),
        speakerVolumeOutOfRange                                 (190),
        switchingCcittTypeOutOfRange                            (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),
```


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```
        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)}

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
```

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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)
                        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) }
```


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```
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) }
AgentLoggedOnEvent FROM CSTA-agent-logged-on-event
       { iso( 1) identified-organization( 3) icd-ecma( 321)
                    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) }
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)
                    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)
```

-`,,```,,,,````-`-`,,`,,`,`,,`---
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```
          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)
                    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) }
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
}
```


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```
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,
        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,
```

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```
        autoWorkMode            [ 7] IMPLICIT AutoWorkModeEvent,
        callBack                [ 8] IMPLICIT CallBackEvent,
        callBackMessage         [ 9] IMPLICIT CallBackMessageEvent,
        callerIDStatus          [10] IMPLICIT CallerIDStatusEvent,
        doNotDisturb            [11] IMPLICIT DoNotDisturbEvent,
        forwarding              [12] IMPLICIT ForwardingEvent,
        routeingMode            [13] IMPLICIT RouteingModeEvent}

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

VoiceUnitEvents ::= CHOICE
{       play                    [ 0] IMPLICIT PlayEvent,
        record                  [ 1] IMPLICIT RecordEvent,
        review                  [ 2] IMPLICIT ReviewEvent,
        stop                    [ 3] IMPLICIT StopEvent,
        suspendPlay             [ 4] IMPLICIT SuspendPlayEvent,
        suspendRecord           [ 5] IMPLICIT SuspendRecordEvent,
        voiceAttributesChange   [ 6] IMPLICIT VoiceAttributesChangeEvent}

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

END  -- of CSTA-event-report-definitions
```


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11 Capability exchange services

11.1 Services

11.1.1 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
        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  CSTACommonArgumentsOPTIONAL}

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,
```

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```
        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,
        extensions                      CSTACommonArguments                OPTIONAL}

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


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11.1.2 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 sta-
tion,
        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
```

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11.1.3 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) }
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) }
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,
SwAppearanceTypes, SwDomainFeatures, SystemStatusServList, TimeStampMode
        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  CSTACommonArguments,
        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,
```


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```
        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,
        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,
        extensions                      CSTACommonArguments                    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)}

DynamicFeatureSupported ::= ENUMERATED
{       none        (0),
        all         (1),
        some        (2)}

CallLinkageOptions ::= BIT STRING
{       callLinkageFeatureSupported         (0),
        threadLinkageFeatureSupported       (1)         }

AgentLogOnModels ::= BIT STRING
{       logOnACDDevice                      (0),
```

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```
        logOnACDGroupExplOneStep           (1),
        logOnACDGroupExplTwoSteps          (2),
        logOnACDGroupImplOneStep           (3)}

AgentStateModels ::= BIT STRING
{       multiState                         (0),
        multiStateSemiIndependentLinked    (1),
        agentOriented                      (2)}

ConnectionView ::= ENUMERATED
{       fixed       (0),
        local       (1)}

ServEvtsList ::= 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,
        callControlEvtsList     [ 5] IMPLICIT CallControlEvtsList              OPTIONAL,
        callAssociatedServList  [ 6] IMPLICIT CallAssociatedServList           OPTIONAL,
        callAssociatedEvtsList  [ 7] IMPLICIT CallAssociatedEvtsList           OPTIONAL,
        mediaServList           [ 8] IMPLICIT MediaServList                    OPTIONAL,
        mediaEvtsList           [ 9] IMPLICIT MediaEvtsList                    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}

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
```


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11.1.4 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),
        groupACD                ( 1),
        groupHunt               ( 2),
        groupPick               ( 3),
        groupOther              ( 4),
        networkInterface        ( 5),
        park                    ( 6),
        routeingDevice          ( 7),
        station                 ( 8),
        voiceUnit               ( 9),
        other                   (10)}

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

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11.1.5 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}

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


END  -- of CSTA-switching-function-devices
```


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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
```

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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
```


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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
```

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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
```


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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
```

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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
```


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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
```

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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
```


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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) }
CSTACommonArguments 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             CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-change-monitor-filter
```

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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) }
CSTACommonArguments 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                      CSTACommonArguments                 OPTIONAL}

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

END  -- of CSTA-monitor-start
```


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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
```

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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) }
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             CSTACommonArguments     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,
```


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```
        callLinkageData                 [2] IMPLICIT CallLinkageData       OPTIONAL,
        extensions                      CSTACommonArguments                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) }
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) };

snapshotDevice  OPERATION ::=
{       ARGUMENT    SnapshotDeviceArgument
        RESULT      SnapshotDeviceResult
        ERRORS      {universalFailure}
        CODE        local: 74
}

SnapshotDeviceArgument ::=
        SEQUENCE
        {snapshotObject DeviceID,
        extensions     CSTACommonArguments     OPTIONAL}

SnapshotDeviceResult ::=
        SEQUENCE
        {crossRefIDorSnapshotData
                    CHOICE
                    {serviceCrossRefID      ServiceCrossRefID,
                    snapshotData            SnapshotDeviceData},
        extensions  CSTACommonArguments     OPTIONAL}


END  -- of CSTA-snapshot-device
```


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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
```

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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                 OPTIONAL,
         lastSegment            BOOLEAN,
         snapshotData           SnapshotDeviceData,
         extensions             CSTACommonArguments     OPTIONAL}


END  -- of CSTA-snapshot-device-data
```


--`,,```,,,,````-`-`,,`,,`,`,,`---
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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
```

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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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-alternate-call
```


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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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-answer-call
```

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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) }
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     OPTIONAL,
                extensions              CSTACommonArguments     OPTIONAL}

CallBackResult ::=
        SEQUENCE
        {       targetDevice    DeviceID                OPTIONAL,
                extensions      CSTACommonArguments     OPTIONAL}

END  -- of CSTA-call-back-call-related
```


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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
```

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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
```


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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) }
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,
                extensions      CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-clear-call
```

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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) }
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,
         extensions             CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-clear-connection
```


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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) }
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,
        extensions             CSTACommonArguments                OPTIONAL}

END  -- of CSTA-conference-call
```

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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 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) };

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,
        extensions                  CSTACommonArguments                     OPTIONAL}

ConsultationCallResult ::= SEQUENCE
{       initiatedCall               ConnectionID,
        mediaCallCharacteristics    [0] IMPLICIT MediaCallCharacteristics   OPTIONAL,
        initiatedCallInfo           [1] IMPLICIT ConnectionInformation      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) }
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,
                correlatorData          CorrelatorData          OPTIONAL,
                userData                UserData                OPTIONAL,
                extensions              CSTACommonArguments     OPTIONAL}

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

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
```


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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) }
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,
                extensions      CSTACommonArguments     OPTIONAL}

END  -- of CSTA-directed-pickup-call
```

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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) }
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) };

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      CSTACommonArguments     OPTIONAL}

GroupPickupCallResult ::=
        SEQUENCE
        {       pickedCall      ConnectionID            OPTIONAL,
                pickedCallInfo  ConnectionInformation   OPTIONAL,
                extensions      CSTACommonArguments     OPTIONAL}

END  -- of CSTA-group-pickup-call
```


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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
```

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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) }
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       DEFAULT active,
        userData                UserData                OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

IntrudeCallResult ::= SEQUENCE
{       conferencedCall         ConnectionID            OPTIONAL,
        conferencedCallInfo     ConnectionInformation   OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

END  -- of CSTA-intrude-call
```


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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) }
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) }
AutoOriginate 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              CSTACommonArguments                 OPTIONAL}

JoinCallResult ::= SEQUENCE
{       conferencedCall         ConnectionID,
        conferencedCallInfo     ConnectionInformation   OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

