IEEE P802.19
Wireless Coexistence

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| Proposed update to messages |
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Abstract

This document is a submission to IEEE 802.19 TG1 proposing update to messages.

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# Proposed update

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

**Normative Annex Messages Definition**

IEEE802191Message DEFINITIONS AUTOMATIC TAGS ::= BEGIN

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

**--Imported data types**

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

--Imported data types

IMPORTS

 --Status

 Status,

 --Coexistence service

 CoexistenceService,

 --Network technology

 NetworkTechnology,

 --Location

 Geolocation,

 --Coverage area

 CoverageArea,

 --Installation parameters

 InstallationParameters,

 --List of available frequencies

 ListOfAvailableFrequencies,

 --List of operating frequencies

 ListOfOperatingFrequencies,

 --Required resource

 RequiredResource,

 --Operation code for registration

 OperationCode,

 --List of available frequencies of the subject WSO

 ListOfSubjectWSOAvailableFrequencies,

 --Transmission schedule

 TxSchedule,

 --Frequency range

 FrequencyRange,

 --CM registration

 CMRegistration,

 --CE registration

 CERegistration,

 --List of subject CEs

 ListOfSubjectCEs,

 --List of neighbor CMs transport information

 ListOfNeighborCMsTransport,

 --List of neighbor CM WSOs

 ListOfNeighborCMWSOs,

 --List of CEs for reconfiguration

 ReconfigListOfCEs

FROM IEEE802191DataType;

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

**--Message structure, header structure, and payload types**

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

--Message structure

CxMessage ::= SEQUENCE {

 -- Message header

 header CxHeader,

 -- Message payload

 payload CxPayload}

--Header

CxHeader ::= CHOICE {

 --For announcement

 none NULL,

 --For request or single response

 requestID INTEGER (0..2147483647),

 --For multiple responses

 multipleResponse SEQUENCE {

 --Original request ID

 requestID INTEGER (0..2147483647),

 --Response number

 sequenceNumber INTEGER (0..2147483647),

 --True is the response is last

 isLastResponse BOOLEAN}}

--Payload types

CxPayload ::= CHOICE {

 --WSO subscription request

 subscriptionRequest SubscriptionRequest,

 --WSO subscription response

 subscriptionResponse SubscriptionResponse,

 --CE registration request

 ceRegistrationRequest CERegistrationRequest,

 --Registration response

 registrationResponse RegistrationResponse,

 --Reconfiguration request

 reconfigurationRequest ReconfigurationRequest,

 --Reconfiguration response

 reconfigurationResponse ReconfigurationResponse,

 --Stop operation announcement

 stopOperationAnnouncement StopOperationAnnouncement,

 --Stop operation confirm

 stopOperationConfirm StopOperationConfirm,

 --Coexistence report announcement

 coexistenceReportAnnouncement CoexistenceReportAnnouncement,

 --Coexistence report confirm

 coexistenceReportConfirm CoexistenceReportConfirm,

 --CM registration request

 cmRegistrationRequest CMRegistrationRequest,

 --Coexistence set information announcement

 coexistenceSetInformationAnnouncement CoexistenceSetInformationAnnouncement,

 --Coexistence set information confirm

 coexistenceSetInformationConfirm CoexistenceSetInformationAnnouncement,

 --Coexistence set element information announcement

 coexistenceSetElementInformationAnnouncement CoexistenceSetElementInformationAnnouncement,

 --Coexistence set element information confirm

 coexistenceSetElementInformationConfirm CoexistenceSetElementInformationConfirm,

 --Coexistence set element information request

 coexistenceSetElementInformationRequest CoexistenceSetElementInformationRequest,

 --Coexistence set element information response

 coexistenceSetElementInformationResponse CoexistenceSetElementInformationResponse,

 --Coexistence set element reconfiguration request

 coexistenceSetElementReconfigurationRequest CoexistenceSetElementReconfigurationRequest,

 --Coexistence set element reconfiguration response

 coexistenceSetElementReconfigurationResponse CoexistenceSetElementReconfigurationResponse

