IEEE P802.19  
Wireless Coexistence

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| Proposed ASN.1 definition of primitives | | | | |
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Abstract

This document is a submission to IEEE 802.19 TG1 proposing ASN.1 definition of primitives.

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# Proposed update

*It is proposed to add Normative Annex Primitive Definition using the text below.*

**Normative Annex Primitives Definition**

IEEE80219TRSAPPrimitive DEFINITIONS AUTOMATIC TAGS::= BEGIN

**-----------------------------------------------------------**

**--Imported data types**

**-----------------------------------------------------------**

--Imported data types

IMPORTS

--Coexistence protocol entity ID

CxID,

--Status

Status

FROM IEEE802191DataType;

**-----------------------------------------------------------**

**--Transport service configuration**

**-----------------------------------------------------------**

--Transport service configuration request

TrConfigurationRequest ::= SEQUENCE {

--Source ID

sourceID CxID,

--Destination ID

destinationID CxID,

--Destination IP address

destinationIPAddress OCTET STRING,

--Destination port number

destinationPortNumber INTEGER}

--Transport service configuration response

TrConfigurationResponse ::= SEQUENCE {

--Destination ID

destinationID CxID,

--Configuration status

status Status}

**-----------------------------------------------------------**

**--Connection establishment**

**-----------------------------------------------------------**

--Request for connection

TrConnectionRequest ::= SEQUENCE {

--Source ID

sourceID CxID,

--Destination ID

destinationID CxID}

--Indication of the received connection request

TrConnectionIndication ::= SEQUENCE {

--Source ID

sourceID CxID}

--Response to the received connection request

TrConnectionResponse ::= SEQUENCE {

--Destination ID

destinationID CxID,

--Connection status

status Status}

--Confirmation to the connection request

TrConnectionConfirm ::= SEQUENCE {

--Source ID

sourceID CxID,

--Connection status

status Status}

**-----------------------------------------------------------**

**--Connection termination**

**-----------------------------------------------------------**

--Connection termination request

TrDisconnectionRequest ::= SEQUENCE {

--Destination ID

destinationID CxID}

--Connection termination indication

TrDisconnectionIndication ::= SEQUENCE {

--Source ID

sourceID CxID}

**-----------------------------------------------------------**

**--Sending a coexistence protocol message**

**-----------------------------------------------------------**

--Request to send coexistence protocol message

TrSendRequest ::= SEQUENCE {

--Destination ID

destinationID CxID,

--Encoded coexistence protocol message

cxMessage OCTET STRING}

--Confirmation of sending coexistence protocol message

TrSendConfirm ::= SEQUENCE {

--Destination ID

destinationID CxID,

--Status of sending coexistence protocol message

status Status}

**-----------------------------------------------------------**

**--Receiving a coexistence protocol message**

**-----------------------------------------------------------**

--Indication of received coexistence protocol message

TrReceiveIndication ::= SEQUENCE {

--Source ID

sourceID CxID,

--Encoded coexistence protocol message

cxMessage OCTET STRING}

END

IEEE80219MEDIASAPPrimitive DEFINITIONS AUTOMATIC TAGS::= BEGIN

**-----------------------------------------------------------**

**--Imported data types**

**-----------------------------------------------------------**

--Imported data types

IMPORTS

--Status

Status,

--Coexistence service

CoexistenceService,

--Network technology

NetworkTechnology,

--Geolocation

Geolocation,

--Coverage area

CoverageArea,

--Installation parameters

InstallationParameters,

--List of available frequencies

ListOfAvailableFrequencies,

--List of operating frequencies

ListOfOperatingFrequencies,

--Required resource

RequiredResource,

--List of neighbor WSOs

ListOfNeighbors,

--Transmission schedule

TxSchedule,

--Coexistence protocol entity ID

CxID,

--Frequency range

FrequencyRange

FROM IEEE802191DataType;

**-----------------------------------------------------------**

**--WSO subscription**

**-----------------------------------------------------------**

--Request for subscription information

CxMediaSubscriptionRequest ::= SEQUENCE {}

--Subscription information

CxMediaSubscriptionResponse ::= SEQUENCE {

--WSO subscription ID

clientID IA5String,

--WSO subscription password

clientPassword IA5String,

--List of serving CMs

listOfCMs SEQUENCE OF SEQUENCE {

--CM ID

cmID CxID,

--CM IP address

cmIPAddress OCTET STRING,

--CM port number

cmPortNumber INTEGER,

--CM subscription ID

serverID IA5String,

--CM subscription password

serverPassword IA5String},

--Coexistence service to which WSO is subscribed

coexistenceService CoexistenceService}

--Request to change subscription

CxMediaSubscriptionIndication ::= SEQUENCE {

--Coexistence service to which WSO is subscribed

coexistenceService CoexistenceService}

--Subscription status

CxMediaSubscriptionConfirm ::= SEQUENCE {

--Subscription status

--noError means subscription is confirmed

--rejected means subscription is not confirmed

status Status}

**-----------------------------------------------------------**

**--WSO registration**

**-----------------------------------------------------------**

--Request for registration information

CxMediaRegistrationRequest ::= SEQUENCE {}

--Registration information

CxMediaRegistrationResponse ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING,

--Network ID

networkID OCTET STRING,

--Network technology

networkTechnology NetworkTechnology,

--Geolocation

geolocation Geolocation,

--Coverage area

coverageArea CoverageArea OPTIONAL,

--Installation parameters

installationParameters InstallationParameters OPTIONAL,

--List of available frequencies

listOfAvailableFrequencies ListOfAvailableFrequencies,

--Transmission schedule is supported or not

txScheduleSupported BOOLEAN OPTIONAL,

--List of operating frequencies

listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

--Required resource

requiredResource RequiredResource}

--Updated registration information

CxMediaRegistrationIndication ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING,

--Indication of WSO stop operation

wsoStopOperation BOOLEAN,

--List of available frequencies

listOfAvailableFrequencies ListOfAvailableFrequencies OPTIONAL,

--List of operating frequencies

listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

--Required resource

requiredResource RequiredResource OPTIONAL}

--Registration confirmation

CxMediaRegistrationConfirm ::= SEQUENCE {

--Registration status

status Status}

**-----------------------------------------------------------**

**--WSO reconfiguration**

**-----------------------------------------------------------**

--Reconfiguration request

CxMediaReconfigurationRequest ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING,

--Operating frequency

operatingFrequency FrequencyRange,

--Transmission power limit

txPowerLimit REAL OPTIONAL,

--Indication whether the channel is shared

channelIsShared BOOLEAN,

--Transmission schedule

txSchedule TxSchedule OPTIONAL}

--Reconfiguration response

CxMediaReconfigurationResponse ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING,

--Reconfiguration status

status Status}

**-----------------------------------------------------------**

**--CM stop operation**

**-----------------------------------------------------------**

--Stop operation indication

CxMediaStopOperationIndication ::= SEQUENCE {}

--Stop operation confirm

CxMediaStopOperationConfirm ::= SEQUENCE {

--Stop operation status

status Status}

**-----------------------------------------------------------**

**--Neighbor report**

**-----------------------------------------------------------**

-- Coexistence report indication

CxMediaCoexistenceReportAnnouncement ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING,

--List of neighbor WSOs

listOfNeighbors ListOfNeighbors}

-- Coexistence report confirm

CxMediaCoexistenceReportConfirm ::= SEQUENCE {

--Coexistence report status

status Status}

END