END  -- of CSTA-join-call
```

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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 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) }
;

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,
        extensions                  CSTACommonArguments                     OPTIONAL}

MakeCallResult ::= SEQUENCE
{       callingDevice           ConnectionID,
        mediaCallCharacteristics [0] IMPLICIT MediaCallCharacteristics      OPTIONAL,
        initiatedCallInfo        [1] IMPLICIT ConnectionInformation         OPTIONAL,
        extensions              CSTACommonArguments                         OPTIONAL}

END  -- of CSTA-make-call
```


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15.1.19 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 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) };

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,
        extensions              CSTACommonArguments                 OPTIONAL}

MakePredictiveCallResult ::= SEQUENCE
{       initiatedCall           ConnectionID,
        initiatedCallInfo       ConnectionInformation               OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}


SignallingDetection ::= SEQUENCE
{       signallingCondition                SignallingCondition,
        signallingConditionsAction         SignallingConditionsAction}

SignallingCondition ::= ENUMERATED
{       callDelivered           (0),
```

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```
        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
```


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15.1.20 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) }
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,
                extensions              CSTACommonArguments     OPTIONAL}

ParkCallResult ::=
        SEQUENCE
        {       parkedTo        ConnectionID            OPTIONAL,
                extensions      CSTACommonArguments     OPTIONAL}

END  -- of CSTA-park-call
```

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15.1.21 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
```


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15.1.22 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) }
CSTACommonArguments 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              CSTACommonArguments OPTIONAL}

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

END  -- of CSTA-retrieve-call
```

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15.1.23 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) }
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) };

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,
         extensions             CSTACommonArguments             OPTIONAL}


SingleStepConfResult ::=
        SEQUENCE
        {       conferencedCall ConnectionID,
                conferencedCallInfo     ConnectionInformation   OPTIONAL,
                extensions              CSTACommonArguments     OPTIONAL}

END  -- of CSTA-single-step-conference
```


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15.1.24 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) }
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,
         tranferredTo           DeviceID,
         accountCode            [0] IMPLICIT AccountInfo        OPTIONAL,
         authCode               [1] IMPLICIT AuthCode           OPTIONAL,
         correlatorData         [2] IMPLICIT CorrelatorData     OPTIONAL,
         userData               UserData                        OPTIONAL,
         extensions             CSTACommonArguments             OPTIONAL}

SingleStepTransResult ::= SEQUENCE
        {transferredCall        ConnectionID,
         connections            [0] IMPLICIT ConnectionList             OPTIONAL,
         transferredCallInfo    [1] IMPLICIT ConnectionInformation      OPTIONAL,
         extensions             CSTACommonArguments                     OPTIONAL}

END  -- of CSTA-single-step-transfer
```

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15.1.25 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) }
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,
       extensions              CSTACommonArguments                OPTIONAL}

END  -- of CSTA-transfer-call
```


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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) }
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,
        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) }
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,
                extensions              CSTACommonArguments                     OPTIONAL}

END  -- of CSTA-call-cleared-event
```


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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) }
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,
        extensions                      [5] IMPLICIT CSTACommonArguments        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( 129) }
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) }
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,
        extensions              CSTACommonArguments                     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) }
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,
                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) }
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,
                extensions              CSTACommonArguments             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) }
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,
        extensions              CSTACommonArguments                     OPTIONAL}

END  -- of 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) }
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,
                extensions              CSTACommonArguments             OPTIONAL}

END  -- of CSTA-established-event
```


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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) }
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,
                establishedConnectionInfo [4] IMPLICIT ConnectionInformation    OPTIONAL,
                callLinkageData         [5] IMPLICIT CallLinkageData    OPTIONAL,
                extensions              CSTACommonArguments             OPTIONAL}

END  -- of CSTA-failed-event
```

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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( 129) }
CallCharacteristics, CallLinkageData, ServicesPermitted 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) };

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,
                extensions              CSTACommonArguments                     OPTIONAL}

END  -- of CSTA-held-event
```


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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) }
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,
                extensions              CSTACommonArguments             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) }
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,
                extensions              CSTACommonArguments             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) }
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,
                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) }
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) }
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,
       extensions                  CSTACommonArguments                     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) }
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) }
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,
                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) }
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,
                extensions              CSTACommonArguments             OPTIONAL}

END  -- of CSTA-retrieved-event
```


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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) }
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,
                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,
                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( 129) }
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) }
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,
                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) }
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,
        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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-cancel-telephony-tones
```


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16.1.3 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
```

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16.1.4 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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-generate-telephony-tones
```


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16.1.5 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              CSTACommonArgumentsOPTIONAL}

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

END  -- of CSTA-send-user-information
```

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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) }
CallLinkageDataList, CallQualifyingData, ServicesPermitted 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) };


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,
        extensions              CSTACommonArguments                 OPTIONAL}

END -- of CSTA-call-information-event
```


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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
```

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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
```


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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
```

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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-charging-event
```


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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) }
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,
        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
```


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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-service
```

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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-service
```


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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,
        actualRouteingMediaClassMediaClass              OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

END  -- of CSTA-route-register
```

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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) }
CSTACommonArguments 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             CSTACommonArguments     OPTIONAL}

END  -- of CSTA-route-register-abort
```


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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
```

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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
```


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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
```

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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
```


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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) }
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,
        extensions                      CSTACommonArguments                     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) }
CSTACommonArguments 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             CSTACommonArguments                     OPTIONAL}

END  -- of CSTA-route-select-request
```


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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
```

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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) }
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) };

buttonPress OPERATION ::=
{      ARGUMENT    ButtonPressArgument
       RESULT      ButtonPressResult
       ERRORS      {universalFailure}
       CODE        local: 260
}

ButtonPressArgument ::= SEQUENCE
{      device      DeviceID,
       button      ButtonID,
       extensions  CSTACommonArguments OPTIONAL}

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

END -- of CSTA-button-press
```


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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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

GetAuditoryApparatusInformationResult ::= SEQUENCE
{       auditoryApparatusList   AuditoryApparatusList,
        extensions              CSTACommonArguments     OPTIONAL}

END -- of CSTA-get-auditory-apparatus-information
```

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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) }
CSTACommonArguments 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                OPTIONAL,
       extensions  CSTACommonArguments     OPTIONAL}

GetButtonInformationResult ::= SEQUENCE
{      buttonList  ButtonList,
       extensions  CSTACommonArguments     OPTIONAL}

ButtonList ::= SEQUENCE OF SEQUENCE
{      button                          ButtonID,
       buttonLabel                     [0] IMPLICIT IA5String  OPTIONAL,
       buttonLabelSettable             [1] IMPLICIT BOOLEAN    OPTIONAL,
       buttonFunction                  [2] IMPLICIT IA5String  OPTIONAL,
       buttonAssociatedNumber          [3] IMPLICIT DeviceID   OPTIONAL,
       buttonAssociatedNumberSettable  [4] IMPLICIT BOOLEAN    OPTIONAL,
       buttonPressIndicator            [5] IMPLICIT BOOLEAN    OPTIONAL,
       lampList                        SEQUENCE OF LampID      OPTIONAL}

END -- of CSTA-get-button-information
```


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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               OPTIONAL,
        extensions  CSTACommonArguments     OPTIONAL}

GetDisplayResult ::= SEQUENCE
{       displayList             DisplayList,
        extensions              CSTACommonArguments     OPTIONAL}

DisplayList ::= SEQUENCE OF SEQUENCE
{       displayID                           DisplayID,
        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}

END -- of CSTA-get-display
```

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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
```


