



TDA/TDE Series PBX - CTI Version 4.000

CSTA Implementation

Specification Part 2

Parameter Specification



Revision 3.1



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Revision History

Revision	Section	Description	Date
0.02		First release	2002/11/29
0.02a	1.77.3 TelephonyTone	"intrusion" is changed to "No".	2002/12/28
1.00	1.35 DeviceID	OtherPlan is changed to "supported".	2003/05/15
1.01	3.44 KmeWakeUpInfo	time parameter is changed to OPTIONAL.	2003/09/11
1.006	4. ASN.1 Definition	This section is added.	2003/11/14
1.006a	Kme specific name type	"wide is not used" is added to all of kme specific name type which has "single" and "wide" in it.	2003/12/19
2.0a	KmePhoneProperty	PortType for IP-PT is added.	2004/07/20
	KmeRevisionType	Added.	
	KmeBroadcastGroupList	Added.	
	KmeBroadcastGrpMembers	Added.	
	KmeTenantSpeedDial	Added.	
	KmeDistributionMethod	Added.	
	KmeFcoKeyList	Added.	
	KmeFcoKeyInfo	Added.	
	KmeDistributionMethod	Added.	
	KmeExternalSensorList	Added.	
	4. ASN.1 Definition	Changed to definitions for version 2.0	
2.0b	4.1 Location of KME Specific Types	This section is added.	2005/05/16
2.0c	3.40 KmePhoneProperty	Port Type is added.	2006/09/28
3.0	4.2 KME Specific Data Types ASN.1 Definition	Updated.	2006/10/02
3.1	3.40 PhoneProperty	Note is added.	2008/08/25
	3.35 KmeSpeedDialRequest	tenantNo parameter is added.	
	4 PBX Hospitality Features	This section is added.	

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1. CSTA Standard Parameter Types

1.1 AccountInfo

1.1.1 Abstract Syntax Module

CSTA-device-feature-types

1.1.2 Services & Events

CDR Report

1.1.3 Data Type Definition

OCTET STRING (SIZE(0..32))

1.2 AgentID

1.2.1 Abstract Syntax Module

CSTA-device-feature-types

1.2.2 Services & Events

GetAgentState-Result

SetAgentState-Request

1.2.3 Data Type Definition

OCTET STRING (SIZE(0..32))

1.3 AgentInfo

1.3.1 Abstract Syntax Module

CSTA-get-agent-state

1.3.2 Services & Events

GetAgentState

1.3.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				
acdGroup	DeviceID	OP	No	
agentState	AgentState	M	Yes	
pendingAgentState	PendingAgentState	OP	No	
agentStateCondition	AgentStateCondition	OP	No	

1.4 AgentState

1.4.1 Abstract Syntax Module

CSTA-device-feature-types

1.4.2 Services & Events

GetAgentState-Result

1.4.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
agentNotReady	0	Yes	
agentNull	1	No	
agentReady	2	Yes	
agentBusy	3	Yes	
agentWorkingAfterCall	4	Yes	

1.5 AgentStateEntry

1.5.1 Abstract Syntax Module

CSTA-get-agent-state

1.5.2 Services & Events

GetAgentState-Result

1.5.3 Data Type Definition

Parameter	Data Type	MO	TDA /TDE	Description
SEQUENCE				
agentID	AgentID	OP	No	
loggedOnState	BOOLEAN,	M	Yes	When the value is FALSE(=loggedOff), the PBX does not provide the agentInfo parameter.
agentInfo	SEQUENCE OF AgentInfo	OP	Yes	

1.6 AgentStateList

1.6.1 Abstract Syntax Module

CSTA-get-agent-state

1.6.2 Services & Events

GetAgentState(Result)

1.6.3 Data Type Definition

SEQUENCE SIZE (1..32) OF AgentStateEntry

1.7 AssociatedCalledDeviceID

1.7.1 Abstract Syntax Module

CSTA-device-identifiers

1.7.2 Services & Events

Delivered-Event, Established-Event, etc.

1.7.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID		Yes	
notKnown	NULL		No	

1.8 AssociatedCallingDeviceID

1.8.1 Abstract Syntax Module

CSTA-device-identifiers

1.8.2 Services & Events

Delivered-Event、Established-Event など。

1.8.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID		Yes	
notKnown	NULL		No	

1.9 BillingID

1.9.1 Abstract Syntax Module

CSTA-call-detail-record

1.9.2 Services & Events

CallDetailRecordsReport (cdrInfo parameter)

1.9.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			

normalCharging	0	Yes	
reverseCharging	1	Yes	
creditCardCharging	2	No	
callForwarding	3	Yes	
callDeflection	4	No	
callTransfer	5	Yes	
other	6	Yes	

1.10 ButtonID

1.10.1 Abstract Syntax Module

Physical device features

1.10.2 Services & Events

ButtonPress-Event

1.10.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.11 CallAssociatedEvents - 1

1.11.1 Abstract Syntax Module

CSTA-application-context-information-csta3

1.11.2 Services & Events

MonitorStart-Request

1.11.3 Data Type Definition

Parameter	Value	Description
BIT STRING		
callInformation	0	
charging	1	
dTMFDigitsDetected	2	
telephonyTonesDetected	3	
serviceCompletionFailure	4	

1.12 CallAssociatedEvents - 2

1.12.1 Abstract Syntax Module

CSTA-event-report-definitions

1.12.2 Services & Events

CSTAEventReportArgument

1.12.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
callInformation	CallInformationEvent	-	Yes	
charging	ChargingEvent	-	No	
digitsGeneratedEvent	DigitsGeneratedEvent	-	No	
telephonyTonesGeneratedEvent	TelephonyTonesGeneratedEvent	-	No	
serviceCompletionFailure	ServiceCompletionFailureEvent	-	Yes	

1.13 CallControlEvents - 1**1.13.1 Abstract Syntax Module**

CSTA-application-context-information-csta3

1.13.2 Services & Events

MonitorStart - MonitorFilter

1.13.3 Data Type Definition

Parameter	Bit	Description
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	

1.14 CallControlEvents - 2**1.14.1 Abstract Syntax Module**

CSTA-event-report-definitions

1.14.2 Services & Events

CSTAEventReportArgument

1.14.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TD E	Description
CHOICE				
bridged	BridgedEvent	-	No	
callCleared	CallClearedEvent	-	No	

conferenced	ConferencedEvent	-	Yes
connectionCleared	ConnectionClearedEvent	-	Yes
delivered	DeliveredEvent	-	Yes
digitsDialed	DigitsDialedEvent	-	Yes
diverted	DivertedEvent	-	Yes
established	EstablishedEvent	-	Yes
failed	FailedEvent	-	Yes
held	HeldEvent	-	Yes
netwCapsChanged	NetworkCapabilitiesChangedEvent	-	No
netwReached	NetworkReachedEvent	-	Yes
offered	OfferedEvent	-	No
originated	OriginatedEvent	-	Yes
queued	QueuedEvent	-	Yes
retrieved	RetrievedEvent	-	Yes
serviceInitiated	ServiceInitiatedEvent	-	Yes
transferred	TransferredEvent	-	Yes

1.15 CalledDeviceID

1.15.1 Abstract Syntax Module

CSTA-device-identifiers

1.15.2 Services & Events

Delivered-Event, etc.

1.15.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID			
notKnown	NULL			

1.16 CallID

OCTET STRING (SIZE(0..8))

Note : The PBX provides CallID whose length is 4.

1.17 CallingDeviceID

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID		Yes	
notKnown	NULL		Yes	

1.18 CallObject

1.18.1 Abstract Syntax Module

CSTA-start-data-collection

1.18.2 Services & Events

StartDataCollection

1.18.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TD E	Description
CHOICE				
device	DeviceID	-	No	
call	ConnectionID	-	Yes	

1.19 CallState**1.19.1 Abstract Syntax Module**

CSTA-status-reporting

1.19.2 Services & Events

SnapshotDeviceData (shapshotData parameter)

1.19.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TDE	Description
CHOICE				
compoundCallState	CompoundCallState	-	Yes	List of LocalConnectionState
simpleCallState	SimpleCallState	-	No	
unknown	NULL	-	No	

1.20 CDRCrossRefID**1.20.1 Abstract Syntax Module**

CSTA-call-detail-record

1.20.2 Services & Events

CallDetailRecordsReport

1.20.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.21 CDRInfo

1.21.1 Abstract Syntax Module

CSTA-call-detail-record

1.21.2 Services & Events

CallDetailRecordsReport

1.21.3 Data Type Definition

SEQUENCE OF CDRInformationItem

1.22 CDRInformationItem

1.22.1 Abstract Syntax Module

CSTA-call-detail-record

1.22.2 Services & Events

CallDetailRecordsReport(cdrInfo parameter)

1.22.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TD E	Description
SEQUENCE				
recordNumber	INTEGER (1..128)	OP	No	
recordCreationTime	TimeInfo,	M	Yes	
callingDevice	CallingDeviceID	OP	Yes	
calledDevice	CalledDeviceID	OP	Yes	
associatedCallingDevice	AssociatedCallingDeviceID	OP	Yes	
associatedCalledDevice	AssociatedCalledDeviceID	OP	Yes	
networkCallingDevice	NetworkCallingDeviceID	OP	No	
networkCalledDevice	NetworkCalledDeviceID	OP	Yes	
callCharacteristics	CallCharacteristics	OP	No	
mediaCallCharacteristics	MediaCallCharacteristics	OP	No	
chargedDevice	ChargedDevice	OP	Yes	
recordedCall	ConnectionID	OP	No	
nodeNumber	NodeNumber	OP	No	
tariffTable	INTEGER	OP	No	
connectionStart	TimeInfo	OP	No	
connectionEnd	TimeInfo	OP	Yes	
connectionDuration	INTEGER	OP	Yes	
accessCode	OCTET STRING	OP	No	
carrier	INTEGER	OP	No	
selectedRoute	INTEGER	OP	No	
billingID	BillingID	OP	Yes	
chargingInfo	ChargingInfo	OP	Yes	
supplServiceInfo	SupplServiceInfo	OP	No	
reasonForTerm	ReasonForTerm	OP	Yes	
authCode	AuthCode	OP	No	
accountInfo	AccountInfo	OP	Yes	
deviceCategory	DeviceCategory	OP	No	
namedDeviceTypes	NamedDeviceTypes	OP	No	
operatorDevice	DeviceID	OP	No	

1.23 CDRTransferMode

1.23.1 Abstract Syntax Module

CSTA-call-detail-record

1.23.2 Services & Events

CallDetailRecordsReport (cdrInfo parameter)

1.23.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED		Yes	
transferAtEndOfCall	0	Yes	
transferOnRequest	1	No	
transferOnThresholdReached	2	No	

1.24 ChargedDevice

1.24.1 Abstract Syntax Module

CSTA-call-detail-record

1.24.2 Services & Events

CallDetailRecordsReport(cdrInfo parameter)

1.24.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TD E	Description
CHOICE		M	Yes	
operator	DeviceID,	-	No	
nonOperator	DeviceID,	-	Yes	

1.25 ChargingInfo

1.25.1 Abstract Syntax Module

CSTA-charge-info

1.25.2 Services & Events

CallDetailRecordsReport (cdrInfo parameter)

1.25.3 Data Type Definition

Parameter	Data Type (Value)	MO	TDA /TDE	Description
SEQUENCE				
numberUnits	NumberUnits	M	Yes	
typeOfChargingInfo	ENUMERATED	M	-Yes	
	subTotal	(0)	-	No
	total	(1)	-	Yes

1.26 CompoundCallState

SEQUENCE OF LocalConnectionState

1.27 ConnectionID

1.27.1 Abstract Syntax Module

CSTA-call-connection-identifiers

1.27.2 Services & Events

CallControl events, etc.

1.27.3 Data Type Definition

Parameter	Data Type	MO	TDA /TDE	Description
CHOICE		M	-	
callID	CallID		No	
deviceID	LocalDeviceID		Yes	Selectable only for requesting DirectedPickupCall against an alerting call.
both	SEQUENCE		Yes	
	callID	CallID		
	deviceID	LocalDeviceID		

1.28 ConnectionList

1.28.1 Abstract Syntax Module

CSTA-connection-states

1.28.2 Services & Events

Conferenced event, Transferred event

1.28.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description	
SEQUENCE OF SEQUENCE					
newConnection	ConnectionID	OP	Yes		
oldConnection	ConnectionID	OP	No		
endpoint	CHOICE		OP	No	
	deviceID	DeviceID		-	
	notKnown	NULL		-	
associatedNID	CHOICE		OP	Yes	
	deviceID	DeviceID		Yes	This parameter is set when connected device is externally located.
	notKnown	NULL		No	
resultingConnectionInfo	ConnectionInformation	OP	No		

1.29 ConsultOptions**1.29.1 Abstract Syntax Module**

CSTA-call-control

1.29.2 Services & Events

ConsultationCall

1.29.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
unrestricted	0	No	
consultOnly	1	No	
transferOnly	2	Yes	
conferenceOnly	3	Yes	

1.30 CSTACommonArguments

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				-
security	CSTASecurityData	OP	No	
privateData	SEQUENCE OF CSTAPrivateData	OP	Yes	

1.31 CSTAObject

Parameter	Data Type	MO	TDA /TD E	Description
-----------	-----------	----	-----------------	-------------

CHOICE		-	
deviceObject	DeviceID	Yes	
callObject	ConnectionID	No	

1.32 CSTAPrivateData

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				-
string	OCTET STRING		No	
private	KmeSpecificPrivateData		Yes	

1.33 DcollCrossRefID

1.33.1 Abstract Syntax Module

CSTA-data-collection

1.33.2 Services & Events

Data Collected, etc.

1.33.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.34 DeviceCategory

1.34.1 Abstract Syntax Module

CSTA-capability-exchange

1.34.2 Services & Events

SwitchingFunctionDevices

1.34.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
acd	0	No	
group	1	Yes	
networkInterface	2	Yes	
park	3	Yes	
routeingDevice	4	Yes	
station	5	Yes	
voiceUnit	6	Yes	
other	7	Yes	

1.35 DeviceID

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE		M	-	
deviceIdentifier	CHOICE		M	-
	dialingNumber	NumberDigits	Yes	Max. length : 32 digits
	deviceNumber	DeviceNumber	Yes	INTEGER type (4 bytes)
	implicitPublic	NumberDigits	No	
	explicitPublic	PublicTON	No	
	implicitPrivate	NumberDigits	No	
	explicitPrivate	PrivateTON	No	
	other	OtherPlan	Yes	*1
mediaCallCharacteristics	MediaCallCharacteristics	OP	No	

*1 Following parameters could have OtherPlan type.

