IEEE P802.19
Wireless Coexistence

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| Proposed resolution to comment to ASN.1 data type definition for COEX\_MEDIA\_SAP  |
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Abstract

This document is a submission to IEEE 802.19 TG1 proposing resolution to comment to ASN1 data type definition for COEX\_MEDIA\_SAP.

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# Proposed resolution

*It is proposed to modify the current text in 4.3.2 COEX\_MEDIA\_SAP as shown below:*

IEEE802191MSAPDataType DEFINITIONS AUTOMATIC TAGS::= BEGIN

SubscribedService ::= ENUMERATED{

 information,

 management

}

NetworkTechnology ::= ENUMERATED{

 ieee802dot11af,

 ieee802dot22,

 ECMA392,

 …

}

NetworkType ::= ENUMERATED{

 fixed,

 mode2,

 mode1,

 …

}

Geolocation :: = SEQUENCE {

 latitude REAL,

 longitude REAL,

 altitude REAL

}

DiscoveryInformation ::= SEQUENCE{

 geolocation Geolocation

 maxTxPower REAL,

 rxSensitivity REAL,

 antennaGain REAL,

 minReqSNR REAL,

 TolerableInterferenceLevel real,

 antennaHeight REAL,

 …

}

FrequencyRange ::= SEQUENCE{

 startFreq REAL,

 stopFreq REAL

}

ListOfSupportedFrequencies ::= SEQUENCE OF FrequencyRange

OperatingFrequency ::= SEQUENCE {

 frequencyRange FrequencyRange,

 occupancy REAL,

 totalOccupancy REAL OPTIONAL

}

ListOfOperatingFrequencies ::= SEQUENCE OF OperatingFrequency

InterferenceDirection ::= ENUMERATED {

 mutual,

 source,

 victim

}

CoexType ::= ENUMERATED {

 known,

 unknown

}

FreqDescription ::= SEQUENCE{

 networkID OCTET STRING OPTIONAL,

 networkTechnology NetworkTechnology OPTIONAL,

 coexType CoexType,

 interferenceDirection InterferenceDirection,

 occupancy REAL OPTIONAL,

 totalOccupancy REAL OPTIONAL

}

REState ::= ENUMERATED {

 free,

 occupiedKnown,

 occupiedUnknown,

 notMeasured

}

REInfoElement ::= SEQUENCE {

 frequencyRange FrequencyRange,

 state REState,

 freqDescription FreqDescription OPTIONAL

}

RadioEnvironmentInformation ::= SEQUENCE OF REInfoElement

NetworkGeometryClass ::= ENUMERATED {

 class1,

 class2,

 class3,

 class4

}

NeighborReportElement ::= SEQUENCE {

 networkID OCTET STRING,

 networkTechnology NetworkTechnology,

 interferenceDirection InterferenceDirection,

 interferenceLevelFromNeighbor REAL,

 interferenceLevelToNeighbor REAL,

 listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

 listOfOperatingChannelNumbers SEQUENCE OF INTEGER OPTIONAL,

 radioEnvironmentInformation RadioEnvironmentInformation OPTIONAL,

 networkGeometryClass NetworkGeometryClass OPTIONAL

}

NeighborReport ::= SEQUENCE OF NeighborReportElement

AggrIntCntrParams ::= SEQUENCE {

 referencePointID INTEGER,

 geolocation Geolocation,

 acs REAL,

 antennaHeight REAL,

 antennaGain REAL,

 protectionRatio REAL,

 …

}

AvailableChannelElement ::= SEQUENCE {

 frequencyRange FrequencyRange,

 txPowerLimit REAL,

 availableStartTime GeneralizedTime,

 availableDuration REAL,

 aggrIntCntrParams AggrIntCntrParams OPTIONAL

}

AvailableChannelList::= SEQUENCE OF AvailableChannelElement

RequiredResourceElement ::= SEQUENCE {

 requiredBandwidth REAL,

 expectedLoad REAL

}

RequiredResource ::= SEQUENCE OF RequiredResourceElement

ListOfAllowedTVWSChNumber ::= SEQUENCE OF INTEGER

ConstOfChUseID :: = ENUMERATED {

 regulationMaxTxPower,

 regulationMaxAntGain,

 regulationMaxAntHeight,

 regulationTVDBUpdateTime,

 outOfBandEmissionLimit,

 …

}

ConstOfChUseValue ::= CHOICE {

 regulationMaxTxPower REAL,

 regulationMaxAntMaxGain REAL,

 regulationAntMaxHeight REAL,

 regulationTVDBUpdateTime REAL,

 outOfBandEmissionLimit REAL,

 …

}

ConstOfChUse ::= SEQUENCE {

 constOfChUseID ConstOfChUseID,

 constOfChUseValue ConstOfChUseValue

}

ConstOfChUses ::= SEQUENCE OF ConstOfChUse

OperatingChannelInfo ::= SEQUENCE {

 operatingChannelNumber INTEGER,

 listOfNetworkID SEQUENCE OF OCTET STRING,

 …

}

ChClassInfo ::= sequence {

 availableChannelList SEQUENCE OF INTEGER,

 restrictedChannelList SEQUENCE OF INTEGER,

 protectedChannelList SEQUENCE OF INTEGER,

 unclassifiedChannelList SEQUENCE OF INTEGER,

 operatingChannelList SEQUENCE OF OperatingChannelInfo,

 coexistenceChannelList SEQUENCE OF OperatingChannelInfo,

 …

}

ChClassInfoList ::= SEQUENCE OF SEQUENCE {

 networkID OCTET STRING,

 chClassInfo ChClassInfo

}

ReqInfoDescrElement ::= ENUMERATED{

 sinr,

 desiredBandwidth,

 desiredOccupancy,

 desiredQoS,

 desiredCoverage,

 channelNumber,

 subscribedService

 ...