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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                  OPTIONAL,
        extensions  CSTACommonArguments     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
```

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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) }
CSTACommonArguments 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}
       CODE        local: 266
}

GetLampModeArgument ::= SEQUENCE
{      device      DeviceID,
       lamp        LampID                 OPTIONAL,
       extensions  CSTACommonArguments    OPTIONAL}

GetLampModeResult ::= SEQUENCE
{      lampModeList           LampModeList,
       lamp                   LampID                 OPTIONAL,
       extensions             CSTACommonArguments    OPTIONAL}

LampModeList ::= SEQUENCE OF SEQUENCE
{      lamp                   LampID,
       lampMode               LampMode,
       lampBrightness         [0] IMPLICIT LampBrightness        OPTIONAL,
       lampColor              [1] IMPLICIT LampColor             OPTIONAL,
       button                 [2] IMPLICIT ButtonID              OPTIONAL}

END -- of CSTA-get-lamp-mode
```


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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) }
CSTACommonArguments 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  CSTACommonArguments     OPTIONAL}

GetMessageWaitingIndicatorResult ::= SEQUENCE
{       messageWaitingOn        BOOLEAN,
        deviceForMessage        DeviceID                OPTIONAL,
        lampIsPresent           BOOLEAN                 OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

END -- of CSTA-get-message-waiting-indicator
```

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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
```


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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
```

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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) }
CSTACommonArguments 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               OPTIONAL,
       extensions  CSTACommonArguments    OPTIONAL}

GetRingerStatusResult ::= SEQUENCE
{      ringerStatusList       RingerStatusList,
       extensions             CSTACommonArguments    OPTIONAL}

RingerStatusList ::= SEQUENCE OF SEQUENCE
{      ringer      RingerID,
       ringMode    RingMode,
       ringCount   [0] IMPLICIT INTEGER (0..1000)     OPTIONAL,
       ringPattern [1] IMPLICIT INTEGER               OPTIONAL,
       ringVolAbs  [2] IMPLICIT INTEGER (0..100)      OPTIONAL}

END -- of CSTA-get-ringer-status
```


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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
```

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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
```


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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
```

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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) }
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) };

setDisplay OPERATION ::=
{      ARGUMENT    SetDisplayArgument
       RESULT      SetDisplayResult
       ERRORS      {universalFailure}
       CODE        local: 274
}

SetDisplayArgument ::= SEQUENCE
{      device                          DeviceID,
       display                         DisplayID                       OPTIONAL,
       physicalBaseRowNumber           [0] IMPLICIT INTEGER            OPTIONAL,
       physicalBaseColumnNumber        [1] IMPLICIT INTEGER            OPTIONAL,
       contentsOfDisplay               IA5String (SIZE(0..240)),
       offset                          [2] IMPLICIT INTEGER            OPTIONAL,
       extensions                      CSTACommonArguments             OPTIONAL}

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

END -- of CSTA-set-display
```

--`,,```,,,,````-`-`,,`,,`,`,,`---

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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
```

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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) }
CSTACommonArguments 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             CSTACommonArguments    OPTIONAL}

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


END -- of CSTA-set-lamp-mode
```


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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
```

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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
```


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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
```

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

setRingerStatus OPERATION ::=
{      ARGUMENT    SetRingerStatusArgument
       RESULT      SetRingerStatusResult
       ERRORS      {universalFailure}
       CODE        local: 280
}

SetRingerStatusArgument ::= SEQUENCE
{      device                 DeviceID,
       ringer                 RingerID,
       ringMode               RingMode                          OPTIONAL,
       ringPattern            [1] IMPLICIT INTEGER              OPTIONAL,
       ringVolume             [2] Volume                        OPTIONAL,
       extensions             CSTACommonArguments               OPTIONAL}

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

END -- of CSTA-set-ringer-status
```


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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
```

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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
```


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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
```

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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) }
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) };

ButtonPressEvent ::= SEQUENCE
{      device                          SubjectDeviceID,
       button                          ButtonID,
       buttonLabel            IA5String (SIZE(0..64))          OPTIONAL,
       buttonAssociatedNumber DeviceID                         OPTIONAL,
       extensions             CSTACommonArguments              OPTIONAL}

END  -- of CSTA-button-press-event
```


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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
```

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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) }
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) };

HookswitchEvent ::= SEQUENCE
{      device                 SubjectDeviceID,
       hookswitch             HookswitchID,
       hookswitchOnHook       BOOLEAN,
       extensions             CSTACommonArguments     OPTIONAL}

END  -- of CSTA-hookswitch-event
```


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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 (SIZE(0..64))          OPTIONAL,
        lampMode                LampMode,
        lampBrightness          LampBrightness                      OPTIONAL,
        lampColor               LampColor                           OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}

END  -- of CSTA-lamp-mode-event
```

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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               OPTIONAL,
       messageWaitingOn       BOOLEAN,
       extensions             CSTACommonArguments    OPTIONAL}

END  -- of CSTA-message-waiting-event
```


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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
```


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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,
        ringPattern             [1] IMPLICIT INTEGER                OPTIONAL,
        ringVolume              [2] Volume                          OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}

END  -- of CSTA-ringer-status-event
```

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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) }
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) };

SpeakerMuteEvent ::= SEQUENCE
{      invokingDevice         SubjectDeviceID,
       auditoryApparatus      AuditoryApparatusID,
       speakerMuteOn          BOOLEAN,
       extensions             CSTACommonArguments    OPTIONAL}

END  -- of CSTA-speaker-mute-event
```


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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
```

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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) }
CSTACommonArguments 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             CSTACommonArguments OPTIONAL}

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

END -- of CSTA-call-back-non-call-related
```


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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
```

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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
```


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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
```

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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               OPTIONAL,
       extensions  CSTACommonArguments    OPTIONAL}

GetAgentStateResult ::= SEQUENCE
{      agentStateList         AgentStateList,
       extensions             CSTACommonArguments OPTIONAL}

AgentStateList ::= SEQUENCE SIZE (1..32) OF AgentStateEntry

AgentStateEntry ::= SEQUENCE
{      agentID                AgentID                OPTIONAL,
       loggedOnState          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
```


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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
```

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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
```


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20.1.8 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
```

--`,,```,,,,````-`-`,,`,,`,`,,`---
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20.1.9 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
```


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20.1.10 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
```

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20.1.11 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
```


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20.1.12 Get routeing mode

```
CSTA-get-routeing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
        standard( 0) csta3( 285) get-routeing-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) };

getRouteingMode OPERATION ::=
{       ARGUMENT    GetRouteingModeArgument
        RESULT      GetRouteingModeResult
        ERRORS      {universalFailure}
        CODE        local: 311
}

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

GetRouteingModeResult ::= SEQUENCE
{       routeingMode            BOOLEAN,
        extensions              CSTACommonArguments     OPTIONAL}

END -- of CSTA-get-routeing-mode
```

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20.1.13 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
```


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20.1.14 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
```

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20.1.15 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
```


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20.1.16 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
```

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20.1.17 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
```


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20.1.18 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) }
CSTACommonArguments 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,
        extensions              CSTACommonArguments     OPTIONAL}

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

END -- of CSTA-set-forwarding
```

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20.1.19 Set routeing mode

```
CSTA-set-routeing-mode
{ iso( 1) identified-organization( 3) icd-ecma( 12)
       standard( 0) csta3( 285) set-routeing-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) };

setRouteingMode OPERATION ::=
{      ARGUMENT    SetRouteingModeArgument
       RESULT      SetRouteingModeResult
       ERRORS      {universalFailure}
       CODE        local: 318
}

SetRouteingModeArgument ::= SEQUENCE
{      device                  DeviceID,
       routeingMode            BOOLEAN,
       extensions              CSTACommonArguments OPTIONAL}