Events	Parameters
Delivered	networkCallingDevice
Established	networkCallingDevice
CDRReport	callingDevice
	networkCalledDevice

1.36 DeviceList

1.36.1 Abstract Syntax Module

CSTA-switching-function-devices

1.36.2 Services & Events

switchingFunctionDevices

1.36.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE OF SEQUENCE				
deviceID	DeviceID,	M	-	
deviceCategory	DeviceCategory	O	Yes	Mandatory
namedDeviceTypes	NamedDeviceTypes	OP	No	
deviceAttributes	DeviceAttributes	OP	No	
deviceModelName	IA5String (SIZE(0..64))	OP	No	

1.37 DeviceMaintenanceEvents - 1

1.37.1 Abstract Syntax Module

CSTA-application-context-information-csta3

1.37.2 Services & Events

MonitorStart - MonitorFilter

1.37.3 Data Type Definition

Parameter	Bit	Description
BIT STRING		
backInService	0	
deviceCapabilityChanged	2	
outOfService	1	

1.38 DeviceMaintenanceEvents - 2

1.38.1 Abstract Syntax Module

CSTA-event-report-definitions

1.38.2 Services & Events

CSTAEventReportArgument

1.38.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				No
backInService	BackInServiceEvent,	-	Yes	
deviceCapabilityChanged	DeviceCapsChangedEvent,	-	No	
outOfService	OutOfServiceEvent	-	Yes	

1.39 DeviceNumber

INTEGER (4 octets)

1.40 DigitsData

1.40.1 Abstract Syntax Module

CSTA-generate-digits

1.40.2 Services & Events

GenerateDigits

1.40.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				

digitsDetected	IA5String (SIZE(0..64))	M	Yes	
digitsDuration	IMPLICIT SEQUENCE OF INTEGER	OP	No	
digitsPauseDuration	IMPLICIT SEQUENCE OF INTEGER	OP	No	

1.41 DigitsReportingCriteria

1.41.1 Abstract Syntax Module

CSTA-start-data-collection

1.41.2 Services & Events

StartDataCollection

1.41.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				
numChars	INTEGER	OP	Yes	
flushChar	IA5String (SIZE(1..1))	OP	Yes	
timeout	INTEGER	OP	Yes	

1.42 DisplayID

1.42.1 Abstract Syntax Module

Physical device features

1.42.2 Services & Events

SetDisplay

1.42.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.43 ErrorValue

UniversalFailure

1.44 EventCause

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
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		

1.45 ForwardList

1.45.1 Abstract Syntax Module

CSTA-device-feature-types

1.45.2 Services & Events

GetForwarding

1.45.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE OF SEQUENCE				
forwardingType	ForwardingType	OP	Yes	
forwardStatus	BOOLEAN	M	Yes	
forwardDN	DeviceID	OP	Yes	
forwardDefault	ForwardDefault	OP	No	
ringCount	INTEGER (1..100)	OP	No	

1.46 ForwardingType

1.46.1 Abstract Syntax Module

CSTA-device-feature-types

1.46.2 Services & Events

GetForwarding, SetForwarding

1.46.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
forwardImmediate	0	No	
forwardBusy	1	No	
forwardNoAns	2	No	
forwardDND	9	No	
forwardBusyInt	3	Yes	
forwardBusyExt	4	Yes	
forwardNoAnsInt	5	Yes	
forwardNoAnsExt	6	Yes	
forwardImmInt	7	Yes	
forwardImmExt	8	Yes	
forwardDNDInt	10	Yes	
forwardDNDExt	11	Yes	

1.47 LocalConnectionState

1.47.1 Abstract Syntax Module

CSTA-connection-states

1.47.2 Services & Events

CallControl events, SnapshotDeviceData

1.47.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
null	0	Yes	
initiated	1	Yes	
alerting	2	Yes	
connected	3	Yes	
hold	4	Yes	
queued	5	Yes	
fail	6	Yes	

1.48 LocalDeviceID**1.48.1 Abstract Syntax Module**

CSTA-call-connection-identifiers

1.48.2 Services & Events

ConnectionID, etc.

1.48.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
staticID	DeviceID	M	-	
dynamicID	OCTET STRING (SIZE(0..32))		Yes	
			No	

1.49 LogicalDeviceFeatureEvents - 1**1.49.1 Abstract Syntax Module**

CSTA-application-context-information-csta3

1.49.2 Services & Events

MonitorStart - MonitorFilter

1.49.3 Data Type Definition

Parameter	Bit	Description
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	

1.50 LogicalDeviceFeatureEvents - 2

1.50.1 Abstract Syntax Module

CSTA-event-report-definitions

1.50.2 Services & Events

CSTAEventReportArgument

1.50.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
agentBusy	AgentBusyEvent	-	Yes	
agentLoggedOn	AgentLoggedOnEvent	-	Yes	
agentLoggedOff	AgentLoggedOffEvent	-	Yes	
agentNotReady	AgentNotReadyEvent	-	Yes	
agentReady	AgentReadyEvent	-	Yes	
agentWorkingAfterCall	AgentWorkingAfterCallEvent	-	Yes	
autoAnswer	AutoAnswerEvent	-	Yes	
autoWorkMode	AutoWorkModeEvent	-	Yes	
callBack	CallBackEvent	-	Yes	
callBackMessage	CallBackMessageEvent	-	Yes	
callerIDStatus	CallerIDStatusEvent	-	No	
doNotDisturb	DoNotDisturbEvent	-	No	
forwarding	ForwardingEvent	-	Yes	
routeingMode	RouteingModeEvent	-	No	

1.51 MonitorCrossRefID

1.51.1 Abstract Syntax Module

CSTA-status-reporting

1.51.2 Services & Events

StartMonitor, StopMonitor, etc.

1.51.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.52 MonitorFilter

1.52.1 Abstract Syntax Module

CSTA-status-reporting

1.52.2 Services & Events

StartMonitor, StopMonitor, GetLogicalDeviceInformation, etc.

1.52.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				
callControl	CallControlEvents	OP	Yes	
callAssociated	CallAssociatedEvents	OP	Yes	
mediaAttachment	MediaAttachmentEvents	OP	No	
physicalDeviceFeature	PhysicalDeviceFeatureEvents	OP	Yes	
logicalDeviceFeature	LogicalDeviceFeatureEvents	OP	Yes	
maintenance	DeviceMaintenanceEvents	OP	Yes	
voiceUnit	VoiceUnitEvents	OP	No	
private	VendorSpecEvents	OP	Yes	

1.53 MonitorObject

CSTAObject

1.54 MonitorType

1.54.1 Abstract Syntax Module

CSTA-status-reporting

1.54.2 Services & Events

MonitorStart

1.54.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			-
call	0	No	
device	1	Yes	

1.55 NetworkCalledDeviceID

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	Yes	
deviceIdentifier	DeviceID			
notKnown	NULL			

1.56 NetworkCallingDeviceID

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	Yes	
deviceIdentifier	DeviceID			
notKnown	NULL			

1.57 NumberDigits

IA5String(SIZE(1..64))

Note : The PBX accpets maximum 32 digits.

1.58 NumberOfCurrencyUnits

1.58.1 Abstract Syntax Module

CSTA-charge-info

1.58.2 Services & Events

CallDetailRecordsReport (cdrInfo parameter)

1.58.3 Data Type Definition

Parameter	Data Type	MO	Description
SEQUENCE			
currencyType	OCTET STRING	M	size 0 indicates default currency
currencyAmount	INTEGER	M	
currencyMultiplier	ENUMERATED		M
	oneThousandth	(0)	1/1000 times
	oneHundredth	(1)	1/100 times
	oneTenth	(2)	1/10 times
	one	(3)	
	ten	(4)	10 times
	hundred	(5)	100 times
thousand	(6)	1000 times	

1.59 OperationErrors

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
generic	1		
atLeastOneConditionalParameterNotProvided	29		
featureAlreadySet	30		
invalidMsgID	25		
invalidParameterValue	31		
invalidAccountCode	21		
invalidAgentGroup	32		
invalidAgentIdentifier	33		
invalidAgentPassword	34		
invalidAgentState	35		
invalidAlertTime	36		
invalidAllocationState	16		
invalidAuthCode	22		
invalidAutoAnswer	37		
invalidBitRate	38		
invalidButtonIdentifier	39		
invalidCallType	42		
invalidConnectionRate	43		
invalidConsultPurpose	44		
invalidCorrelatorData	20		
invalidCrossRefID	17		
invalidDelayTolerance	45		
invalidDestination	14		
invalidDestinationDetect	46		
invalidDoNotDisturb	47		
invalidEscapeCrossRefID	48		
invalidFeature	15		
invalidFile	28		
invalidFlowDirection	49		
invalidForwardingDestination	7		
invalidForwardingFlag	51		
invalidForwardingType	52		
invalidHookswitchType	53		
invalidHookswitchComponent	54		
invalidLampMode	55		
invalidLampID	56		
invalidMessageWaitingSetting	57		
invalidMicrophoneGain	58		
invalidMicrophoneMute	59		
invalidMonitorCrossRefID	60		
invalidMonitorFilter	61		
invalidMonitorObject	62		
invalidMonitorType	63		
invalidNumberOfChannels	64		
invalidParticipationType	65		
invalidRemainRetry	66		
invalidRingCount	67		
invalidRingPattern	68		
invalidRingVolume	69		
invalidRouteingAlgorithm	70		
invalidRouteingCrossRefID	71		
invalidRouteRegistrationCrossRefID	72		
invalidSpeakerVolume	73		
invalidSpeakerMute	74		
invalidSwitchingSubdomainCharsType	75		
invalidObjectType	18		
invalidActiveCallObject	76		
invalidCalledDeviceObjectType	77		
invalidCallingDeviceObjectType	78		
invalidCallToBePickedUpObjectType	79		
invalidCallToDivertObjectType	80		
invalidCallToParkObjectType	81		
invalidDestinationDeviceObject	195		
invalidHeldCallObject	82		
invalidMonitorObjectType	83		
invalidParkToObjectType	84		
messageIDRequired	2626		
notDifferentDevices	85		

notSameDevice	86		
objectNotKnown	4		
invalidCallID	11		
invalidActiveCallID	87		
invalidHeldCallID	88		
invalidConnectionID	13		
invalidActiveConnectionID	89		
invalidHeldConnectionID	90		
invalidDeviceID	12		
invalidActiveDeviceID	91		
invalidCalledDeviceID	6		
invalidCallingDeviceID	5		
invalidCallToParkDeviceID	92		
invalidDestinationDeviceID	93		
invalidDivertingDeviceID	94		
invalidHeldDeviceID	95		
invalidParkToDeviceID	96		
invalidPickUpDeviceID	97		
parameterNotSupported	98		
accountCodeNotSupported	99		
agentGroupNotSupported	100		
agentPasswordNotSupported	101		
agentStateNotSupported	102		
alertTimeNotSupported	103		
allocationNotSupported	104		
authorisationCodeNotSupported	105		
autoAnswerNotSupported	106		
bitRateNotSupported	107		
buttonNotSupported	108		
callTypeNotSupported	109		
charactersToSendNotSupported	110		
connectionRateNotSupported	111		
connectionReservationNotSupported	112		
consultPurposeNotSupported	113		
correlatorDataNotSupported	114		
delayToleranceNotSupported	115		
destinationDetectNotSupported	116		
digitModeNotSupported	117		
errorValueNotSupported	118		
flowDirectionNotSupported	119		
forwardingDestinationNotSupported	120		
lampNotSupported	121		
monitorTypeNotSupported	122		
numberOfChannelsNotSupported	123		
parameterTypeNotSupported	124		
priorityNotSupported	125		
privateDataNotSupported	126		
pulseDurationNotSupported	127		
pulseRateNotSupported	128		
pulseRateNotSupported	129		
ringCountNotSupported	130		
routeUsedNotSupported	131		
securityNotSupported	132		
swSubdomainCCIETypeNotSupported	133		
toneDurationNotSupported	134		
sysStatRegIDNNotSupported	135		
userDataNotSupported	136		
privilegeViolationSpecifiedDevice	8		
privilegeViolationActiveDevice	137		
privilegeViolationCalledDevice	9		
privilegeViolationCallingDevice	10		
privilegeViolationCallToParkDevice	138		
privilegeViolationDestinationDevice	139		
privilegeViolationOnDivertingDevice	140		
privilegeViolationHeldDevice	141		
privilegeViolationOnParkToDevice	142		
privilegeViolationPickUpDevice	143		
routingTimerExpired	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		
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		

1.60 ParticipationType

1.60.1 Abstract Syntax Module

CSTA-device-feature-types

1.60.2 Services & Events

IntrudeCall, JoinCall

1.60.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
silent	0	Yes	
active	1	Yes	

1.61 PendingAgentState

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
agentNotReady	0		
agentNull	1		
agentReady	2		
agentWorkingAfterCall	3		

1.62 PerformanceManagementErrors

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
generic	1		
performanceLimitExceeded	2		

1.63 PhysicalDeviceFeatureEvents

1.63.1 Abstract Syntax Module

CSTA-application-context-information-csta3

1.63.2 Services & Events

MonitorStart - MonitorFilter

1.63.3 Data Type Definition

Parameter	Bit	Description
BIT STRING		
buttonInformation	0	
buttonPress	1	
displayUpdated	2	
hookswitch	3	
lampMode	4	
messageWaiting	5	
microphoneGain	6	
microphoneMute	7	
ringerStatus	8	
speakerMute	9	
speakerVolume	10	

1.64 PrivateDataInfoErrors

Parameter	Value	TDA/T DE	Description
ENUMERATED		Yes	
cSTAPrivateDataInfoError	1		

1.65 RedirectionDeviceID

1.65.1 Abstract Syntax Module

CSTA-device-identifiers

1.65.2 Services & Events

CallControl events

1.65.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
numberDialed	DeviceID		Yes	
notKnown	NULL		Yes	
notRequired	NULL		Yes	
notSpecified	NULL		Yes	

1.66 ReqAgentState

1.66.1 Abstract Syntax Module

CSTA-set-agent-state

1.66.2 Services & Events

SetAgentState

1.66.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
loggedOn	0	Yes	
loggedOff	1	Yes	
notReady	2	Yes	
ready	3	Yes	
workingAfterCall	4	No	