}

ReqInfoDescr ::= SEQUENCE OF ReqInfoDescrElement

ReqInfoValueType ::= CHOICE {

 sinrValue REAL,

 desiredBandwidthValue REAL,

 desiredOccupancyValue REAL,

 desiredQoSValue REAL,

 desiredCoverageValue REAL,

 channelNumberValue REAL,

 SubscribedServiceValue SubscribedService

 otherValue ANY

}

ReqInfoValueElement ::= SEQUENCE {

 reqInfoDescr ReqInfoDescr,

 reqInfoValue ReqInfoValueType

}

ReqInfoValue ::= SEQUENCE OF ReqInfoValueElement

MeasSchedule ::= SEQUENCE {

 measStartTime REAL,

 numberOfMeasurements INTEGER,

 timeBetweenMeasurements REAL

}

MeasFreq ::= SEQUENCE {

 measStartAFreq REAL OPTIONAL,

 measEndFreq REAL OPTIONAL,

 listOfChNumber SEQUENCE OF INTEGER OPTIONAL

}

MeasDescr ::= ENUMERATED {

 sinr,

 fer,

 sensingLevel,

 primaryDetection,

 tvdbDetection,

 channelLoadMeasurement,

 ...

}

MeasurementDescription ::= SEQUENCE OF SEQUENCE {

 measDescr MeasDescr,

 measSchedule MeasSchedule,

 measFreq MeasFreq

}

ReqInfoValue ::= CHOICE {

 SINRValue REAL,

 FERValue REAL,

 SensingLevelValue REAL,

 PrimaryDetectionValue BOOLEAN,

 TVBDDetectionValue BOOLEAN,

 ChannelLoadMeasurementValue REAL,

 otherValue ANY

}

MeasurementResult ::= SEQUENCE OF SEQUENCE {

 reqInfoDescr ReqInfoDescr,

 reqInfoValue ReqInfoValue

}

TxScheduleElement ::= SEQUENCE {

 scheduleStartTime GeneralizedTime,

 scheduleDuration REAL,

 numberOfScheduleRepetitions INTEGER,

 transmissionStartTime REAL,

 transmissionDuration REAL

}

TxSchedule ::= SEQUENCE OF TxScheduleElement

ReconfigurationRequestElement ::= SEQUENCE {

 operatingFrequency FrequencyRange OPTIONAL,

 listOfOperatingChNumber SEQUENCE OF INTEGER OPTIONAL

 txPowerLimit REAL OPTIONAL,

 channelIsShared BOOLEAN,

 txSchedule TxSchedule OPTIONAL,

 networkTechnology NetworkTechnology OPTIONAL

}

ReconfigurationRequest ::= SEQUENCE OF ReconfigurationRequestElement

FailedParameterID ::= ENUMERATED {

 operatingFrequency,

 listOfoperatingChNumber,

 txPowerLimit,

 channelIsShared,

 txSchedule,

}

FailedParameterValue ::= CHOICE {

 operatingFrequency FrequencyRange,

 listOfoperatingChNumber SEQUENCE OF INTEGER,

 txPowerLimit REAL,

 channelIsShared boolean,

 txSchedule TxSchedule OPTIONAL

}

FailedParameter ::= SEQUENCE {

 failedParameterID FailedParameterID,

 failedParameterValue FailedParameterValue

}

FailedParameters ::= SEQUENCE OF FailedParameter

EventDescr ::= ENUMERATED{

 sinrThresholdReached,

 qosDegradation,

 misLocatedTVBDDetected,

 …

}

MisLocatedTVBDDetectedInfo ::= SEQUENCE {

 networkID OCTET STRING,

 listOfoperatingFrequency SEQUENCE OF FrequencyRange OPTIONAL,

 listOfChannelNumber SEQUENCE OF INTEGER OPTIONAL

}

AddInfo ::= CHOICE {

 misLocatedTVBDDetectedInfo MisLocatedTVBDDetectedInfo,

 …

}

EventParams ::= SEQUENCE {

 eventDescr EventDescr,

 addInfo AddInfo OPTIONAL

}

MediaType ::= ENUMERATED {

 xDSL,

 opticalFiber,

 other

}

GuranteedQoSOfWiredConnection:: = ENUMERATED {

 mediaType MediaType,

 guranteedMinimumBitRate REAL,

 guranteedMaximumLatency REAL OPTIONAL,

 …

}

END