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

END -- of CSTA-set-routeing-mode
```


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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                          OPTIONAL,
       acdGroup               DeviceID                         OPTIONAL,
       pendingAgentState      [2] IMPLICIT PendingAgentState   OPTIONAL,
       cause                  [3] IMPLICIT EventCause          OPTIONAL,
       extensions             CSTACommonArguments              OPTIONAL}

END -- of CSTA-agent-busy-event
```

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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) }
CSTACommonArguments 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             CSTACommonArguments               OPTIONAL}

END -- of CSTA-agent-logged-off-event
```


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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) }
CSTACommonArguments 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             CSTACommonArguments               OPTIONAL}

END -- of CSTA-agent-logged-on-event
```

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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
```


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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
```

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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
```


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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
```

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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
```

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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
```

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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) }
CSTACommonArguments 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             CSTACommonArguments    OPTIONAL}


END -- of CSTA-do-not-disturb-event
```


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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,
       extensions             CSTACommonArguments    OPTIONAL}


END -- of CSTA-forwarding-event
```

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20.2.14 Routeing mode

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

RouteingModeEvent ::= SEQUENCE
{      device                SubjectDeviceID,
       routeingMode          BOOLEAN,
       extensions            CSTACommonArguments    OPTIONAL}


END -- of CSTA-routeing-mode-event
```


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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
```

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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
```


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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
```

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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
```


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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
```

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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) };

ioRegisterCancelOPERATION ::=
{       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
```


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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) };

dataPathResumedOPERATION ::=
{       ARGUMENT    DataPathResumedArgument
        RESULT      DataPathResumedResult
        ERRORS      {universalFailure}
        CODE        local: 118
}

DataPathResumedArgument ::= SEQUENCE
{       ioCrossRefID            IOCrossRefID,
        ioRegisterReqID         IORegisterReqID         OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-data-path-resumed
```

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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) };

dataPathSuspendedOPERATION ::=
{       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
```


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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 (SIZE(0..240))         OPTIONAL,
        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
```

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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) }
CSTACommonArguments 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              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-resume-data-path
```

--`,,```,,,,````-`-`,,`,,`,`,,`---

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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 (SIZE(0..240)),
        dataPathType            DataPathType                        OPTIONAL,
        displayAttributes       DisplayAttributeList                OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}

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

END  -- of CSTA-send-broadcast-data
```

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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) }
CSTACommonArguments 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 (SIZE(0..240)),
        ioCause                 EventCause                          OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}

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

END  -- of CSTA-send-data
```


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

sendMulticastDataOPERATION ::=
{       ARGUMENT    SendMulticastDataArgument
        RESULT      SendMulticastDataResult
        ERRORS      {universalFailure}
        CODE        local: 113
}

SendMulticastDataArgument ::= SEQUENCE
{       ioCrossRefIDList        SEQUENCE OF IOCrossRefID,
        ioData                  OCTET STRING (SIZE(0..240))         OPTIONAL,
        displayAttributes       DisplayAttributeList                OPTIONAL,
        extensions              CSTACommonArguments                 OPTIONAL}

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

END  -- of CSTA-send-multicast-data
```

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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) }
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) };

startDataPathOPERATION ::=
{       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                      CSTACommonArguments             OPTIONAL}

StartDataPathResult ::=SEQUENCE
        {ioCrossRefID                   IOCrossRefID,
         numberOfCharactersToCollect    [0] IMPLICIT INTEGER    OPTIONAL,
         terminationCharacter           IA5String(SIZE(1..1))   OPTIONAL,
         timeout                        [1] IMPLICIT INTEGER    OPTIONAL,
         extensions                     CSTACommonArguments     OPTIONAL}

DataPathDirection ::= ENUMERATED
{       computeFunctionToObject         (0),
        objectToComputeFunction         (1),
        bidirectional                   (2)}

END  -- of CSTA-start-data-path
```


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

stopDataPathOPERATION ::=
{       ARGUMENT    StopDataPathArgument
        RESULT      StopDataPathResult
        ERRORS      {universalFailure}
        CODE        local: 111
}

StopDataPathArgument ::= SEQUENCE
{       ioCrossRefID            IOCrossRefID,
        ioRegisterReqID         IORegisterReqID         OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-stop-data-path
```

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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) };

suspendDataPathOPERATION ::=
{       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
```


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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) }
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) }
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              CSTACommonArguments                OPTIONAL}

DataCollectedResult ::= CHOICE
{       extensions  CSTACommonArguments,
        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),
```

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```
        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) }
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) };

dataCollectionResumed OPERATION ::=
{       ARGUMENT    DataCollectionResumedArgument
        RESULT      DataCollectionResumedResult
        ERRORS      {universalFailure}
        CODE        local: 344
}

DataCollectionResumedArgument ::= SEQUENCE
{       dcollCrossRefID         DcollCrossRefID,
        extensions              CSTACommonArguments     OPTIONAL}

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


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

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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) }
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) };

dataCollectionSuspended OPERATION ::=
{      ARGUMENT    DataCollectionSuspendedArgument
       RESULT      DataCollectionSuspendedResult
       ERRORS      {universalFailure}
       CODE        local: 345
}

DataCollectionSuspendedArgument ::= SEQUENCE
{      dcollCrossRefID         DcollCrossRefID,
       extensions              CSTACommonArguments     OPTIONAL}

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


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


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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) }
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) };

resumeDataCollection OPERATION ::=
{       ARGUMENT    ResumeDataCollectionArgument
        RESULT      ResumeDataCollectionResult
        ERRORS      {universalFailure}
        CODE        local: 346
}

ResumeDataCollectionArgument ::= SEQUENCE
{       dcollCrossRefID         DcollCrossRefID,
        extensions              CSTACommonArguments     OPTIONAL}

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


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

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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
```


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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) }
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) };

stopDataCollection OPERATION ::=
{       ARGUMENT    StopDataCollectionArgument
        RESULT      StopDataCollectionResult
        ERRORS      {universalFailure}
        CODE        local: 348
}

StopDataCollectionArgument ::= SEQUENCE
{       dcollCrossRefID         DcollCrossRefID,
        extensions              CSTACommonArguments     OPTIONAL}

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


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

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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
```


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24 Voice unit services and events

24.1 Services

24.1.1 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
```

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24.1.2 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) }
CSTACommonArguments FROM CSTA-extension-types
        { iso( 1) identified-organization( 3) icd-ecma( 12)
                        standard( 0) csta3( 285) extension-types( 129) };

deleteMessageOPERATION ::=
{       ARGUMENT    DeleteMessageArgument
        RESULT      DeleteMessageResult
        ERRORS      {universalFailure}
        CODE        local: 501
}

DeleteMessageArgument ::= SEQUENCE
{       messageToBeDeleted      MessageID,
        extensions              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-delete-message
```


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24.1.3 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
```

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24.1.4 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) }
AttributeInfo, 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) };

queryVoiceAttributeOPERATION ::=
{       ARGUMENT    QueryVoiceAttributeArgument
        RESULT      QueryVoiceAttributeResult
        ERRORS      {universalFailure}
        CODE        local: 503
}

QueryVoiceAttributeArgument ::= SEQUENCE
{       messageToQuery          MessageID,
        attributeToQuery        AttributeToQuery,
        connection              ConnectionID            OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

QueryVoiceAttributeResult ::= SEQUENCE
{       attribute               AttributeInfo,
        extensions              CSTACommonArguments     OPTIONAL}

AttributeToQuery ::= ENUMERATED
{       encodingAlgorithm       (0),
        samplingRate            (1),
        duration                (2),
        fileName                (3),
        currentPosition         (4),
        currentSpeed            (5),
        currentVolume           (6),
        currentLevel            (7),
        currentState            (8)         }

END  -- of CSTA-query-voice-attribute
```