1.67 ReqDeviceCategory

1.67.1 Abstract Syntax Module

CSTA-get-switching-function-devices

1.67.2 Services & Events

GetSwitchingFunctionDevices

1.67.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED		-	
acd	0	No	
groupACD	1	Yes	Incoming Gourp - UCD
groupHunt	2	Yes	Incoming Gourp - Hunting
groupPick	3	No	
groupOther	4	Yes	Incoming Gourp - Ring
networkInterface	5	Yes	Trunk port
park	6	Yes	Park
routeingDevice	7	Yes	Incoming Gourp - ACD mode
station	8	Yes	Extension
voiceUnit	9	Yes	Extension port connected to Voice Unit.
other	10	Yes	Others

1.68 SubjectDeviceID**1.68.1 Abstract Syntax Module**

CSTA-device-identifiers

1.68.2 Services & Events

CallControl events

1.68.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID			
notKnown	NULL			

1.69 ServiceCrossRefID**1.69.1 Abstract Syntax Module**

CSTA-capability-exchange

1.69.2 Services & Events

GetSwitchingFunctionDevices

1.69.3 Data Type Definition

OCTET STRING (SIZE(0..4))

1.70 SnapshotDeviceData - 1**1.70.1 Abstract Syntax Module**

CSTA-status-reporting

1.70.2 Services & Events

SnapshotDevice, SnapshotDeviceData

1.70.3 Data Type Definition

SEQUENCE OF SnapshotDeviceResponseInfo

1.71 SnapshotDeviceResponseInfo

Parameter	Data Type	MO	TDA /TDE	Description
SEQUENCE				
connectionIdentifier	ConnectionID	M	Yes	This may contain a deviceID whose format is Switching Function Representaion format
localCallState	CallState	M	Yes	
servicesPermitted	ServicesPermitted	OP	No	
mediaServiceInfoList	DeviceMediaInfoList	OP	No	
mediaCallCharacteristics	MediaCallCharacteristics	OP	No	

1.72 StateIncompatibilityErrors

Parameter	Value	TDA/TDE	Description
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		
-----------------	----	--	--

1.73 SubjectDeviceID

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE		M	-	
deviceIdentifier	DeviceID			
notKnown	NULL			

1.74 SubscribedResourceAvailabilityErrors

Parameter	Value	TDA/T DE	Description
ENUMERATED		Yes	
generic	1		
objectMonitorLimitExceeded	2		
trunkLimitExceeded	3		
outstandingReqLimitExceeded	4		
objectRegistrationLimitExceeded	5		

1.75 SystemResourceAvailabilityErrors

Parameter	Value	TDA/T DE	Description
ENUMERATED		Yes	
generic	1		
resourceBusy	2		
internalResourceBusy	3		
classifierBusy	9		
noMediaChannelsAvailable	10		
channelsInUseForBridgedDevices	11		
channelsInUseForData	12		
toneDetectorBusy	13		
toneGeneratorBusy	14		
networkBusy	5		
resourceOutOfService	4		
deviceOutOfService	15		
activeDeviceOutOfService	16		
calledDeviceOutOfService	17		
callingDeviceOutOfService	18		
callToParkDeviceOutOfService	19		
destinationDeviceOutOfService	20		
divertingDeviceOutOfService	21		
heldDeviceOutOfService	22		
parkToDeviceOutOfService	23		
pickupDeviceOutOfService	24		
networkOutOfService	6		
otherResourceOutOfService	25		
resourceLimitExceeded	26		

overallMonitorLimitExceeded	7		
conferenceMemberLimitExceeded	8		
registrationLimitExceeded	27		

1.76 SystemStatus - 1

1.76.1 Abstract Syntax Module

CSTA-device-feature-types

1.76.2 Services & Events

SystemStatus

1.76.3 Data Type Definition

Parameter	Value	TDA /TD E	Description
ENUMERATED		Yes	
disabled	4	No	
partiallyDisabled	8	No	
enabled	1	No	
initializing	0	No	
messagesLost	3	Yes	CDR Reports are lost.
normal	2	Yes	Nothing special happen. This is also used for periodic status reporting.
overloadImminent	5	No	
overloadReached	6	Yes	
overloadRelieved	7	No	

1.77 TelephonyTone

1.77.1 Abstract Syntax Module

CSTA-device-feature-types

1.77.2 Services & Events

GenerateTelephonyTones

1.77.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
ENUMERATED			
beep	0	No	
billing	1	No	
busy	2	Yes	
carrier	3	No	
confirmation	4	Yes	
dial	5	Yes	
faxCNG	6	No	
hold	7	Yes	
howler	8	No	
intrusion	9	No	
modemCNG	10	No	
park	11	No	
recordWarning	12	No	
reorder	13	Yes	
ringback	14	Yes	
silence	15	Yes	No sound.
sitVC	16	No	
sitC	17	No	
sitRO	18	No	
sitNC	19	No	
switchSpec0	20	Yes	Confirmation Tone 1 (Single tone)
switchSpec1	21	Yes	Confirmation Tone 2 (Single tone)
switchSpec2	22	Yes	Confirmation Tone 3-1 (Single tone)
switchSpec3	23	Yes	Confirmation Tone 3-2 (Single tone)
switchSpec4	24	Yes	Confirmation Tone 4-1 (Single tone)
switchSpec5	25	Yes	Confirmation Tone 4-2 (Single tone)
switchSpec6	26	Yes	Confirmation Tone 5 (Single tone)
switchSpec7	27	Yes	Dial Tone 1-A (Cyclic tone)
switchSpec8	28	Yes	Dial Tone 1-B (Cyclic tone)
switchSpec9	29	Yes	Dial Tone 2-A (Cyclic tone)
switchSpec10	30	Yes	Dial Tone 2-B (Cyclic tone)
switchSpec11	31	Yes	Dial Tone 3-A (Cyclic tone)
switchSpec12	32	Yes	Dial Tone 3-B (Cyclic tone)
switchSpec13	33	Yes	Dial Tone 4-A (Cyclic tone)
switchSpec14	34	Yes	Dial Tone 4-B (Cyclic tone)
switchSpec15	35	Yes	Busy Tone 1 (Cyclic tone)
switchSpec16	36	Yes	Busy Tone 2 (Cyclic tone)
switchSpec17	37	Yes	Reorder Tone 1 (Cyclic tone)
switchSpec18	38	Yes	Reorder Tone 2 (Cyclic tone)
switchSpec19	39	Yes	Ringback Tone 1 (Cyclic tone)
switchSpec20	40	Yes	Ringback Tone 2 (Cyclic tone)
switchSpec21	41	Yes	Warning Tone (Single tone)
switchSpec22	42	Yes	DND tone (Cyclic tone)
switchSpec23	43	Yes	CO Warning Tone (Cyclic tone)
switchSpec24	44	Yes	Hold Alarm (Cyclic tone)
switchSpec25	45	Yes	Call Waiting Tone1 (Cyclic tone)
switchSpec26	46	Yes	Conference Tone 1 (Normal) (Cyclic tone)
switchSpec27	47	Yes	Conference Tone 1 (Override) (Cyclic tone)
switchSpec28	48	Yes	Hold Tone (Cyclic tone)
switchSpec29	49	Yes	TAFAS Tone (Cyclic tone)
switchSpec30	50	Yes	External Music Source 1
switchSpec31	51	Yes	External Music Source 2
switchSpec32	52	No	External Music Source 3 - This will be supported in future.
switchSpec33	53	No	External Music Source 4 - This will be supported in future.
switchSpec34	54	No	External Music Source 5 - This will be supported in future.
switchSpec35	55	No	External Music Source 6 - This will be supported in future.
switchSpec36	56	No	External Music Source 7 - This will be supported in future.
switchSpec37	57	No	External Music Source 8 - This will be supported in future.
switchSpec38	58	Yes	Cancel tone
switchSpec39... switchSpec100		No	

1.78 TimelInfo

1.78.1 Abstract Syntax Module

CSTA-security

1.78.2 Services & Events

CallDetailRecordsReport (cdrInfo parameter)

1.78.3 Data Type Definition

GeneralizedTime

1.79 Universal Failure

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
operation	OperationErrors,	OP	Yes	
security	SecurityErrors,	OP	Yes	
stateIncompatibility	StateIncompatibilityErrors,	OP	Yes	
systemResourceAvailability	SystemResourceAvailabilityErrors,	OP	Yes	
subscribedResourceAvailability	SubscribedResourceAvailabilityErrors,	OP	Yes	
performanceManagement	PerformanceManagementErrors	OP	Yes	
privateData	PrivateDataInfoErrors,	OP	Yes	
unspecified	UnspecifiedErrors }	OP	Yes	

1.80 UnspecifiedErrors

NULL

1.81 VendorSpecEvents - 1

1.81.1 Abstract Syntax Module

CSTA-application-context-information-csta3

1.81.2 Services & Events

MonitorStart - MonitorFilter

1.81.3 Data Type Definition

Parameter	Value	TDA/T DE	Description
BIT STRING			
privateEvent	0	1	

1.82 VendorSpecEvents - 2**1.82.1 Abstract Syntax Module**

CSTA-event-report-definitions

1.82.2 Services & Events

CSTAEventReportArgument

1.82.3 Data Type Definition

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
privateEvent	PrivateEvent	-	Yes	

2. ACSE User Information For CSTA

2.1 ACSEUserInformationForCSTA

Parameter	Data Type	MO	TDA /TD E	Description
CHOICE				
oldDefinition	OldACSEUserInformationForCSTA,	-	No	
newDefinition	NewACSEUserInformationForCSTA	-	Yes	

2.2 OldACSEUserInformationForCSTA

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				
cSTAVersion	CSTAVersion,	M	Yes	
cSTAFunctionsRequiredByApplication	CSTAFunctionality	OP	No	
cSTAFunctionsThatCanBeSupplied	CSTAFunctionality	OP	No	

2.3 NewACSEUserInformationForCSTA

Parameter	Data Type	MO	TDA /TD E	Description
SEQUENCE				
cSTAVersion	CSTAVersion,	M	Yes	
cSTAFunctionsRequiredByApplication	CSTAFunctionality	OP	No	
cSTAFunctionsThatCanBeSupplied	CSTAFunctionality	OP	No	
cSTAPrivateDataVersionList	CSTAPrivateDataVersionList	OP	No	

2.4 CSTAPrivateDataVersionList

SEQUENCE OF INTEGER

2.5 CSTAVersion

Parameter	Value	TDA/T DE	Description
BIT STRING			
versionOne	0	0	
versionTwo	1	0	
versionThree	2	0	
versionFour	3	0	
versionFive	4	1	
versionSix	5	0	
versionSeven	6	0	
versionEight	7	0	
versionNine	8	0	
versionTen	9	0	
versionEleven	10	0	
versionTwelve	11	0	
versionThirteen	12	0	

versionFourteen	13	0	
versionFifteen	14	0	
versionSixteen	15	0	

3. KME Specific Types

3.1 KmeAbsentMessage (GetSystemData)

```
KmeAbsentMessage ::= CHOICE
{
    single      [0] OCTET STRING (SIZE(0..16)),
    wide       [1] OCTET STRING (SIZE(0..32)) }
```

Parameter	Data Type	MO	Description
CHOICE			
single	OCTET STRING (SIZE(0..16))	M	
wide	OCTET STRING (SIZE(0..32))		Not used

3.2 KmeBroadcastGroupList

```
KmeBroadcastGroupList ::= SEQUENCE OF SEQUENCE
{
    groupNo      INTEGER,
    name         KmeExtName OPTIONAL }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
groupNo	INTEGER	M	
name	KmeExtName	M	

3.3 KmeBroadcastGrpMembers

```
KmeBroadcastGrpMembers ::= SEQUENCE
{
    groupNo      [0] INTEGER,
    members      [1] IMPLICIT SEQUENCE OF DeviceID }
```

Parameter	Data Type	MO	Description
SEQUENCE			
groupNo	INTEGER	M	
members	SEQUENCE OF DeviceID	M	

3.4 KmeCallBackInvokeReq

```
KmeCallBackInvokeReq ::= SEQUENCE
{
    callBackID   OCTET STRING (SIZE(0..4)),
    requestingDevice DeviceID,
    targetDevice DeviceID OPTIONAL} -- extension only
```

Parameter	Data Type	MO	Description
SEQUENCE			
callBackID	OCTET STRING(SIZE(0..4))	M	
requestingDevice	DeviceID	M	
targetDevice	DeviceID	O	Extension only

3.5 KmeCallBackInvokeRsp

KmeCallBackInvokeRsp ::= ConnectionID

Parameter	Data Type	MO	Description
-	ConnectionID	M	

3.6 KmeCdrConditionCode

KmeCdrConditionCode ::= ENUMERATED

```
{
  cl          (0),  -- Reverse Charging
  tr          (1),  -- Call Transfer
  fw          (2),  -- Call Forwarding
  d0          (3),  -- DISA/TIE
  rm          (4),  -- Remote Maintenance
  na          (5)}  -- No Answer
```

Parameter	Value	MO	Description
ENUMERATED		M	
cl	0		
tr	1		
fw	2		
d0	3		
rm	4		
na	5		

3.7 KmeChangeExtNo

KmeChangeExtNo ::= SEQUENCE

```
{
  requestingDevice  DeviceID,
  newExtNo          IA5String(SIZE(1..5))}
```

Parameter	Data Type	MO	Description
SEQUENCE			
requestingDevice	DeviceID	M	
newExtNo	IA5String(SIZE(1..5))	M	

3.8 KmeChangeName

KmeChangeName ::= SEQUENCE

```
{
  requestingDevice  DeviceID,
  newName          CHOICE
  {
    single          [0] OCTET STRING(SIZE(0..20)),
    wide            [1] OCTET STRING(SIZE(0..40)) } OPTIONAL}
```

Parameter	Data Type	MO	Description
SEQUENCE			
requestingDevice	DeviceID	M	
name	CHOICE	O	
single	OCTET STRING(SIZE(0..20))		

	wide	OCTET STRING(SIZE(0..40))		wide is not used.
--	------	---------------------------	--	-------------------

3.9 KmeDistributionMethod

KmeDistributionMethod ::= SEQUENCE -- V2.0

```
{
    group      DeviceID,
    type       KmeGroupType }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
group	DeviceID	M	
type	KmeGroupType	M	UCD, RING, HUNT

3.10 KmeDnMode (GetSystemData)

KmeDnMode ::= ENUMERATED

```
{
    day        (0),
    lunch      (1),
    break      (2),
    night      (3)}
```

Parameter	Value	MO	Description
ENUMERATED		M	
day	0		
lunch	1		
break	2		
night	3		

3.11 KmeDayNightMode (GetSystemData)

KmeDayNightMode ::= SEQUENCE OF SEQUENCE

```
{
    tenantNo  [0] INTEGER,
    mode      [1] KmeDnMode }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
tenantNo	INTEGER	M	
mode	KmeDnMode	O	

3.12 KmeDeviceCategory