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24.1.5 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) }
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) };

recordMessageOPERATION ::=
{       ARGUMENT    RecordMessageArgument
        RESULT      RecordMessageResult
        ERRORS      {universalFailure}
        CODE        local: 511
}

RecordMessageArgument ::= SEQUENCE
{       callToBeRecorded        ConnectionID,
        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
```

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24.1.6 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) }
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) };

reposition          OPERATION ::=
{       ARGUMENT    RepositionArgument
        RESULT      RepositionResult
        ERRORS      {universalFailure}
        CODE        local: 504
}

RepositionArgument ::= SEQUENCE
{       connection              ConnectionID,
        periodOfReposition      Period,
        mesageToReposition      MessageID               OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

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

Period ::= CHOICE
{       absolutePosition        ENUMERATED
                                {           startOfMessage(0),
                                            endOfMessage(1)},
        relativePosition        INTEGER}

END  -- of CSTA-reposition
```


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24.1.7 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) }
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,
        mesageToResume          MessageID               OPTIONAL,
        duration                INTEGER                 OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

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


END  -- of CSTA-resume
```

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24.1.8 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) }
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) };

review              OPERATION ::=
{       ARGUMENT    ReviewArgument
        RESULT      ReviewResult
        ERRORS      {universalFailure}
        CODE        local: 506
}

ReviewArgument ::= SEQUENCE
{       connection              ConnectionID,
        periodToReview          PeriodToReview,
        mesageToReview          MessageID               OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

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

PeriodToReview ::= CHOICE
{       startOfMessage          NULL,
        lengthOfReview          INTEGER}

END  -- of CSTA-review
```


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24.1.9 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) }
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) };

setVoiceAttributeOPERATION ::=
{       ARGUMENT    SetVoiceAttributeArgument
        RESULT      SetVoiceAttributeResult
        ERRORS      {universalFailure}
        CODE        local: 507
}

SetVoiceAttributeArgument ::= SEQUENCE
{       connection              ConnectionID,
        attributeToSet          AttributeToSet,
        message                 MessageID               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)}

END  -- of CSTA-set-voice-attribute
```

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24.1.10 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) }
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,
        extensions              CSTACommonArguments     OPTIONAL}

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

END  -- of CSTA-stop
```


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24.1.11 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) }
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,
        mesage      MessageID               OPTIONAL,
        extensions  CSTACommonArguments     OPTIONAL}

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


END  -- of CSTA-suspend
```

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24.1.12 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) }
CSTACommonArguments 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              CSTACommonArguments    OPTIONAL}

SynthesizeMessageResult ::= SEQUENCE
{      synthesizedMessage      MessageID,
       extensions              CSTACommonArguments    OPTIONAL}

END  -- of CSTA-synthesize-message
```


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24.2 Events

24.2.1 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) }
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) };

PlayEvent ::=SEQUENCE
{       connection              ConnectionID,
        message                 MessageID,
        length                  [0] IMPLICIT INTEGER              OPTIONAL,
        currentPosition         [1] IMPLICIT INTEGER              OPTIONAL,
        speed                   [2] IMPLICIT INTEGER              OPTIONAL,
        cause                   EventCause                        OPTIONAL,
        servicesPermitted       ServicesPermitted                 OPTIONAL,
        extensions              CSTACommonArguments               OPTIONAL}

END  -- of CSTA-play-event
```

--`,,```,,,,````-`-`,,`,,`,`,,`---

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24.2.2 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) }
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,
       length                 [0] IMPLICIT INTEGER    OPTIONAL,
       currentPosition        [1] IMPLICIT INTEGER    OPTIONAL,
       cause                  EventCause              OPTIONAL,
       servicesPermitted      ServicesPermitted       OPTIONAL,
       extensions             CSTACommonArguments     OPTIONAL}

END  -- of CSTA-record-event
```


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24.2.3 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) }
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) };

ReviewEvent ::= SEQUENCE
{       connection              ConnectionID,
        message                 MessageID,
        length                  [0] IMPLICIT INTEGER    OPTIONAL,
        currentPosition         [1] IMPLICIT INTEGER    OPTIONAL,
        cause                   EventCause              OPTIONAL,
        servicesPermitted       ServicesPermitted       OPTIONAL,
        extensions              CSTACommonArguments     OPTIONAL}

END  -- of CSTA-review-event
```

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24.2.4 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) }
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,
       length                 [0] IMPLICIT INTEGER    OPTIONAL,
       currentPosition        [1] IMPLICIT INTEGER    OPTIONAL,
       cause                  EventCause              OPTIONAL,
       servicesPermitted      ServicesPermitted       OPTIONAL,
       extensions             CSTACommonArguments     OPTIONAL}

END  -- of CSTA-stop-event
```


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24.2.5 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) }
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,
        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
```

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24.2.6 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) }
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,
       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
```


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24.2.7 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) }
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,
       playVolume             [0] Volume                          OPTIONAL,
       recordingGain          [1] IMPLICIT INTEGER (0 .. 100)     OPTIONAL,
       speed                  [2] IMPLICIT INTEGER                OPTIONAL,
       currentPosition        [3] IMPLICIT INTEGER                OPTIONAL,
       cause                  EventCause                          OPTIONAL,
       servicesPermitted      ServicesPermitted                   OPTIONAL,
       extensions             CSTACommonArguments                 OPTIONAL}

END  -- of CSTA-voice-attributes-change-event
```

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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) }
CSTACommonArguments 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               OPTIONAL,
        extensions      CSTACommonArguments     OPTIONAL}

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


END  -- of CSTA-call-detail-records-notification
```


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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
{       cdrRrossRefID                   CDRCrossRefID,
        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
```

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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
{       cdrRrossRefID   CDRCrossRefID,
        timePeriod      CDRTimePeriod           OPTIONAL,
        extensions      CSTACommonArguments     OPTIONAL}

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


END  -- of CSTA-send-stored-call-detail-records
```


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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
{       cdrRrossRefID   CDRCrossRefID,
        extensions      CSTACommonArguments     OPTIONAL}


END  -- of CSTA-start-call-detail-records-transmission
```

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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) }
CSTACommonArguments 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
{       cdrRrossRefID   CDRCrossRefID,
        cdrTermReason   CDRTermReason           OPTIONAL,
        extensions      CSTACommonArguments     OPTIONAL}

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


END  -- of CSTA-stop-call-detail-records
```


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26 Vendor specific extensions services and events

26.1 Registration services

26.1.1 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
```

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26.1.2 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
```


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26.1.3 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
```

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26.2 Services

26.2.1 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) }
CSTACommonArguments, 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      CSTACommonArguments,
        noData          NULL}


END -- of CSTA-escape-service
```


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26.2.2 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
```

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26.3 Events

26.3.1 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
```


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Annex A

(normative)

Protocol Implementation Conformance Statement (PICS) Performa

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 protocol 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 protocol 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 International 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 (A.4, “Implementation identification”, on page 308), 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, A.5, “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.

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A.4 Implementation identification

Supplier	
Protocol Version	Phase III, First 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			

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A.5.2 Capability Exchange Services

A.5.2.1 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			
groupDeviceAttibutes			
namedDeviceTypes			
shortFormDeviceID			
agentLogOnModels			
appearanceList			
otherPhysicalDeviceList			
miscMonitorCaps			
associatedGroupList			
maxCallbacks			
maxAutoAnswerRings			
maxActiveCalls			
maxHeldCalls			
maxFwdSettings			
maxDevicesInConf			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
mediaClassSupport			
mediaServiceCapsList			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
connectionRateList			
delayToleranceList			
numberOfChannels			
maxChannelBind			
routeingServList			
logDevServList			
logDevEvtsList			
deviceMaintEvtsList			
security			
privateData			

A.5.2.2 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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
maxButtons			
maxLamps			
maxRingPatterns			
physDevServList			
physDevEvtsList			
security			
privateData			

A.5.2.3 Get Switching Function Capabilities

This service shall be supported by a switching function.