```

KmeDeviceCategory ::= CHOICE
{
    standardDevice [0] ReqDeviceCategory,
    kemDevice      [1] KmeOtherDevice}

```

Parameter	Data Type	MO	Description
CHOICE			
standardDevice	ReqDeviceCategory	M	
kemDevice	KmeOtherDevice		

3.13 KmeDeviceLock (GetSystemData)

```

KmeDeviceLock ::= ENUMERATED
{
    lock      (0),
    unlock    (1)}

```

Parameter	Value	Description
ENUMERATED		
lock	0	
unlock	1	

3.14 KmeDeviceState

```

KmeDeviceState ::= ENUMERATED
{
    ins      (0),
    ous      (1)}

```

Parameter	Value	Description
ENUMERATED		
ins	0	In Service
ous	1	Out Of Service

3.15 KmeDeviceStateList

```

KmeDeviceStateList ::= SEQUENCE OF KmeDeviceStateEntry

```

3.16 KmeDeviceStateEntry

```

KmeDeviceStateEntry ::= SEQUENCE
{
    device      DeviceID,
    number      IA5String(SIZE(1..5)) OPTIONAL, -- Extension, CO
    status      KmeDeviceState}

```

Parameter	Data Type	MO	Description
SEQUENCE			
device	DeviceID	M	
number	IA5String(SIZE(1..5))	O	Extention number
status	KmeDeviceState	M	INS/OUS

3.17 KmeDistributionMethod

KmeDistributionMethod ::= SEQUENCE -- V2.0

```
{
    group      DeviceID,
    type       KmeGroupType}
```

Parameter	Data Type	MO	Description
SEQUENCE			
group	DeviceID	M	
type	KmeGroupType	M	

3.18 KmeDoorPhone (GetSystemData)

KmeDoorPhone ::= SEQUENCE OF SEQUENCE

```
{
    device      [0] DeviceID,
    name        [1] CHOICE
    {
        single   [0] OCTET STRING (SIZE(1..20)),
        wide     [1] OCTET STRING (SIZE(1..40)) } OPTIONAL,
    extNo       [2] IA5String (SIZE(1..5)) OPTIONAL}
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
device	DeviceID	M	
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
extNo	IA5String (SIZE(1..5))	O	Extension number

3.19 KmeExternalSensorList

KmeExternalSensorList ::= SEQUENCE OF SEQUENCE -- V2.0

```
{
    sensorNo    [0] IA5String (SIZE(1..3)),
    device      [1] DeviceID,
    name        [2] CHOICE
    {
        single   [0] OCTET STRING (SIZE(1..20)),
        wide     [1] OCTET STRING (SIZE(1..40)) } OPTIONAL}
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
sensorNo	IA5String(SIZE(1..3))	M	
device	DeviceID	M	
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	

3.20 KmeExtGroupEntry (GetSystemData)

KmeExtGroupEntry ::= SEQUENCE

```
{
    device      [0] DeviceID,
    name        [1] CHOICE
    {
        single   [0] OCTET STRING (SIZE(1..20)),
        wide     [1] OCTET STRING (SIZE(1..40)) } OPTIONAL,
    devNumber   [2] DeviceID,
    cabinetNO   [3] INTEGER OPTIONAL,
    psNo        [4] IA5String (SIZE(1..3)) OPTIONAL}
```


Parameter	Data Type	MO	Description
SEQUENCE			
device	DeviceID	M	Extension number
name	CHOICE		wide is not used
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
devNumber	DeviceID	M	DeviceNumber type
cabinetNO	INTEGER	O	
psNo	IA5String(SIZE(1..3))	O	PS only

3.21 KmeExtName

```
KmeExtName ::= CHOICE
{
    single      [0] OCTET STRING (SIZE(1..20)),
    wide       [1] OCTET STRING (SIZE(1..40)) }

```

Parameter	Data Type	MO	Description
CHOICE			
single	OCTET STRING(SIZE(1..20))	M	
wide	OCTET STRING(SIZE(1..40))		Not used

3.22 KmeExtTrkGroupList (GetSystemData)

```
KmeExtTrkGroupList ::= SEQUENCE OF SEQUENCE
{
    groupNo      [0] INTEGER,
    name         [1] CHOICE
    {
        single   [0] OCTET STRING (SIZE(1..20)),
        wide     [1] OCTET STRING (SIZE(1..40)) } OPTIONAL,
    tenantNo    [2] INTEGER OPTIONAL }

```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
groupNo	INTEGER	M	
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING(SIZE(1..40))	
tenantNo	INTEGER	O	Extension only(1-8)

3.23 KmeExtMembers (GetSystemData)

```
KmeExtMembers ::= SEQUENCE
{
    groupNo      [0] IMPLICIT INTEGER,
    members     [1] IMPLICIT SEQUENCE OF KmeExtGroupEntry}

```

Parameter	Data Type	MO	Description
SEQUENCE			
groupNo	INTEGER	M	
members	SEQUENCE OF KmeExtGroupEntry	O	

3.24 KmeFcoKeyInfo

```
KmeFcoKeyInfo ::= SEQUENCE -- V2.0
{
    button          ButtonID,
    function        OCTET STRING(SIZE(1)) }
```

Parameter	Data Type	MO	Description
SEQUENCE			
button	ButtonID	M	
function	OCTET STRING(SIZE(1))	M	ID number of flexible key function

3.25 KmeFcoKeyList

```
KmeFcoKeyList ::= SEQUENCE OF KmeFcoKeyInfo -- V2.0
```

3.26 KmeFeatureList (GetSystemData)

```
KmeFeatureList ::= SEQUENCE OF SEQUENCE
{
    featureNo      [0] INTEGER,
    featureDigits  [1] IA5String(SIZE(1..6)) OPTIONAL }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
featureNo	INTEGER	M	Feature number index
featureDigits	IA5String(SIZE(1..6))	O	Feature number digits

3.27 KmeFeatureNumber

```
KmeFeatureNumber ::= INTEGER
-- 1: Call Waiting(Delivered-Event)
-- 2: Answered by TAM(AnswerCall-Request)
-- 3: Visual Caller ID(CallInformation-Event)
```

3.28 KmeForwardType (SetSystemData, SetForwarding-privateData)

```
KmeForwardType ::= 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),
    forwardBusyNoAnswer   (12),
    forwardBusyNoAnswerInt (13),
    forwardBusyNoAnswerExt (14) }
```

Parameter	Value	Description
ENUMERATED		
forwardImmediate	0	Not Supported
forwardBusy	1	Not Supported
forwardNoAns	2	Not Supported
forwardDND	9	Not Supported
forwardBusyInt	3	
forwardBusyExt	4	
forwardNoAnsInt	5	
forwardNoAnsExt	6	
forwardImmInt	7	
forwardImmExt	8	
forwardDNDInt	10	
forwardDNDExt	11	
forwardBusyNoAnswer	12	Not Supported
forwardBusyNoAnswerInt	13	
forwardBusyNoAnswerExt	14	

3.29 KmeGroupEntry (GetSystemData)

```

KmeGroupEntry ::= SEQUENCE
{
    device          [0] DeviceID,
    name           [1] CHOICE
    {
        single      [0] OCTET STRING (SIZE(1..20)),
        wide        [1] OCTET STRING(SIZE(1..40)) } OPTIONAL,
    number        [2] CHOICE
    {
        extNo       [0] IA5String(SIZE(1..5)),
        coNo        [1] IA5String(SIZE(1..3)) } OPTIONAL,
    cabinetNO     [3] INTEGER OPTIONAL }
    
```

Parameter	Data Type	MO	Description
SEQUENCE			
device	DeviceID	M	
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING(SIZE(1..40))	
number	CHOICE		Extension number. CO number
	extNo	IA5String(SIZE(1..5))	
	coNo	IA5String(SIZE(1..3))	
cabinetNo	INTEGER	O	Cabinet number

3.30 KmeHoldType

```

KmeHoldType ::= ENUMERATED
{
    cosultation    (0),
    normal         (1),
    exclusive      (2)}
    
```

Parameter	Value	MO	Description
ENUMERATED			M
cosultation	0		Consltation hold
normal	1		Normal hold
exclusive	2		Exclusive hold

3.31 KmeIcmGrpMembers (GetSystemData)

```
KmeIcmGrpMembers ::= SEQUENCE
{
    grpDevice    [0] IMPLICIT DeviceID,
    members     [1] IMPLICIT SEQUENCE OF DeviceID}

```

Parameter	Data Type	MO	Description
SEQUENCE			
grpDevice	DeviceID	M	Incoming group deviceID
members	SEQUENCE OF DeviceID	M	List of member ID

3.32 KmeIncomingGroupList (GetSystemData)

```
KmeIncomingGroupList ::= SEQUENCE OF SEQUENCE
{
    groupNo    [0] INTEGER,
    device     [1] DeviceID,
    name      [2] CHOICE
    {
        single [0] OCTET STRING (SIZE(1..20)),
        wide   [1] OCTET STRING (SIZE(1..40)) } OPTIONAL,
    extNo     [3] IA5String (SIZE(1..5)) OPTIONAL,
    groupType [4] KmeGroupType,           -- 3rd Party
    acdMode   [5] BOOLEAN,               -- 3rd Party
    ctiWaitTime [6] INTEGER}            -- 3rd Party

```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
groupNo	INTEGER	M	
device	DeviceID	M	DeviceID
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
extNo	IA5String(SIZE(1..5))	O	Floating extension number
groupType	KmeGroupType	M	Types of incoming group
acdMode	BOOLEAN	M	Mods of incoming group (the value would be TRUE in the ACD mode).
ctiWaitTime	INTEGER	M	The time that waiting for a control request from a computing function(second).

3.33 NumberOfMsgPort

Parameter	Data Type	MO	Description
SEQUENCE			
numberOfMsgPort	INTEGER	M	Number of message ports.
numberOfFreePort	INTEGER	M	Number of free message ports.

3.34 KmeOgmPlayState

KmeOgmPlayState ::= ENUMERATED

```
{
    started      (0),
    ended        (1) }
```

Parameter	Value	Description
ENUMERATED		
started	0	Replaying is started.
ended	1	Replaing is ended.

3.35 KmeOtherDevice (GetSwitchingFunctionDevices, GetSystemData)

KmeOtherDevice ::= ENUMERATED

```
{
    vm                (0),
    doorPhone         (1),      -- including Door openor
    disa              (2),
    pagingGroup       (3),
    psGruop           (4),
    externalRinger    (5),
    externalSensor    (6),
    externalPager     (7),
    modem             (8),
    hdlc              (9),
    pbxSystem         (10) }
```

Parameter	Value	MO	Description
ENUMERATED			
vm	0	M	VoiceMail
doorPhone	1		Door Phone
disa	2		
pagingGroup	3		
psGruop	4		
externalRinger	5		
externalSensor	6		
modem	7		
hdlc	8		
pbxSystem	9		

3.36 KmePckPagGroupList (GetSystemData)

KmePckPagGroupList ::= SEQUENCE OF SEQUENCE

```
{
    groupNo          [0] INTEGER,
    memberList       [1] KmePckPagMembers OPTIONAL }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
groupNo	INTEGER	M	Group number
memberList	SEQUENCE OF INTEGER	O	Each bit represents an extension group.

3.37 KmePsGroupList

KmePsGroupList ::= SEQUENCE OF SEQUENCE

```
{
    groupNo          INTEGER,
    device           DeviceID,      -- Ext. number
    name             CHOICE
    {
        single       [0] OCTET STRING(SIZE(1..20)),
        wide          [1] OCTET STRING(SIZE(1..40)) } OPTIONAL,
    memberList       [2] KmeGroupMembers OPTIONAL }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
groupNo	INTEGER	M	
device	DeviceID	M	DeviceID
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
memberList	KmeGroupMembers	O	

3.38 KmeRevisionType

```
KmeRevisionType ::= ENUMERATED -- V2.0
{
    systemDataRevision    (0),
    speedDialRevision     (1) }
```

Parameter	Value	Description
ENUMERATED		
systemDataRevision	0	System data revision information is requested
speedDialRevision	1	Speed dial revision information is requested

3.39 KmeGroupMembers (GetSystemData)

```
KmePckPagMembers ::= BIT STRING
{
    one           ( 0),
    two          ( 1),
    three        ( 2),
    four         ( 3),
    five         ( 4),
    six          ( 5),
    seven        ( 6),
    eight        ( 7),
    nine         ( 8),
    ten          ( 9),
    eleven       (10),
    twelve       (11),
    thirteen     (12),
    fourteen     (13),
    fifteen      (14),
    sixteen      (15),
    seventeen    (16),
    eighteen     (17),
    nineteen     (18),
    twenty       (19),
    twentyOne    (20),
    twentyTwo    (21),
    twentyThree  (22),
    twentyFour   (23),
    twentyFive   (24),
    twentySix    (25),
    twentySeven  (26),
    twentyEight  (27),
    twentyNine   (28),
    thirty       (29),
    thirtyOne    (30),
    thirtyTwo    (31),
    thirtyThree  (32),
    thirtyFour   (33),
    thirtyFive   (34),
    thirtySix    (35),
    thirtySeven  (36),
    thirtyEight  (37),
    thirtyNine   (38),
    forty        (39),
    fortyOne     (40),
```

fourtyTwo	(41),
fourtyThree	(42),
fourtyFour	(43),
fourtyFive	(44),
fourtySix	(45),
fourtySeven	(46),
fourtyEight	(47),
fourtyNine	(48),
fifty	(49),
fiftyOne	(50),
fiftyTwo	(51),
fiftyThree	(52),
fiftyFour	(53),
fiftyFive	(54),
fiftySix	(55),
fiftySeven	(56),
fiftyEight	(57),
fiftyNine	(58),
sixty	(59),
sixtyOne	(60),
sixtyTwo	(61),
sixtyThree	(62),
sixtyFour	(63),
sixtyFive	(64),
sixtySix	(65),
sixtySeven	(66),
sixtyEight	(67),
sixtyNine	(68),
seventy	(69),
seventyOne	(70),
seventyTwo	(71),
seventyThree	(72),
seventyFour	(73),
seventyFive	(74),
seventySix	(75),
seventySeven	(76),
seventyEight	(77),
seventyNine	(78),
eighty	(79),
eightyOne	(80),
eightyTwo	(81),
eightyThree	(82),
eightyFour	(83),
eightyFive	(84),
eightySix	(85),
eightySeven	(86),
eightyEight	(87),
eightyNine	(88),
ninety	(89),
ninetyOne	(90),
ninetyTwo	(91),
ninetyThree	(92),
ninetyFour	(93),
ninetyFive	(94),
ninetySix	(95),
ninetySeven	(96),
ninetyEight	(97),
ninetyNine	(98),
oneHundred	(99),
oneHundredOne	(100),
oneHundredTwo	(101),
oneHundredThree	(102),
oneHundredFour	(103),
oneHundredFive	(104),
oneHundredSix	(105),
oneHundredSeven	(106),
oneHundredEiht	(107),
oneHundredNine	(108),
oneHundredTen	(109),
oneHundredEleven	(110),
oneHundredTwelve	(111),
oneHundredThirteen	(112),
oneHundredFourteen	(113),
oneHundredFifteen	(114),
oneHundredSixteen	(115),
oneHundredSeventeen	(116),
oneHundredEithteen	(117),
oneHundredNineteen	(118),
oneHundredTwenty	(119),
oneHundredTwentyOne	(120),
oneHundredTwentyTwo	(121),

```

oneHundredTwentyThree    (122),
oneHundredTwentyFour    (123),
oneHundredTwentyFive    (124),
oneHundredTwentySix     (125),
oneHundredTwentySeven   (126),
oneHundredTwentyEight   (127) }

```

3.40 KmePhoneProperty

```

KmePhoneProperty ::= SEQUENCE
{
    portType          INTEGER,
    phoneCode         INTEGER,
    lcdRows           INTEGER,
    lcdColumns        INTEGER,
    numberOfCoKeys    INTEGER,
    numberOfSoftKeys  INTEGER,
    spPhone           BOOLEAN}

```

Parameter	Data Type	MO	Description
SEQUENCE			
portType	INTEGER	M	Type of extension port
phoneCode	INTEGER	M	Code of telephone set
lcdRows	INTEGER	M	Line number of LCD
lcdColumns	INTEGER	M	Digit number of LCD
numberOfCoKeys	INTEGER	M	The number of CO button
numberOfSoftKeys	INTEGER	M	The number of soft key
spPhone	BOOLEAN	M	Whether or not a speaker phone exists (true=exists).

Note : Value of parameters in KmePhoneProperty is indefinite while the extension is out of service.

PortType	Value
none	0
slt	1
apt	2
dptOld	3
dpt	4
isdn	8
wireless	10
ip-pt	12
ip-pt (P2P)	13
sip	14

3.41 KmeProprietaryChars

```

KmeProprietaryChars ::= OCTET STRING(SIZE(0..144))

```

3.42 KmeRequestedDevice

```

KmeRequestedDevice ::= CHOICE
{
    device          [0] DeviceID,
    category        [1] KmeDeviceCategory}

```


Parameter	Data Type	MO	Description
CHOICE			
device	DeviceID	M	
category	KmeDeviceCategory		

3.43 KmeSetForwardInfo (SetSystemData)

```
KmeSetForwardInfo ::= SEQUENCE
{
    forwardingType      [0] KmeForwardType,
    activateForward     [1] BOOLEAN,
    forwardDN          [2] DeviceID OPTIONAL}

```

Parameter	Data Type	MO	Description
SEQUENCE			
forwardingType	KmeForwardType	M	
activateForward	BOOLEAN	M	TRUE : Enable forwarding FALSE : Disable forwarding
forwardDN	DeviceID	O	

3.44 KmeSpeedDial (GetSystemData)

```
KmeSpeedDial ::= SEQUENCE OF SEQUENCE
{
    serialNumber      [0] INTEGER(0..999),
    registeredDigits  [1] IA5String(SIZE(1..32)) OPTIONAL,
    callerName       [2] CHOICE
    {
        single        [0] OCTET STRING (SIZE(1..20)),
        wide          [1] OCTET STRING(SIZE(1..40)) } OPTIONAL}

```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
serialNumber	INTEGER(0..999)	M	
registeredDigits	IA5String(SIZE(1..32))	O	
callerName	CHOICE		O wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING(SIZE(1..40))	

3.45 KmeSpeedDialRequest (GetSystemData)

```
KmeSpeedDialRequest ::= SEQUENCE
{
    startSerialNo INTEGER(0..999),
    number        INTEGER(1..1000), -- Currently 0..50
    tenantNo      [0] INTEGER OPTIONAL} -- TDA600V4.0

```

Parameter	Data Type	MO	Description
SEQUENCE			
startSerialNo	INTEGER(0..999)	M	
number	INTEGER(1..1000)	M	Number of speed dial records to be retrieved.
tenantNo	INTEGER	O	

3.46 KmeTenantSpeedDial

```
KmeTenantSpeedDial ::= SEQUENCE -- V2.0
```

```
{
    tenantNo      [0] INTEGER,
    kmeSpeedDial  [1] KmeSpeedDial}
```

Parameter	Data Type	MO	Description
SEQUENCE			
tenantNo	INTEGER	M	
kmeSpeedDial	KmeSpeedDial	M	

3.47 KmeTimeStamp (GetSystemData)

```
KmeTimeStamp ::= GeneralizedTime
```

3.48 KmeTrkGroupEntry (GetSystemData)

```
KmeTrkGroupEntry ::= SEQUENCE
{
    device      [0] DeviceID,
    name        [1] CHOICE
    {
        single  [0] IA5String(SIZE(1..20)),
        wide    [1] OCTET STRING(SIZE(1..40)) } OPTIONAL,
    devNumber   [2] DeviceID,
    cabinetNO   [3] INTEGER OPTIONAL}
```

Parameter	Data Type	MO	Description
SEQUENCE			
device	DeviceID	M	
name	CHOICE		wide is not used
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
coNo	IA5String(SIZE(1..3))	M	CO number
cabinetNO	INTEGER	O	

3.49 KmeTrkMembers (GetSystemData)

```
KmeTrkMembers ::= SEQUENCE
{
    groupNo     [0] IMPLICIT INTEGER,
    members     [1] IMPLICIT SEQUENCE OF KmeTrkGroupEntry}
```

Parameter	Data Type	MO	Description
SEQUENCE			
groupNo	INTEGER	M	Group number
members	SEQUENCE OF KmeTrkGroupEntry	O	Member information

3.50 KmeVmDtmfType

```
KmeVmGroup ::= ENUMERATED
{
    dpt      (0),
    dtmf     (1)}
```

Parameter	Value	Description
dpt	(0)	
dtmf	(1)	

ENUMERATED		
dpt	0	DPT
dtmf	1	DTMF

3.51 KmeVmGroup

```
KmeVmDtmfType ::= ENUMERATED
{
    aa          (0),
    vm          (1) }
```

Parameter	Value	Description
ENUMERATED		
aa	0	Auto Attendant
vm	1	Voice Mail

3.52 KmeVmGroupList

```
KmeVmGroupList ::= SEQUENCE OF SEQUENCE
{
    device      DeviceID,
    vmType      KmeVmGroup,
    name        CHOICE
    {
        single   [0] OCTET STRING (SIZE(1..20)),
        wide     [1] OCTET STRING (SIZE(1..40)) } OPTIONAL,
    extNo       IA5String(SIZE(1..5)) OPTIONAL,
    dtmfType    KmeVmDtmfType OPTIONAL }
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
device	DeviceID	M	DeviceID
vmType	KmeVmGroup	M	Interface type : DPT or DTMF
name	CHOICE		wide is not used.
	single	OCTET STRING (SIZE(1..20))	
	wide	OCTET STRING (SIZE(1..40))	
extNo	IA5String(SIZE(1..5))	O	Extension number
dtmfType	KmeVmDtmfType	M	AA(Automated Attendant) or VM(Voice Mail)

3.53 KmeWakeUpInfo (GetSystemData)

```
KmeWakeUpInfo ::= SEQUENCE
{
    time        [0] KmeWakeUpTime,
    schedule    [1] KmeWakeUpSchedule }
```

Parameter	Data Type	MO	Description
SEQUENCE			
time	KmeWakeUpTime	O	
schedule	KmeWakeUpSchedule	M	

3.54 KmeWakeUpSchedule (GetSystemData)

```
KmeWakeUpSchedule ::= ENUMERATED
{
    noSchedule      (0),
    once            (1),
    everyday        (2) }
```

Parameter	Value	Description
ENUMERATED		
noSchedule	0	The wakeup Call feature has not been set.
once	1	The wakeup Call feature has been set so as to use it once.
everyday	2	The wakeup Call feature has been set so as to use it everyday.

3.55 WakeupState

```
KmeWakeupState ::= ENUMERATED
{
    answered      (0),
    noAnswer      (1) }
```

Parameter	Value	Description
ENUMERATED		
answered	0	
noAnswer	1	

3.56 KmeWakeUpTime (GetSystemData)

```
KmeWakeUpTime ::= SEQUENCE
{
    hour      [0] IA5String(SIZE(2)),
    minute    [1] IA5String(SIZE(2)) }
```

Parameter	Data Type	MO	Description
SEQUENCE			
hour	IA5String(SIZE(2))	M	Indicated in 24-hour time stamp
minute	IA5String(SIZE(2))	M	

4. PBX Hospitality Features

4.1 KmeCheckStatusList

-- Used in KmeGetSystemDataRsp as response to KmeGetSystemData request.

KmeCheckStatusList ::= SEQUENCE OF SEQUENCE

```
{
    extNo          DeviceID,
    status         KmeRoomStatus,
    cleanUpStatus  KmeCleanUpStatus OPTIONAL}
```

Parameter	Data Type	MO	Description
SEQUENCE OF SEQUENCE			
extNo	cleanUpStatus	M	Extension number of a guest room.
status	KmeRoomStatus	M	Status whether checked-in or checked-out.
cleanUpStatus	KmeCleanUpStatus	O	Status of guest room cleanup.

4.2 KmeCleanUpStatus

KmeCleanUpStatus ::= ENUMERATED

```
{
    ready          (0),
    notReady       (1)}
```

Parameter	Value	MO	Description
ENUMERATED			
ready	(0)	M	The guest room is cleaned up.
notReady	(1)	M	The guest room is required to be cleaned up.

4.3 KmeHotelSrvEvt

-- TDA600 V4.0 : PBX internal hotel feature control interface

KmeHotelSrvEvt ::= CHOICE

```
{
    guestCheckIn  [0] IMPLICIT DeviceID,
    guestCheckOut [1] IMPLICIT DeviceID,
    checkedIn     [2] IMPLICIT DeviceID,
    checkedOut    [3] IMPLICIT DeviceID,
    cleanUp       [4] IMPLICIT DeviceID, -- Req.(toggle:Ready<->NotReady)
    cleanUpReady  [5] IMPLICIT DeviceID, -- Event
    cleanUpNotReady [6] IMPLICIT DeviceID} -- Event
```

Parameter	Data Type	MO	Description
CHOICE			
guestCheckIn	DeviceID	M	Escape service to request check in.
guestCheckOut	DeviceID		Escape service to request check out.
checkedIn	DeviceID		Private event to notify guest is checked in.
checkedOut	DeviceID		Private event to notify guest is checked out
cleanUp	DeviceID		Escape service to request clean up.
cleanUpReady	DeviceID		Private event to notify guest room is cleaned up.
cleanUpNotReady	DeviceID		Private event to notify guest room is required to be cleaned up.

4.4 KmeRoomStatus

KmeRoomStatus ::= ENUMERATED

```
{
    checkIn      (0),
    checkOut     (1)}

```

Parameter	Value	MO	Description
ENUMERATED			
checkIn	(0)	M	The guest room is check-in status.
checkOut	(1)	M	The guest room is check-out status.

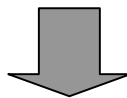
5. Panasonic Specific Types ASN.1 Definition

5.1 Location of Panasonic Specific Types

KX-TDA/TDE PBX specific data types are defined in KME Specific Data Types module to implement KX-TDA/TDE PBX specific services and events. The root data type of this module is `KMESpecificPrivateData`. This is used as the data type of “private” parameter in `CSTAPrivateData` instead of “NULL” data type as follows.

Standard ASN.1 Definition from ECMA-285

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



Modified

KX-TDA/TDE PBX uses following ASN.1 Definition

```
CSTAPrivateData ::= CHOICE
{
    string          OCTET STRING,
    private         KMESpecificPrivateData }
```

5.2 Panasonic Specific Data Types ASN.1 Definition

```

--
-- Panasonic Specific Data Types for CSTA Phase III
--
-- Version : 4.6 (for TDA 600 V4.0)
-- Date : 2008/04/01
--
-- Copyright Panasonic Communications Co.,Ltd.
-- Office Network Company
--

KME-specific-types
    { iso(1) identified-organization(3) icd-ecma(12)
      member-company(2) panasonic(1019) kme(1) telecom(1) pbx(1) software(1) tda-types(1) }

DEFINITIONS ::=
BEGIN

EXPORTS
KMESpecificPrivateData:

IMPORTS
DeviceID, SubjectDeviceID FROM CSTA-device-identifiers
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) device-identifiers(123) }
ConnectionID, CallID FROM CSTA-call-connection-identifiers
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) call-connection-identifiers(124) }
AccountInfo FROM CSTA-device-feature-types
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) device-feature-types(127) }
ForwardList FROM CSTA-device-feature-types
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) device-feature-types(127) }
EventCause FROM CSTA-event-causes
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) event-causes(121) }
LocalConnectionState FROM CSTA-connection-states
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) connection-states(125) }
DeviceCategory FROM CSTA-capability-exchange
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) capability-exchange(131) }
ReqDeviceCategory FROM CSTA-get-switching-function-devices
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) get-switching-function-devices(204) }
ServiceCrossRefID FROM CSTA-capability-exchange
    { iso(1) identified-organization(3) icd-ecma(12)
      standard(0) csta3(285) capability-exchange(131) }

```


ButtonID FROM CSTA-physical-device-feature

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

KmeDeviceLock ::= ENUMERATED

```
{ lock (0),
  unlock (1)}
```

KmeTimeStamp ::= GeneralizedTime

KmeSpeedDialRequest ::= SEQUENCE

```
{ startSerialNo INTEGER(0..999),
  number INTEGER(1..1000), -- Currently 0..50
  tenantNo [0] INTEGER OPTIONAL} -- TDA600V4.0
```

KmeSpeedDial ::= SEQUENCE OF SEQUENCE

```
{ serialNumber [0] INTEGER(0..999),
  registeredDigits [1] IA5String(SIZE(1..32)) OPTIONAL,
  callerName [2] CHOICE
  { single [0] OCTET STRING(SIZE(1..20)),
    wide [1] OCTET STRING(SIZE(1..40))} OPTIONAL}
```

KmeWakeUpTime ::= SEQUENCE

```
{ hour [0] IA5String(SIZE(2)),
  minute [1] IA5String(SIZE(2))}
```

KmeWakeUpSchedule ::= ENUMERATED