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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
securityMode			
securityFormat			
privateDataFormat			
transAndConfSetup			
deviceOnDeviceMonitorFilter			
deviceOnConnectionMonitorFilter			
callOnDeviceMonitorFilter			
callOnConnectionMonitorFilter			
miscMonitorCaps			
correlatorDataSupported			
dynamicFeatureSupported			
callLinkageOptionsSupported			
acdModels			
agentLogonModels			
agentStateModels			
routeingServList			
logDevServList			
logDevEvtsList			
physDevServList			
physDevEvtsList			
deviceMaintEvtsList			
statusReportingServList			
capExchangeServList			
cdrServList			
vendorSpecificServList			
vendorSpecificEvtsList			
privateDataVersionList			
systemStatusTimer			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
simpleThreshold			
filterThreshold			
mediaServiceCapsList			
security			
privateData			

A.5.2.4 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.5.2.5 Switching Function Devices

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Switching Function Devices			
Service Request optional parameters			
segmentID			
security			
privateData			

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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			

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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			

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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			

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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.5.4 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			

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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			

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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			
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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
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			

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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			

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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			
privateData			
Service Response optional parameters			
targetDevice			
security			
privateData			

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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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
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			
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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
connections			
conferenceCallInfo			
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			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
security			
privateData			

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A.5.6.11 Deflect Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Deflect Call			
Service Request optional parameters			
correlatorData			
userData			
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			

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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			
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			
security			
privateData			

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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			
security			
privateData			

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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			
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			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
medaCallCharacteristics			
callingConnectionInfo			
security			
privateData			
Service Response optional parameters			
mediaCallCharacteristics			
initiatedCallInfo			
security			
privateData			

A.5.6.19 Make Predictive Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Make Predictive Call			
Service Request optional parameters			
signallingDectection			
destinationDetection			
defaultAction			
accountCode			
authCode			
autoOriginate			
alertTime			
correlatorData			
callCharacteristics			
userData			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
initiatedCallInfo			
security			
privateData			

A.5.6.20 Park Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Park Call			
Service Request optional parameters			
correlatorData			
security			
privateData			
Service Response optional parameters			
parkedTo			
security			
privateData			

A.5.6.21 Reconnect Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Reconnect Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.6.22 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.5.6.23 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			
security			
privateData			
Service Response optional parameters			
conferencedCallInfo			
security			
privateData			

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A.5.6.24 Single Step Transfer Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Single Step Transfer Call			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
userData			
security			
privateData			
Service Response optional parameters			
connections			
transferredCallInfo			
security			
privateData			

A.5.6.25 Transfer Call

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Transfer Call			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
connections			
transferredCallInfo			
security			
privateData			

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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			
security			
privateData			

A.5.7.2 Call Cleared

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Call Cleared			
correlatorData			
userData			
mediaCallCharacteristics			
callCharacteristics			
callLinkageData			
security			
privateData			

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A.5.7.3 Conferenced

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Conferenced			
secondaryOldCall			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
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			
security			
privateData			

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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			
security			
privateData			

A.5.7.6 Digits Dialed

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Digits Dialed			
localConnectionInfo			
correlatorData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
associatedCalledDevice			
diallingConnectionInfo			
callCharacteristics			
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			
security			
privateData			

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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			
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			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
failedConnectionInfo			
security			
privateData			

A.5.7.10 Held

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Held			
localConnectionInfo			
correlatorData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
heldConnectionInfo			
callLinkageData			
security			
privateData			

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A.5.7.11 Network Capabilities Changed

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Network Capabilities Changed			
localConnectionInfo			
correlatorData			
userData			
networkCapability			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
outboundConnectionInfo			
security			
privateData			

A.5.7.12 Network Reached

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Network Reached			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
networkCapability			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
outboundConnectionInfo			
networkCallingDevice			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
networkCalledDevice			
associatedCallingDevice			
security			
privateData			

A.5.7.13 Offered

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Offered			
originatingNIDConnection			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
offeredConnectionInfo			
security			
privateData			

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A.5.7.14 Originated

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Originated			
originatingDevice			
localConnectionInfo			
correlatorData			
servicesPermitted			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
originatedConnectionInfo			
security			
privateData			

A.5.7.15 Queued

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Queued			
numberQueued			
callsInFront			
localConnectionInfo			
correlatorData			
userData			
servicesPermitted			
networkCallingDevice			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
networkCalledDevice			
associatedCallingDevice			
associatedCalledDevice			
mediaCallCharacteristics			
callCharacteristics			
queuedConnectionInfo			
security			
privateData			

A.5.7.16 Retrieved

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Retrieved			
localConnectionInfo			
correlatorData			
servicePermitted			
mediaCallCharacteristics			
callCharacteristics			
retrievedConnectionInfo			
callLinkageData			
security			
privateData			

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A.5.7.17 Service Initiated

This event must be supported if the Basic Telephony profile is supported (A.5.1).

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Service Initiated			
localConnectionInfo			
correlatorData			
servicesPermitted			
mediaCallCharacteristics			
callCharacteristics			
initiatedConnectionInfo			
networkCallingDevice			
networkCalledDevice			
associatedCallingDevice			
security			
privateData			

A.5.7.18 Transferred

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Transferred			
secondaryOldCall			
localConnectionInfo			
correlatorData			
userData			
chargingInfo			
servicesPermitted			
mediaCallCharacteristics			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
callCharacteristics			
security			
privateData			

A.5.8 Call Associated Feature Services

A.5.8.1 Associate Data

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Associate Data			
Service Request optional parameters			
accountCode			
authCode			
correlatorData			
callQualifyingData			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.8.2 Cancel Telephony Tones

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Cancel Telephony Tones			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.8.3 Generate Digits

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Generate Digits			
Service Request optional parameters			
digitMode			
toneDuration			
pulseRate			
pauseDuration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.8.4 Generate Telephony Tones

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Generate Telephony Tones			
Service Request optional parameters			
toneDuration			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.8.5 Send User Information

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Send User Information			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.9 Call Associated Feature Events

A.5.9.1 Call Information

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Call Information			
callingDevice			
accountInfo			
authorisationCode			
correlatorData			
servicesPermitted			
userData			
callQualifyingData			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
connectionInfo			
security			
privateData			

A.5.9.2 Charging

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Charging			
cause			
security			
privateData			

A.5.9.3 Digits Generated

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Digits Generated			
digitDurationList			
pauseDurationList			
connectionInfo			
security			
privateData			

A.5.9.4 Telephony Tones Generated

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Telephony Tones Generated			
toneGenerated			
toneFrequency			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
toneDuration			
pauseDuration			
connectionInfo			
security			
privateData			

A.5.9.5 Service Completion Failure

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Service Completion Failure			
secondaryCall			
otherDevicesPrimaryCallList			
otherDevicesSecondaryCallList			
mediaCallCharacteristics			
security			
privateData			

A.5.10 Media Attachment Services

A.5.10.1 Attach Media Service

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Attach Media Service			
Service Request optional parameters			
mediaServiceVersion			
mediaServiceInstanceID			
requestedConnectionState			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
mediaConnection			
mediaDevice			
mediaServiceInstanceID			
mediaConnectionInfo			
security			
privateData			