```
{ noSchedule (0),
  once (1),
  everyday (2)}
```

KmeWakeUpInfo ::= SEQUENCE

```
{ time [0] KmeWakeUpTime OPTIONAL,
  schedule [1] KmeWakeUpSchedule}
```

KmeWakeupState ::= ENUMERATED

```
{ answered (0),
  noAnswer (1)}
```

-- 2002/10/29 Changed

KmeAbsentMessage ::= CHOICE

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```
{
    single      [0] OCTET STRING(SIZE(0..16)),
    wide        [1] OCTET STRING(SIZE(0..32))}
```

KmeDnMode ::= ENUMERATED

```
{
    day          (0),
    lunch        (1),
    break        (2),
    night        (3)}
```

KmeDayNightMode ::= SEQUENCE OF SEQUENCE

```
{
    tenantNo     [0] INTEGER,
    mode         [1] KmeDnMode }
```

KmeOgmPlayState ::= ENUMERATED

```
{
    started      (0),
    ended        (1)}
```

KmeForwardType ::= 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),
    forwardBusyNoAnswer   (12),      -- KmeProprietary
    forwardBusyNoAnswerInt (13),     -- KmeProprietary
    forwardBusyNoAnswerExt (14)}     -- KmeProprietary
```

KmeSetForwardInfo ::= SEQUENCE

```
{
    forwardingType [0] KmeForwardType,
    activateForward [1] BOOLEAN,
    forwardDN      [2] DeviceID  OPTIONAL}
```

KmeFeatureList ::= SEQUENCE OF SEQUENCE

```
{
    featureNo      [0] INTEGER,
    featureDigits [1] IA5String(SIZE(1..6))  OPTIONAL}
```

KmeExtGroupEntry ::= SEQUENCE

```
{
    device          [0] DeviceID,  -- ext. number
    name            [1] CHOICE
    {
        single      [0] OCTET STRING(SIZE(1..20)),
        wide        [1] OCTET STRING(SIZE(1..40)) }    OPTIONAL,
    devNumber      [2] DeviceID,  -- device number
    cabinetNO      [3] INTEGER          OPTIONAL,
    psNo           [4] IA5String(SIZE(1..3))    OPTIONAL,
    numberOfBch    [5] INTEGER          OPTIONAL}

```

KmeTrkGroupEntry ::= SEQUENCE

```
{
    device          [0] DeviceID,  -- device number
    name            [1] CHOICE
    {
        single      [0] OCTET STRING(SIZE(1..20)),
        wide        [1] OCTET STRING(SIZE(1..40)) }    OPTIONAL,
    coNo           [2] IA5String(SIZE(1..3)),
    cabinetNO      [3] INTEGER OPTIONAL}

```

KmeExtMembers ::= SEQUENCE

```
{
    groupNo        [0] IMPLICIT INTEGER,
    members        [1] IMPLICIT SEQUENCE OF KmeExtGroupEntry}

```

KmeTrkMembers ::= SEQUENCE

```
{
    groupNo        [0] IMPLICIT INTEGER,
    members        [1] IMPLICIT SEQUENCE OF KmeTrkGroupEntry}

```

KmeExtTrkGroupList ::= SEQUENCE OF SEQUENCE

```
{
    groupNo        [0] INTEGER,
    name            [1] CHOICE
    {
        single      [0] OCTET STRING(SIZE(1..20)),
        wide        [1] OCTET STRING(SIZE(1..40)) }    OPTIONAL,
    tenantNo       [2] INTEGER    OPTIONAL}

```

KmeGroupMembers ::= BIT STRING

```
{
    one            ( 0),
    two            ( 1),
    three          ( 2),
    four           ( 3),
    five           ( 4),
    six            ( 5),
    seven          ( 6),
    eight          ( 7),
    nine          ( 8),

```

ten	(9),
eleven	(10),
twelve	(11),
thirteen	(12),
fourteen	(13),
fifteen	(14),
sixteen	(15),
seventeen	(16),
eighteen	(17),
nineteen	(18),
twenty	(19),
twentyOne	(20),
twentyTwo	(21),
twentyThree	(22),
twentyFour	(23),
twentyFive	(24),
twentySix	(25),
twentySeven	(26),
twentyEight	(27),
twentyNine	(28),
thirty	(29),
thirtyOne	(30),
thirtyTwo	(31),
thirtyThree	(32),
thirtyFour	(33),
thirtyFive	(34),
thirtySix	(35),
thirtySeven	(36),
thirtyEight	(37),
thirtyNine	(38),
fourty	(39),
fourtyOne	(40),
fourtyTwo	(41),
fourtyThree	(42),
fourtyFour	(43),
fourtyFive	(44),
fourtySix	(45),
fourtySeven	(46),
fourtyEight	(47),
fourtyNine	(48),
fifty	(49),
fiftyOne	(50),
fiftyTwo	(51),
fiftyThree	(52),
fiftyFour	(53),
fiftyFive	(54),
fiftySix	(55),
fiftySeven	(56),
fiftyEight	(57),
fiftyNine	(58),

sixty	(59),
sixtyOne	(60),
sixtyTwo	(61),
sixtyThree	(62),
sixtyFour	(63),
sixtyFive	(64),
sixtySix	(65),
sixtySeven	(66),
sixtyEight	(67),
sixtyNine	(68),
seventy	(69),
seventyOne	(70),
seventyTwo	(71),
seventyThree	(72),
seventyFour	(73),
seventyFive	(74),
seventySix	(75),
seventySeven	(76),
seventyEight	(77),
seventyNine	(78),
eighty	(79),
eightyOne	(80),
eightyTwo	(81),
eightyThree	(82),
eightyFour	(83),
eightyFive	(84),
eightySix	(85),
eightySeven	(86),
eightyEight	(87),
eightyNine	(88),
ninety	(89),
ninetyOne	(90),
ninetyTwo	(91),
ninetyThree	(92),
ninetyFour	(93),
ninetyFive	(94),
ninetySix	(95),
ninetySeven	(96),
ninetyEight	(97),
ninetyNine	(98),
oneHundred	(99),
oneHundredOne	(100),
oneHundredTwo	(101),
oneHundredThree	(102),
oneHundredFour	(103),
oneHundredFive	(104),
oneHundredSix	(105),
oneHundredSeven	(106),
oneHundredEiht	(107),
oneHundredNine	(108),

```

oneHundredTen      (109),
oneHundredEleven   (110),
oneHundredTwelve   (111),
oneHundredThirteen (112),
oneHundredFourteen (113),
oneHundredFifteen  (114),
oneHundredSixteen   (115),
oneHundredSeventeen (116),
oneHundredEighteen  (117),
oneHundredNineteen (118),
oneHundredTwenty   (119),
oneHundredTwentyOne (120),
oneHundredTwentyTwo (121),
oneHundredTwentyThree (122),
oneHundredTwentyFour (123),
oneHundredTwentyFive (124),
oneHundredTwentySix (125),
oneHundredTwentySeven (126),
oneHundredTwentyEight (127) }

```

KmePckPagGroupList ::= SEQUENCE OF SEQUENCE

```

{
    groupNo      [0] INTEGER,
    memberList   [1] KmeGroupMembers OPTIONAL}

```

KmeIcmGrpMembers ::= SEQUENCE

```

{
    grpDevice    [0] IMPLICIT DeviceID,
    members      [1] IMPLICIT SEQUENCE OF DeviceID}

```

KmeIncomingGroupList ::= SEQUENCE OF SEQUENCE

```

{
    groupNo      [0] INTEGER,
    device       [1] DeviceID,
    name         [2] CHOICE
    {
        single   [0] OCTET STRING(SIZE(1..20)),
        wide     [1] OCTET STRING(SIZE(1..40)) } OPTIONAL,
    extNo       [3] IA5String(SIZE(1..5)) OPTIONAL,
    groupType   [4] KmeGroupType,                -- 3rd Party
    acdMode     [5] BOOLEAN,                      -- 3rd Party
    ctiWaitTime [6] INTEGER,                      -- 3rd Party
    queueSize   [7] INTEGER OPTIONAL}            -- 3rd Party

```

-- 2001.05.15 Modified

KmeDoorPhone ::= SEQUENCE OF SEQUENCE

```

{
    doorPhoneNo [0] IA5String(SIZE(1..2)),
    device      [1] DeviceID,
    name       [2] CHOICE

```

```

{      single      [0] OCTET STRING(SIZE(1..20)),
      wide         [1] OCTET STRING(SIZE(1..40)) }  OPTIONAL}

-- 2001.05.10 added
KmeVmGroup ::= ENUMERATED
{      dpt         (0),
      dtmf         (1)}

-- 2001.05.10 added
KmeVmDtmfType ::= ENUMERATED
{      aa         (0),
      vm          (1)}

-- 2001.05.10 added
KmeVmGroupList ::= SEQUENCE OF SEQUENCE
{
      device       DeviceID,      -- Ext.Number
      vmType       KmeVmGroup,
      name         CHOICE
      {      single      [0] OCTET STRING(SIZE(1..20)),
              wide         [1] OCTET STRING(SIZE(1..40)) }  OPTIONAL,
      dtmfType     KmeVmDtmfType  OPTIONAL} -- dtmf type only

-- 01/12/17
KmePsGroupList ::= SEQUENCE OF SEQUENCE
{      groupNo     INTEGER,
      device       DeviceID,      -- Ext. number
      name         CHOICE
      {      single      [0] OCTET STRING(SIZE(1..20)),
              wide         [1] OCTET STRING(SIZE(1..40)) }  OPTIONAL,
      memberList   [2] KmeGroupMembers  OPTIONAL,
      memberList2  [3] KmeGroupMembers  OPTIONAL,
      memberList3  [4] KmeGroupMembers  OPTIONAL,
      memberList4  [5] KmeGroupMembers  OPTIONAL}

KmeChangeExtNo ::= SEQUENCE
{      requestingDevice DeviceID,
      newExtNo         IA5String(SIZE(1..5))}

KmeChangeName ::= SEQUENCE
{      requestingDevice DeviceID,
      newName          CHOICE
      {      single      [0] OCTET STRING(SIZE(1..20)),
              wide         [1] OCTET STRING(SIZE(1..40))} OPTIONAL}

```

```
-- GetSystemData for Third Party Function
```

```
KmeDeviceCategory ::= CHOICE
```

```
{
    standardDevice [0] DeviceCategory,
    kmeDevice      [1] KmeOtherDevice}
```

```
KmeRequestedDevice ::= CHOICE          -- for GetSystemData.deviceList
```

```
{
    device          [0] DeviceID,
    category        [1] KmeDeviceCategory}
```

```
KmeChangedDeviceCategory ::= CHOICE    -- for SWF.DeviceChanged
```

```
{
    standardDevice [0] ReqDeviceCategory,
    kmeDevice      [1] KmeOtherDevice}
```

```
KmeDeviceStateList ::= SEQUENCE OF KmeDeviceStateEntry
```

```
KmeDeviceStateEntry ::= SEQUENCE
```

```
{
    device          DeviceID,
    number          IA5String(SIZE(1..5)) OPTIONAL, -- Ext No, CO No, Park Area No.
    status          KmeDeviceState}
```

```
KmeDeviceState ::= ENUMERATED
```

```
{
    ins            (0),
    ous            (1)}
```

```
KmeGroupType ::= ENUMERATED
```

```
{
    ucd            (0),
    ring           (1),
    hunt           (2)}
```

```
KmePhoneProperty ::= SEQUENCE
```

```
{
    portType       INTEGER,
    phoneCode      INTEGER,
    lcdRows        INTEGER,
    lcdColumns     INTEGER,
    numberOfCoKeys INTEGER,
    numberOfSoftKeys INTEGER,
    spPhone        BOOLEAN}
```

```
-- PortType
```

```
-- none          0x00
```



```

-- slt/OPX      0x01
-- apt         0x02
-- dptOld      0x03
-- dpt         0x04
-- isdn        0x08
-- wireless    0x0A
-- ip-pt       0x0C
-- ip-pt(p2p)  0x0D
-- sip         0x0E

```

```

--
-- Version 1.1
--

```

```

KmeDeviceExtNo ::= SEQUENCE
{
    devNumber      DeviceID,    -- DeviceNumber type
    extNo          IA5String(SIZE(1..5)) OPTIONAL}

```

```

KmeDeviceName ::= SEQUENCE
{
    extNo          IA5String(SIZE(1..5)),
    name           KmeExtName}

```

```

KmeFcoKeyInfo ::= SEQUENCE -- V2.0
{
    button         ButtonID,
    function        OCTET STRING(SIZE(1))}

```

```

KmeFcoKeyList ::= SEQUENCE OF KmeFcoKeyInfo -- V2.0

```

```

KmeExternalSensorList ::= SEQUENCE OF SEQUENCE -- V2.0
{
    sensorNo       [0] IA5String(SIZE(1..3)),
    device         [1] DeviceID,
    name           [2] CHOICE
    {
        single     [0] OCTET STRING(SIZE(1..20)),
        wide       [1] OCTET STRING(SIZE(1..40)) } OPTIONAL}

```

```

KmeTenantSpeedDial ::= SEQUENCE -- V2.0
{
    tenantNo       [0] INTEGER,
    kmeSpeedDial  [1] KmeSpeedDial}

```

```

KmeDistributionMethod ::= SEQUENCE -- V2.0
{
    group          DeviceID,
    type           KmeGroupType}

```

```
KmePDFStart ::= SEQUENCE -- V2.0
{
    device          DeviceID}

```

```
KmePDFStop ::= DeviceID -- V2.0
```

```
KmePDFStatus ::= SEQUENCE -- V2.0
{
    targetDevice    DeviceID,
    originatingDevice DeviceID,
    status          BOOLEAN}

```

```
KmePDFSrvEvt ::= CHOICE -- V2.0
{
    pDFStart [0] KmePDFStart,
    pDFStop  [1] KmePDFStop}

```

```
-- TDA30 V2.2
```

```
KmeSvmList ::= SEQUENCE OF SEQUENCE
{
    device          DeviceID, -- Ext.Number
    name           KmeExtName OPTIONAL}

```

```
-----
-- SetSystemData for Third Party Function
-----
```

```
KmeExtName ::= CHOICE
{
    single [0] OCTET STRING(SIZE(0..20)),
    wide   [1] OCTET STRING(SIZE(0..40)) }

```

```
NumberOfMsgPort ::= SEQUENCE
{
    numberOfMsgPort INTEGER,
    numberOfFreePort INTEGER}

```

```
-----
-- KmeCallControlSrvExt
-----
```

```
KmeDndOverride ::= ConnectionID
```

```
KmeInterruptCall ::= ConnectionID
```

```
KmeExternalFeatureAccess ::= ConnectionID -- Request Only. Response = noData in EscapeResult.
```

```
KmeTempTollChange ::= SEQUENCE
{
    connection      ConnectionID,
    tollLevel       INTEGER}
```

```
KmeDoorOpen ::= ConnectionID
```

```
KmeTwoWayRec ::= SEQUENCE
{
    connection      ConnectionID,
    vmGroupExtNo    IA5String(SIZE(1..5))}
```

```
-- 2002/05/28 Added
```

```
KmeCallBackInvokeReq ::= SEQUENCE
{
    callBackID      OCTET STRING (SIZE(0..4)),
    requestingDevice DeviceID,
    targetDevice    DeviceID    OPTIONAL} -- extension only
```

```
-- 2002/05/28 Added
```

```
KmeCallBackInvokeRsp ::= ConnectionID
```

```
-- 2002/05/28 Added
```

```
CallBackNotification ::= SEQUENCE
{
    callBackID      OCTET STRING (SIZE(0..4)),
    prompted        BOOLEAN,
    requestingDevice DeviceID,
    targetDevice    SubjectDeviceID}
```

```
-- 2002/05/28 Mod
```

```
KmeCallBackInvoke ::= CHOICE
{
    request      KmeCallBackInvokeReq,
    result       KmeCallBackInvokeRsp}
```

```
-- 2002/04/03
```

```
KmePcRec ::= SEQUENCE
{
    connection      ConnectionID,
    pcRecOn         BOOLEAN}
```

```
--
```

```
-- KmeDeviceStatus
```

```
--
```

KmeDeviceAgentStatus ::= SEQUENCE

```
{
    device          [0] DeviceID,
    status          [1] ENUMERATED
    {
        logout      (0),
        login       (1)},
    imcomingGroup  [2] DeviceID}
```

-- Changed 2001.04.24

KmeDeviceCallStatus ::= SEQUENCE OF SEQUENCE

```
{
    device          [0] DeviceID,
    status          [1] CHOICE
    {
        lineStatus  [0] ENUMERATED
        {
            idle     (0),
            ring     (1),
            busy     (2),
            hold     (3)},
        parkStatus  [1] SEQUENCE
        {
            area     [0] INTEGER(0..999),
            call     [1] CallID,
            action   ENUMERATED
            {
                parkin      (0),
                parkout     (1)}}}}
```

KmeDeviceServiceStatus ::= SEQUENCE

```
{
    source          [0] CHOICE
    {
        device      [0] DeviceID,
        cabinet     [1] INTEGER},
    status          [1] ENUMERATED
    {
        ous         (0),
        ins         (1)}}}
```

-- TDA600

KmeLineStatus ::= SEQUENCE

```
{
    segmentId      KmeLineStatusSegment,
    lineInformation OCTET STRING(SIZE(0..384))}
```

KmeLineStatusSegment ::= ENUMERATED

```
{
    wired1        (0),
    wired2        (1),
    wireless      (2),
    trunk         (3)}
```

-- End of KmeDeviceStatus

--

-- KmeDeviceMonitor

--

```

KmeStartDeviceMonitor ::= CHOICE
{
    null          NULL,
    event         CallMonitorEvent} -- TDA600

KmeStopDeviceMonitor ::= NULL -- Request Only. Response = noData in EscapeResult.

-- TDA600
CallMonitorEvent ::= ENUMERATED
{
    deviceCallStatus      (0),
    deviceLineStatus      (1)}

-- End of KmeDeviceMonitor

--
-- TDA Version 1.1
--

KmeBroadcastGroupList ::= SEQUENCE OF SEQUENCE
{
    groupNo      INTEGER,
    name         KmeExtName  OPTIONAL}

KmeBroadcastGrpMembers ::= SEQUENCE
{
    groupNo      [0] INTEGER,
    members      [1] IMPLICIT SEQUENCE OF DeviceID}

--
-- TDA600
--

KmeAlterIfSrvEvt ::= CHOICE
{
    alterIf      [0] KmeAlterIf,
    ifAltered    [1] KmeIfAltered}

KmeAlterIf ::= IfVersion

KmeIfAltered ::= IfVersion

IfVersion ::= ENUMERATED
{
    version0      (0),
    version1      (1)}

KmeDeviceDataList ::= SEQUENCE OF SEQUENCE
{
    device        [0] DeviceID,
    sysData       [1] CHOICE
    {
        standardInfo  SEQUENCE

```

```

    {
        wakeUp          [ 9] KmeWakeUpInfo          OPTIONAL,
        remoteLock      [10] KmeDeviceLock          OPTIONAL,
        callLogLock     [11] KmeDeviceLock          OPTIONAL,
        absentMessage   [12] KmeAbsentMessage       OPTIONAL,
        forwardDnd      [13] ForwardList            OPTIONAL,
        cos              [34] INTEGER                OPTIONAL,
        phoneProperty   [35] KmePhoneProperty       OPTIONAL,
        assocIncomGroup [36] KmeGroupMembers        OPTIONAL,
        messageWaiting  [37] SEQUENCE OF DeviceID  OPTIONAL,
        assocExtGroup   [39] INTEGER                OPTIONAL
    },
    extName            [41] KmeExtName,
    fcoKeyList         [44] KmeFcoKeyList,
    sxdpMaster         [45] DeviceID} }

```

-- TDA600 V3.1

KmePdnGMembers ::= SEQUENCE

```

{
    groupDevice    [0] IMPLICIT DeviceID,
    members        [1] IMPLICIT SEQUENCE OF DeviceID}

```

-- TDA600 V4.0 : PBX internal hotel feature control interface

KmeHotelSrvEvt ::= CHOICE

```

{
    guestCheckIn   [0] IMPLICIT DeviceID,
    guestCheckOut  [1] IMPLICIT DeviceID,
    checkedIn      [2] IMPLICIT DeviceID,
    checkedOut     [3] IMPLICIT DeviceID,
    cleanUp        [4] IMPLICIT DeviceID,    -- Req.(toggle:Ready<->NotReady)
    cleanUpReady   [5] IMPLICIT DeviceID,    -- Event
    cleanUpNotReady [6] IMPLICIT DeviceID}    -- Event

```

-- Used in KmeGetSystemDataRsp

KmeCheckStatusList ::= SEQUENCE OF SEQUENCE

```

{
    extNo          DeviceID,
    status         KmeRoomStatus,
    cleanUpStatus  KmeCleanUpStatus    OPTIONAL}

```

KmeRoomStatus ::= ENUMERATED

```

{
    checkIn        (0),
    checkOut       (1)}

```

KmeCleanUpStatus ::= ENUMERATED

```

{
    ready          (0),
    notReady       (1)}

```

--

-- KmeSystemData

--

```

KmeGetSystemDataReq ::= CHOICE
{
    systemData    [0] ENUMERATED
        {
            sysTimeStamp    ( 0),
            devTimeStamp    ( 1),      -- Not used
            featureList     ( 2),
            speedDial       ( 3),      -- Not used
            trunkGroup      ( 4),
            extensionGroup  ( 5),
            pickupGroup     ( 6),
            pagingGroup     ( 7),
            incomingGroup   ( 8),
            dayNightMode    ( 9),
            doorPhone       (10),
            vmGroup         (11),
            manufacturerName (12),    -- 3rd Party
            subdomainName   (13),    -- 3rd Party
            softwareVersion  (14),    -- 3rd Party
            ctiVersion      (15),    -- 3rd Party
            regionCode      (16),    -- 3rd Party
            systemTime      (17),    -- 3rd Party
            numberOfMsgPort (18),    -- 3rd Party
            psGroup         (19),    -- 3rd Party
            whoAmI          (20),    -- V1.1
            broadcastGroup  (21),    -- V1.1
            pbxType         (22),    -- V2.0
            externalSensor  (23),    -- V2.0
            svm             (24),    -- TDA30 V2.2
            pdn             (25)},   -- TDA600 V3.1

    deviceData    [1] SEQUENCE      -- Extension(Station) Device
        {
            device    [0] DeviceID,
            sysData   [1] CHOICE
                {
                    standardInfo  BIT STRING
                        {
                            wakeUp           (0),
                            remoteStationLock (1),
                            callLogLock     (2),
                            absentMessage   (3),
                            forwardDnd      (4),
                            cos              (5),      -- 3rd Party
                            phoneProperty    (6),      -- 3rd Party
                            assocIncomGroup (7),      -- 3rd Party
                            messageWating   (8),      -- 3rd Party
                            assocExtGroup   (9)},      -- 3rd Party
                            extName         [1] NULL,    -- V1.1
                            fcoKey         [2] NULL,    -- V2.0
                            sxdpMaster    [3] NULL}},    -- V2.0

            trkExtGMember [2] IMPLICIT SEQUENCE
                {
                    groupNo    INTEGER,
                    groupType  ENUMERATED
                        {
                            trunkGMembers (0),

```

```

                                extGMembers      (1) }},
incomGMember  [3] IMPLICIT SEQUENCE
  {      groupNo      DeviceID },
deviceList    [4] KmeRequestedDevice,
vmGMember     [5] DeviceID,                -- 02/05/20
speedDial     [6] KmeSpeedDialRequest,     -- 02/11/26
broadcastGMembers [7] INTEGER,            -- V1.1
guestCheckStatus [8] IMPLICIT DeviceID}   -- TDA600 V4.0

```

KmeGetSystemDataRsp ::= SEQUENCE

```

{ -- Whole system data
  timeStamp      [ 0] KmeTimeStamp      OPTIONAL, -- PCC
  featureList    [ 1] KmeFeatureList     OPTIONAL, -- PCC
  speedDial      [ 2] KmeSpeedDial       OPTIONAL, -- PCC
  trunkGroup     [ 3] KmeExtTrkGroupList OPTIONAL, -- PCC
  extGroup       [ 4] KmeExtTrkGroupList OPTIONAL, -- PCC
  pickGroup      [ 5] KmePckPagGroupList OPTIONAL, -- PCC
  pagingGroup    [ 6] KmePckPagGroupList OPTIONAL, -- PCC
  incomingGroup  [ 7] KmeIncomingGroupList OPTIONAL, -- PCC
  dayNightMode   [ 8] KmeDayNightMode    OPTIONAL, -- PCC
  wakeUp         [ 9] KmeWakeUpInfo      OPTIONAL, -- PCC
  remoteLock     [10] KmeDeviceLock       OPTIONAL, -- PCC
  callLogLock    [11] KmeDeviceLock       OPTIONAL, -- PCC
  absentMessage  [12] KmeAbsentMessage    OPTIONAL, -- PCC
  forwardDnd     [13] ForwardList         OPTIONAL, -- PCC
  trkGMembers    [14] KmeTrkMembers       OPTIONAL, -- PCC
  extGMembers    [15] KmeExtMembers       OPTIONAL, -- PCC
  incomGMembers  [16] KmeIcmGrpMembers    OPTIONAL, -- PCC
  doorPhone      [17] KmeDoorPhone        OPTIONAL, -- PCC
  vmGroup        [18] KmeVmGroupList      OPTIONAL, -- PCC
  manufacturerName [19] IA5String(SIZE(0..64)) OPTIONAL, -- 3rd Party
  subdomainName  [20] IA5String(SIZE(0..20)) OPTIONAL, -- 3rd Party
  softwareVersion [21] IA5String(SIZE(0..32)) OPTIONAL, -- 3rd Party
  ctiVersion     [22] IA5String(SIZE(0..32)) OPTIONAL, -- 3rd Party
  regionCode     [23] IA5String(SIZE(0..32)) OPTIONAL, -- 3rd Party
  systemTime     [24] GeneralizedTime     OPTIONAL, -- 3rd Party
  numberOfMsgPort [25] NumberOfMsgPort    OPTIONAL, -- 3rd Party
  psGroup        [26] KmePsGroupList      OPTIONAL, -- 3rd Party
  youAre         [27] DeviceID            OPTIONAL, -- V1.1
  svm            [28] KmeSvmList          OPTIONAL, -- TDA30 V2.2
  pdn            [29] KmePdnGMembers      OPTIONAL, -- TDA600 V3.1

-- Each device data
  cos            [34] INTEGER              OPTIONAL, -- 3rd Party
  phoneProperty  [35] KmePhoneProperty    OPTIONAL, -- 3rd Party
  assocIncomGroup [36] KmeGroupMembers    OPTIONAL, -- 3rd Party
  messageWaiting [37] SEQUENCE OF DeviceID OPTIONAL, -- 3rd Party
  deviceList     [38] KmeDeviceStateList  OPTIONAL, -- 3rd Party
  assocExtGroup  [39] INTEGER              OPTIONAL, -- 01/12/17
  vmGMembers     [40] KmeIcmGrpMembers    OPTIONAL, -- 02/05/20

```



```

extName          [41] KmeExtName          OPTIONAL,    -- V1.1
broadcastGroup   [42] KmeBroadcastGroupList  OPTIONAL,    -- V1.1
broadcastGMembers [43] KmeBroadcastGrpMembers  OPTIONAL,    -- V1.1
fcoKeyList       [44] KmeFcoKeyList         OPTIONAL,    -- V2.0
sxdpMaster       [45] DeviceID              OPTIONAL,    -- V2.0
pbxType          [46] INTEGER              OPTIONAL,    -- V2.0
externalSensor   [47] KmeExternalSensorList OPTIONAL,    -- V2.0
deviceDataList   [48] KmeDeviceDataList     OPTIONAL,    -- TDA600
guestCheckStatus [49] KmeCheckStatusList     OPTIONAL}    -- TDA600 V4.0

```

```
KmeGetSystemData ::= CHOICE
```

```
{
    request      KmeGetSystemDataReq,
    result       KmeGetSystemDataRsp}
```

```
-- KmeDnMode changed to KmeDayNightMode 2001.03.09
```

```
KmeSetSystemData ::= CHOICE -- Request Only. Response = noData in EscapeResult.
```