A.5.10.2 Detach Media Service

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Detach Media Service			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.11 Media Attachment Events

A.5.11.1 Media Attached

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Media Attached			
mediaServiceVersion			
mediaServiceInstanceID			
mediaStreamID			
mediaCallCharacteristics			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
callCharacteristics			
localConnectionInfo			
mediaConnectionInfo			
security			
privateData			

A.5.11.2 Media Detached

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Media Detached			
mediaServiceVersion			
mediaServiceInstanceID			
mediaStreamID			
mediaCallCharacteristics			
callCharacteristics			
localConnectionInfo			
mediaConnectionInfo			
security			
privateData			

A.5.12 Routeing Services

A.5.12.1 Route Register

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Register			
Service Request optional parameters			
routeingDevice			
requestedRouteingMediaClass			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
actualRouteingMediaClass			
security			
privateData			

A.5.12.2 Route Register Abort

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.12.3 Route Register Cancel

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.12.4 Re-Route

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Re-Route			
Service Request optional parameters			
routeRegisterReqID			
replyTimeout			
correlatorData			
security			
privateData			

A.5.12.5 Route End

This service must be supported if the Routeing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route End			
Service Request optional parameters			
routeRegisterReqID			
errorValue			
correlatorData			
security			
privateData			

A.5.12.6 Route Reject

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Reject			
Service Request optional parameters			
routeRegisterReqID			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
rejectCause			
correlatorData			
security			
privateData			

A.5.12.7 Route Request

This service must be supported if the Routeing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Request			
Service Request optional parameters			
routeRegisterReqID			
callingDevice			
routeingDevice			
routedCall			
routeSelAlgorithm			
associatedCallingDevice			
associatedCalledDevice			
priority			
replyTimeout			
correlatorData			
mediaCallCharacteristics			
callCharacteristics			
routedCallInfo			
security			
privateData			

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A.5.12.8 Route Select

This service must be supported if the Routeing Profile is supported (A.5.1).

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Select			
Service Request optional parameters			
routeRegisterReqID			
alternateRoutes			
remainRetries			
routeUsedReq			
correlatorData			
security			
privateData			

A.5.12.9 Route Used

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Route Used			
Service Request optional parameters			
routeRegisterReqID			
callingDevice			
domain			
correlatorData			
security			
privateData			

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A.5.13 Physical Device Services

A.5.13.1 Button Press

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Button Press			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.2 Get Auditory Apparatus Information

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Auditory Apparatus Information			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.3 Get Button Information

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Button Information			
Service Request optional parameters			
button			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.4 Get Display

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Display			
Service Request optional parameters			
displayID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.5 Get HookSwitch Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get HookSwitch Status			
Service Request optional parameters			
hookswitch			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.13.6 Get Lamp Information

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Lamp Information			
Service Request optional parameters			
lamp			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.7 Get Lamp Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Lamp Mode			
Service Request optional parameters			
lamp			
security			
privateData			
Service Response optional parameters			
lamp			
security			
privateData			

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A.5.13.8 Get Message Waiting Indicator

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Message Waiting Indicator			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
deviceForMessage			
lampIsPresent			
security			
privateData			

A.5.13.9 Get Microphone Gain

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Microphone Gain			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.13.10 Get Microphone Mute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Microphone Mute			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.11 Get Ringer Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Ringer Status			
Service Request optional parameters			
ringer			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.12 Get Speaker Mute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Speaker Mute			
Service Request optional parameters			
auditoryApparatus			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.13 Get Speaker Volume

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Speaker Volume			
Service Request optional parameters			
auditoryApparatus			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.14 Set Button Information

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Button Information			
Service Request optional parameters			
buttonLabel			
buttonAssociatedNumber			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.13.15 Set Display

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Display			
Service Request optional parameters			
displayID			
physicalBaseRowNumber			
physicalBaseColumnNumber			
offset			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.16 Set HookSwitch Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set HookSwitch Status			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.13.17 Set Lamp Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Lamp Mode			
Service Request optional parameters			
lampBrightness			
lampColor			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.18 Set Message Waiting Indicator

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Message Waiting Indicator			
Service Request optional parameters			
deviceForMessage			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.13.19 Set Microphone Gain

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Microphone Gain			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.20 Set Microphone Mute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Microphone Mute			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.21 Set Ringer Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Ringer Status			
Service Request optional parameters			
ringMode			
ringPattern			
ringVolume			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.22 Set Speaker Mute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Speaker Mute			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.13.23 Set Speaker Volume

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Speaker Volume			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.14 Physical Device Events

A.5.14.1 Button Information

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Button Information			
buttonLabel			
buttonAssociatedNumber			
buttonPressIndicator			
security			
privateData			

A.5.14.2 Button Press

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Button Press			
buttonLabel			
buttonAssociatedNumber			
security			
privateData			

A.5.14.3 Display Updated

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Display Updated			
displayID			
physicalRows			
physicalColumns			
physicalBaseRowNumber			
physicalBaseColumnNumber			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
characterSet			
security			
privateData			

A.5.14.4 Hookswitch

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Hookswitch			
security			
privateData			

A.5.14.5 Lamp Mode

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Lamp Mode			
lampLabel			
lampBrightness			
lampColor			
security			
privateData			

A.5.14.6 Message Waiting

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Message Waiting			
deviceForMessage			
security			
privateData			

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A.5.14.7 Microphone Gain

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Microphone Gain			
security			
privateData			

A.5.14.8 Microphone Mute

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Microphone Mute			
security			
privateData			

A.5.14.9 Ringer Status

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Ringer Status			
ringMode			
ringCount			
ringPattern			
ringVolume			
security			
privateData			

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A.5.14.10 Speaker Mute

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Speaker Mute			
security			
privateData			

A.5.14.11 Speaker Volume

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Speaker Volume			
timeStamp			
security			
privateData			

A.5.15 Logical Device Services

A.5.15.1 Call Back Non-Call-Related

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Call Back Non-Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.15.2 Call Back Message Non-Call-Related

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Call Back Message Non-Call-Related			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.3 Cancel Call Back

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Cancel Call Back			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.4 Cancel Call Back Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Cancel Call Back Message			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.15.5 Get Agent State

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Agent State			
Service Request optional parameters			
acdGroup			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.6 Get Auto Answer

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Auto Answer			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
numberOfRings			
security			
privateData			

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A.5.15.7 Get Auto Work Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Auto Work Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
autoWorkInterval			
security			
privateData			

A.5.15.8 Get Caller ID Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Caller ID Status			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.9 Get Do Not Disturb

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Do Not Disturb			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
callOrigination			
callingDeviceList			
security			
privateData			

A.5.15.10 Get Forwarding

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Forwarding			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.11 Get Last Number Dialled

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Last Number Dialled			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.15.12 Get Routeing Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Get Routeing Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.13 Set Agent State

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Agent State			
Service Request optional parameters			
agentID			
password			
group			
security			
privateData			
Service Response optional parameters			
pendingAgentState			
security			
privateData			

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A.5.15.14 Set Auto Answer

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Auto Answer			
Service Request optional parameters			
numberOfRings			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.15 Set Auto Work Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Auto Work Mode			
Service Request optional parameters			
autoWorkInterval			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.16 Set Caller ID Status

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Caller ID Status			
Service Request optional parameters			
security			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.17 Set Do Not Disturb

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Do Not Disturb			
Service Request optional parameters			
callOrigination			
callingDeviceList			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.15.18 Set Forwarding

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Forwarding			
Service Request optional parameters			
forwardingType			
forwardDN			
ringCount			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.15.19 Set Routeing Mode

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Routeing Mode			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.16 Logical Device Events

A.5.16.1 Agent Busy

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Busy			
agentID			
acdGroup			
pendingAgentState			
cause			
security			
privateData			