```
{
    systemData    [0] CHOICE -- Whole system data
    {
        speedDial      [0] KmeSpeedDial,          -- PCC
        dayNightMode   [1] KmeDayNightMode,      -- PCC
        time           [2] GeneralizedTime,      -- PCC
        extNo          [3] KmeChangeExtNo,       -- 2002/01/24
        name           [4] KmeChangeName,        -- 2002/01/24
        subdomainName  [5] IA5String(SIZE(0..20)), -- V2.0(Lock)
        tenantSpeedDial [6] KmeTenantSpeedDial,  -- V2.0(Lock)
        distributionMethod [7] KmeDistributionMethod}, -- V2.0(Lock)
    deviceData    [1] SEQUENCE -- Each device data for extension
    {
        device        [1] DeviceID,
        sysData       [2] CHOICE
        {
            wakeUp      [0] KmeWakeUpInfo,      -- PCC
            remoteLock  [1] KmeDeviceLock,      -- PCC
            forwardDnd  [2] KmeSetForwardInfo,  -- PCC
            absentMessage [3] KmeAbsentMessage, -- PCC
            passwordClear [4] NULL,             -- PCC
            extNumber   [5] IA5String(SIZE(1..5)),
            extName     [6] KmeExtName,
            cos         [7] INTEGER,
            joinGroup   [8] DeviceID,
            leaveGroup  [9] DeviceID,
            inService   [10] BOOLEAN,           -- 2002/01/24
            fcoKey      [11] KmeFcoKeyList}}, -- V2.0(No lock)
        acdQueue       [3] SEQUENCE -- No lock(V2.0 modified)
        {
            device      DeviceID,
            attribute   CHOICE
            {
                groupType [1] KmeGroupType,    -- Not used(V2.0)
                acdMode   BOOLEAN,
                ctiWaitTime INTEGER} } }
```

KmeSystemDataChanged ::= CHOICE

```

{
    systemData      [0] ENUMERATED
    {
        featureList      ( 1),
        speedDial        ( 2),
        trunkGroup       ( 3),
        extGroup         ( 4),
        pickGroup        ( 5),
        pagingGroup      ( 6),
        incomingGroup    ( 7),
        dayNightMode     ( 8),
        doorPhone        ( 9),
        vmGroup          (10),
        systemTime       (11),
        psGroup          (12),
        trunkGMembers    (13),           -- 02/01/24
        incomingGMembers (14),           -- 02/01/24
        psGMembers       (15),           -- 02/01/24
        vmGMembers       (16),           -- 02/05/20
        broadcastGroup   (17),           -- V1.1
        broadcastGMembers (18),           -- V1.1
        subdomainName    (19),           -- V2.0
        externalSensor   (20),           -- V2.0
        svm              (21)},          -- TDA30 V2.2
    deviceData      [1] SEQUENCE
    {
        device          [0] DeviceID,
        sysData         [1] ENUMERATED
        {
            wakeUp      ( 0),
            remoteStationLock ( 1),
            callLogLock ( 2),
            absentMessage ( 3),
            forwardDnd   ( 4),
            cos           ( 5),
            extName      ( 6),           -- 01/12/17
            assocExtGroup ( 7),           -- 01/12/17
            fcoKey       ( 8),           -- V2.0
            sxdpMaster   ( 9)},          -- V2.0
        deviceBasicInfo [2] DeviceID,
        reconfiguration [3] NULL}        -- 02/04/03
}

```

KmeSystemDataLinkedReply ::= SEQUENCE

```

{
    crossRefID      [0] ServiceCrossRefID,   -- 01/12/17
    segmentID       [1] INTEGER,
    lastSegment     [2] BOOLEAN,
    sysData         [3] KmeGetSystemDataRsp  OPTIONAL} -- 02/04/22

```

KmeGetSystemDataPosAck ::= ServiceCrossRefID -- Cross Reference Identifier 01/12/17

-- 2002/07/02 Modified

KmeSystemCrossRefID ::= OCTET STRING(SIZE(4))

KmeLockSystemData ::= CHOICE

```
{
    request      SEQUENCE
    {
        systemDataLock    BOOLEAN, -- true:lock, false:unlock
        CHOICE
        {
            lock          DeviceID,
            unlock        KmeSystemCrossRefID} },
    lockResult    KmeSystemCrossRefID}
```

KmeSystemDataStatus ::= SEQUENCE

```
{
    systemDataLock    BOOLEAN,
    lockingDevice     DeviceID    OPTIONAL}
```

-- 2002/12/19 added

KmeSystemDataRevision ::= OCTET STRING(SIZE(0..128))

KmeGetSystemDataRevision ::= CHOICE -- V2.0

```
{
    request      KmeRevisionType,
    result       KmeSystemDataRevision}
```

KmeRevisionType ::= ENUMERATED -- V2.0

```
{
    systemDataRevision    (0),
    speedDialRevision     (1)}
```

--true:Event is enable

ProgrammingEventOn ::= BOOLEAN -- V2.0

KmeSetProgrammingEventOn ::= CHOICE -- V2.0

```
{
    request      ProgrammingEventOn}
```

-- End of KmeSystemData

--

-- KmeLocalAlarmMessage

--

KmeLocalAlarm ::= CHOICE

```
{
    singleMessage    [0] OCTET STRING(SIZE(0..24)),
    wideMessage      [1] OCTET STRING(SIZE(0..48))}
```

-- End of KmeLocalAlarmMessage

--

--

-- KmeAdditionalData (PrivateData in a CSTA standard service/event)

--

--

-- MakeCall-Request

KmeTrunkId ::= DeviceID

-- GetSwitchingFunctionDevices-Request

KmeOtherDevice ::= ENUMERATED

```
{
    vm                (0),
    doorPhone         (1),    -- including Door opener
    disa              (2),
    pagingGroup       (3),    -- 2001/12/17
    psGruop           (4),    -- 2001/12/17
    externalRinger    (5),    -- 2002/04/26
    externalSensor    (6),    -- 2002/04/26
    externalPager     (7),    -- 2002/04/26
    modem             (8),    -- 2002/04/26
    hdlc              (9),    -- 2002/04/26
    pbxSystem         (10),   -- 2002/04/26
    svm               (11)}   -- 2004/10/04 for TDA30 V2.2
```

-- Call Detail Record Report

KmeCdrConditionCode ::= ENUMERATED

```
{
    cl                (0),    -- Reverse Charging
    tr                (1),    -- Call Transfer
    fw                (2),    -- Call Forwarding
    d0                (3),    -- DISA/TIE
    rm                (4),    -- Remote Maintenance
    na                (5)}   -- No Answer
```

KmeFeatureNumber ::= INTEGER

-- 1: Call Waiting(Delivered-Event)

-- Not used

-- 2: Answered by TAM(AnswerCall-Request)

-- PCC PC Console/PC Phone only

-- 3: Visual Caller ID(CallInformation-Event) 2002/05/27

-- 4: New Call with temporary COS(ServiceInitiated-Event) 2004/11/08

-- Set Display mod. 2002/08/08

KmeProprietaryChars ::= OCTET STRING(SIZE(0..144))

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-- Held Event

KmeHoldType ::= ENUMERATED

```
{
    consultation      (0),
    normal            (1),
    exclusive         (2)}
```

-- Deflect Call 2002/07/17

KmeForcedAlerting ::= BIT STRING

```
{
    fwdDnd           (0),
    timer            (1)}
```

-- Kme Private Events

KmeDigitsReport ::= SEQUENCE

```
{
    connection      ConnectionID,
    digits           IA5String(SIZE(0..64))}
```

KmeOgmStatus ::= SEQUENCE

```
{
    connection      ConnectionID,
    state           KmeOgmPlayState,
    ogmId           INTEGER,
    ogmPortNumber   DeviceID}
```

KmeWakeupResult ::= SEQUENCE

```
{
    device          DeviceID,
    state           KmeWakeupState,
    wakeupTime      KmeWakeUpTime,
    invokeTime      GeneralizedTime,
    restOfRetry     INTEGER          OPTIONAL}
```

KmeUnconferenced ::= SEQUENCE

```
{
    unconferencingDevice DeviceID,
    primaryCall          ConnectionID,
    secondaryCall        ConnectionID          OPTIONAL,
    primaryNID           [1] DeviceID         OPTIONAL,
    secondaryNID         [2] DeviceID         OPTIONAL,
    primaryConnectionInfo LocalConnectionState,
    secondaryConnectionInfo LocalConnectionState OPTIONAL}
```

-- 2002/04/26 05/17 mod.

KmeTamEnded ::= ConnectionID

-- 2002/05/17 Added.

KmePcRecEnded ::= ConnectionID

-- 2002/07/22 Added

KmeSwitchChannel ::= ConnectionID

-- 2002/07/26 Added

KmeFreeOgmPort ::= INTEGER

KmeCallControlSrvEvt ::= CHOICE

```
{
    dndOverride          [0] KmeDndOverride,
    interruptCall        [1] KmeInterruptCall,
    eFA                  [2] KmeExternalFeatureAccess,
    tempTollChange       [3] KmeTempTollChange,
    doorOpen             [4] KmeDoorOpen,
    twoWayRec            [5] KmeTwoWayRec,
    callBackInvoke       [6] KmeCallBackInvoke,
    pcRec                [7] KmePcRec,
    switchChannel        [8] KmeSwitchChannel}
```

KmeDeviceStatus ::= CHOICE

```
{
    agentStatus          [0] KmeDeviceAgentStatus,
    callStatus           [1] KmeDeviceCallStatus,
    serviceStatus        [2] KmeDeviceServiceStatus,
    lineStatus           [3] KmeLineStatus}    -- TDA600
```

KmeDeviceMonitor ::= CHOICE

```
{
    startDeviceMonitor   [0] KmeStartDeviceMonitor,
    stopDeviceMonitor    [1] KmeStopDeviceMonitor}
```

KmeSystemData ::= CHOICE

```
{
    getSystemData        [0] KmeGetSystemData,
    setSystemData        [1] KmeSetSystemData,
    systemDataChanged    [2] KmeSystemDataChanged,
    systemDataLinkedReply [3] KmeSystemDataLinkedReply,
    getSystemDataPosAck  [4] KmeGetSystemDataPosAck,
    lockSystemData       [5] KmeLockSystemData,      -- 2002/05/17
    systemDataStatus     [6] KmeSystemDataStatus,    -- 2002/05/17
    dataRevisionRecord   [7] KmeSystemDataRevision,  -- 2002/12/19
    getDataRevisionRecord [8] KmeGetSystemDataRevision, -- V2.0
    setprogrammingEventOn [9] KmeSetProgrammingEventOn} -- V2.0
```

-- Private Data added in Standard Services

KmeAdditionalData ::= CHOICE

```
{
    fowardType          [1] KmeForwardType,          -- SetForwarding
    trunkId             [2] KmeTrunkId,              -- Not Used.
    otherDevice         [3] KmeOtherDevice,          -- GetSwitchingFunctionDevices
    vmRecExtNo          [4] IA5String(SIZE(1..5)),    -- ConsultationCall
    deviceCategory      [5] KmeChangedDeviceCategory, -- SwitchingFunctionDevice Changed
    device              [6] DeviceID,                -- GetAutoWorkMode-Request,
SetAutoWorkMode-Request
    featureNumber       [7] KmeFeatureNumber,        -- AnswerCall-Request, Delivered-Event
    proprietaryContents [8] KmeProprietaryChars,     -- Set Display
    holdType           [9] KmeHoldType,              -- Held Event
    conditionCode      [10] KmeCdrConditionCode,     -- Call Detail Records Report
    lockDisplay        [11] BOOLEAN,                 -- SetDisplay
    forcedAlerting     [12] KmeForcedAlerting,       -- DeflectCall
    callID             [13] CallID,                  -- RingStatus
    ogmContinuation    [14] BOOLEAN,                 -- DeflectCall
    broadcastGroupNo   [15] INTEGER,                 -- SInit,Orig,Delivered,Established
    ringPattern        [16] INTEGER,                 -- DeflectCall V2.0
    didNo              [17] DeviceID}                -- Delivered V2.0
```

KmePrivateEvent ::= CHOICE

```
{
    digitsReport        [1] KmeDigitsReport,
    ogmStatus           [2] KmeOgmStatus,
    wakeupResult        [3] KmeWakeupResult,
    unconferenced       [4] KmeUnconferenced,
    tamEnded            [5] KmeTamEnded,             -- 2002/04/26 05/17 mod.
    pcRecEnded          [6] KmePcRecEnded,          -- 2002/05/17 Added.
    callbackNotification [7] CallBackNotification,  -- 2002/05/28 Added
    freeOgmPort         [8] KmeFreeOgmPort,         -- 2002/08/26 Added
    pDFStatus           [9] KmePDFStatus}           -- Ver2.0
```

--

-- Resource Control

--

KmeResourceControl ::= CHOICE

```
{
    ogmStart            [0] KmeOgmStart,
    ogmStop             [1] KmeOgmStop}
```

KmeOgmStart ::= SEQUENCE

```
{
    connection          ConnectionID,
    ogmId               INTEGER}
```

KmeOgmStop ::= ConnectionID

--

-- Generic Services/Events

--

KmeGenericSrvEvt ::= CHOICE

```
{
    serviceRequest      [0] KmeGenericServiceReq,
    serviceResult      [1] KmeGenericServiceRsp,
    event               [2] KmeGenericEvent}
```

KmeGenericServiceReq ::= SEQUENCE

```
{
    serviceNo          INTEGER,
    device             DeviceID          OPTIONAL,
    connection         ConnectionID      OPTIONAL,
    number             INTEGER            OPTIONAL,
    string             IA5String(SIZE(0..128)) OPTIONAL}
```

KmeGenericServiceRsp ::= SEQUENCE

```
{
    number             INTEGER            OPTIONAL,
    string             IA5String(SIZE(0..128)) OPTIONAL}
```

KmeGenericEvent ::= SEQUENCE

```
{
    eventNo           INTEGER,
    device            DeviceID          OPTIONAL,
    connection        ConnectionID      OPTIONAL,
    state             LocalConnectionState OPTIONAL,
    cause             INTEGER            OPTIONAL,
    message           IA5String(SIZE(1..128)) OPTIONAL}
```

--- Root data structure of KME Specific Data

KMESpecificPrivateData ::= CHOICE

```
{
    kmeCallControl      [1] KmeCallControlSrvEvt,
    kmeDeviceStatus    [2] KmeDeviceStatus,
    kmeDeviceMonitor    [3] KmeDeviceMonitor,
    kmeSystemData       [4] KmeSystemData,
    kmeLocalAlarm       [5] KmeLocalAlarm,
    kmeAdditionalData   [6] KmeAdditionalData,
    kmePrivateEvent     [7] KmePrivateEvent,
    kmeResourceControl  [8] KmeResourceControl,
    kmeGeneric          [9] KmeGenericSrvEvt,
    kmeExtendedDataAccess [10] OCTET STRING(SIZE(0..200)),
    kmePDFControl       [11] KmePDFSrvEvt,      -- Ver2.0
    kmeAlterIf          [12] KmeAlterIfSrvEvt,  -- TDA600
    kmeHotelControl     [13] KmeHotelSrvEvt}  -- TDA600 v4.0
```

END -- of KME-specific-types