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A.5.16.2 Agent Logged Off

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Logged Off			
agentID			
acdGroup			
agentPassword			
cause			
security			
privateData			

A.5.16.3 Agent Logged On

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Logged On			
agentID			
acdGroup			
agentPassword			
cause			
security			
privateData			

A.5.16.4 Agent Not Ready

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Not Ready			
agentID			
acdGroup			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
cause			
security			
privateData			

A.5.16.5 Agent Ready

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Ready			
agentID			
acdGroup			
cause			
security			
privateData			

A.5.16.6 Agent Working After Call

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Agent Working After Call			
agentID			
acdGroup			
pendingAgentState			
cause			
security			
privateData			

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A.5.16.7 Auto Answer

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Auto Answer			
numberOfRings			
security			
privateData			

A.5.16.8 Auto Work Mode

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Auto Work Mode			
security			
privateData			

A.5.16.9 Call Back

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Call Back			
security			
privateData			

A.5.16.10 Call Back Message

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Call Back Message			
security			
privateData			

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A.5.16.11 Caller ID Status

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Caller ID Status			
security			
privateData			

A.5.16.12 Do Not Disturb

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Do Not Disturb			
callOrigination			
callingDeviceList			
security			
privateData			

A.5.16.13 Forwarding

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Forwarding			
forwardingType			
forwardTo			
forwardDefault			
ringCount			
security			
privateData			

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A.5.16.14 Routeing Mode

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Routeing Mode			
security			
privateData			

A.5.17 Device Maintenance Events

A.5.17.1 Back In Service

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Back In Service			
cause			
security			
privateData			

A.5.17.2 Device Capabilities Changed

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Device Capabilities Changed			
cause			
security			
privateData			

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A.5.17.3 Out of Service

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Out of Service			
cause			
security			
privateData			

A.5.18 I/O Services

A.5.18.1 I/O Register

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
I/O Register			
Service Request optional parameters			
ioDevice			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.2 I/O Register Abort

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
I/O Register Abort			
Service Request optional parameters			
security			
privateData			

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A.5.18.3 I/O Register Cancel

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
I/O Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.4 Data Path Resumed

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Data Path Resumed			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.5 Data Path Suspended

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Data Path Suspended			
Service Request optional parameters			
ioRegisterReqID			
security			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.6 Fast Data

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Fast Data			
Service Request optional parameters			
ioRegisterReqID			
dataPathType			
displayAttributes			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.7 Resume Data Path

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Resume Data Path			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.18.8 Send Broadcast Data

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Send Broadcast Data			
Service Request optional parameters			
dataPathType			
displayAttributes			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.9 Send Data

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Send Data			
Service Request optional parameters			
ioRegisterReqID			
displayAttributes			
ioCause			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.18.10 Send Multicast Data

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Send Multicast Data			
Service Request optional parameters			
ioData			
displayAttributes			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.11 Start Data Path

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Start Data Path			
Service Request optional parameters			
ioRegisterReqID			
dataPathDirection			
dataPathType			
displayID			
numberOfCharsToCollect			
terminationCharacter			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
timeout			
security			
privateData			
Service Response optional parameters			
numberOfCharsToCollect			
terminationCharacter			
timeout			
security			
privateData			

A.5.18.12 Stop Data Path

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Stop Data Path			
Service Request optional parameters			
ioRegisterReqID			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.18.13 Suspend Data Path

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Suspend Data Path			
Service Request optional parameters			
ioRegisterReqID			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19 Data Collection Services

A.5.19.1 Data Collected

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Data Collected			
Service Request optional parameters			
digitsData			
telTonesData			
connectionInfo			
dcollCause			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.19.2 Data Collection Resumed

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Data Collection Resumed			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.3 Data Collection Suspended

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Data Collection Suspended			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.4 Resume Data Collection

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Resume Data Collection			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.19.5 Start Data Collection

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Start Data Collection			
Service Request optional parameters			
dataCollType			
digitsReportingCriteria			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.19.6 Stop Data Collection

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Stop Data Collection			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.19.7 Suspend Data Collection

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Suspend Data Collection			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20 Voice Unit Services

A.5.20.1 Concatenate Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Concatenate Message			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.2 Delete Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Delete Message			
Service Request optional parameters			
security			
privateData			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Service Response optional parameters			
security			
privateData			

A.5.20.3 Play Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Play Message			
Service Request optional parameters			
duration			
termination			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.4 Query Voice Attribute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Query Voice Attribute			
Service Request optional parameters			
connection			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.20.5 Record Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Record Message			
Service Request optional parameters			
samplingRate			
encodingAlgorithm			
maxDuration			
termination			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.6 Reposition

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Reposition			
Service Request optional parameters			
messageToReposition			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.20.7 Resume

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Resume			
Service Request optional parameters			
messageToResume			
duration			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.8 Review

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Review			
Service Request optional parameters			
messageToReview			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.20.9 Set Voice Attribute

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Set Voice Attribute			
Service Request optional parameters			
message			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.10 Stop

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Stop			
Service Request optional parameters			
messageToBeStopped			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.11 Suspend

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Suspend			
Service Request optional parameters			
message			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.20.12 Synthesize Message

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Synthesize Message			
Service Request optional parameters			
control			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.21 Voice Unit Events

A.5.21.1 Play

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Play			
length			
currentPosition			
speed			
cause			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
servicesPermitted			
security			
privateData			

A.5.21.2 Record

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Record			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.3 Review

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Review			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

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A.5.21.4 Stop

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Stop			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.5 Suspend Play

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Suspend Play			
length			
currentPosition			
cause			
servicesPermitted			
security			
privateData			

A.5.21.6 Suspend Record

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Suspend Record			
length			
currentPosition			
cause			

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Description: Event, optional parameters	Supported?		Comments
	Yes	No	
servicesPermitted			
security			
privateData			

A.5.21.7 Voice Attribute Changed

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Voice Attribute Changed			
playVolume			
recordingGain			
speed			
currentPosition			
cause			
security			
privateData			

A.5.22 Call Detail Record (CDR) Services

A.5.22.1 Call Detail Records Notification

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Call Detail Records Notification			
Service Request optional parameters			
cdrReason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.22.2 Call Detail Records Report

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Call Detail Records Report			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.3 Send Stored Call Detail Records

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Send Stored Call Detail Records			
Service Request optional parameters			
timePeriod			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.4 Start Call Detail Records Transmission

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Start Call Detail Records Transmission			
Service Request optional parameters			
security			

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Description: Service, optional parameters	Supported?		Comments
	Yes	No	
privateData			
Service Response optional parameters			
security			
privateData			

A.5.22.5 Stop Call Detail Records Transmission

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Stop Call Detail Records Transmission			
Service Request optional parameters			
cdrTermReason			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23 Vendor Specific Extension Services

A.5.23.1 Escape Register

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Escape Register			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

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A.5.23.2 Escape Register Abort

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Escape Register Abort			
Service Request optional parameters			
security			
privateData			

A.5.23.3 Escape Register Cancel

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Escape Register Cancel			
Service Request optional parameters			
security			
privateData			
Service Response optional parameters			
security			
privateData			

A.5.23.4 Escape

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Escape			
Service Request optional parameters			
escapeRegisterID			
security			
Service Response optional parameters			
security			
privateData			

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A.5.23.5 Private Data Version Selection

Description: Service, optional parameters	Supported?		Comments
	Yes	No	
Private Data Version Selection			
Service Response optional parameters			
security			
privateData			

A.5.24 Vendor Specific Extension Events

A.5.24.1 Private Event

Description: Event, optional parameters	Supported?		Comments
	Yes	No	
Private Event			
security			

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