}

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

**--WSO subscription**

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

--WSO subscription request

SubscriptionRequest ::= SEQUENCE {

 --WSO subscription ID

 clientID IA5String OPTIONAL,

 --WSO subscription password

 clientPassword IA5String OPTIONAL,

 --Coexistence service to which WSO is subscribed

 coexistenceService CoexistenceService}

--WSO subscription response

SubscriptionResponse ::= SEQUENCE {

 --CM subscription ID

 serverID IA5String OPTIONAL,

 --CM subscription password

 serverPassword IA5String OPTIONAL,

 --Subscription status

 --noError means subscription is confirmed

 --rejected means subscription is not confirmed

 status Status}

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

**--WSO registration**

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

CERegistrationRequest ::= SEQUENCE OF SEQUENCE {

 --New registration, registration update or deregistration

 operationCode OperationCode,

 --WSO ID

 wsoID OCTET STRING,

 --Network ID

 networkID OCTET STRING OPTIONAL,

 --Network technology

 networkTechnology NetworkTechnology OPTIONAL,

 --Location

 geolocation Geolocation OPTIONAL,

 --Coverage area

 coverageArea CoverageArea OPTIONAL,

 --Installation parameters

 installationParameters InstallationParameters OPTIONAL,

 --List of available frequencies

 listOfAvailableFrequencies ListOfAvailableFrequencies OPTIONAL,

 --Transmission schedule is supported or not

 txScheduleSupported BOOLEAN OPTIONAL,

 --List of operating frequencies

 listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

 --Required resource

 requiredResource RequiredResource OPTIONAL}

--Registration response

RegistrationResponse ::= SEQUENCE {

 --Registration status

 status Status}

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

**--WSO reconfiguration**

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

--Reconfiguration request

ReconfigurationRequest ::= 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 OPTIONAL,

 --Transmission schedule

 txSchedule TxSchedule OPTIONAL}

--Reconfiguration response

ReconfigurationResponse ::= SEQUENCE OF SEQUENCE {

 --WSO ID

 wsoID OCTET STRING,

 --Reconfiguration status

 status Status}

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

**--Stop operation**

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

--Stop operation announcement

StopOperationAnnouncement ::= SEQUENCE {}

--Stop operation confirm

StopOperationConfirm ::= SEQUENCE {

 --Stop operation status

 status Status}

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

**--Coexistence report**

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

--Coexistence report announcement

CoexistenceReportAnnouncement ::= SEQUENCE OF SEQUENCE {

 --Subject WSO ID

 wsoID OCTET STRING,

 --List of subject WSO available frequencies

 listOfSubjectWSOAvailableFrequencies ListOfSubjectWSOAvailableFrequencies}

--Coexistence report confirm

CoexistenceReportConfirm ::= SEQUENCE {

 --Coexistence report status

 status Status}

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

**--CM registration**

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

--CM registration request

CMRegistrationRequest ::= SEQUENCE {

 --CM registration

 cmRegistration CMRegistration OPTIONAL,

 --CE registration

 ceRegistration CERegistration}

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

**--Coexistence set information**

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

--Coexistence set information announcement

CoexistenceSetInformationAnnouncement ::= SEQUENCE {

 --List of subject CEs

 listOfSubjectCEs ListOfSubjectCEs,

 --List of neighbor CMs transport information mentioned inside the list of subject CEs

 listOfNeighborCMsTransport ListOfNeighborCMsTransport}

--Coexistence set information confirm

CoexistenceSetInformationConfirm ::= SEQUENCE {

 --Coexistence set information status

 status Status}

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

**--Coexistence set element information**

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

--Coexistence set element information announcement

CoexistenceSetElementInformationAnnouncement ::= SEQUENCE OF SEQUENCE{

 --CE ID

 ceID CxID,

 --Coexistence service

 coexistenceService CoexistenceService OPTIONAL,

 --List of neighbor CM WSOs

 listOfNeighborCMWSOs ListOfNeighborCMWSOs OPTIONAL

}

--Coexistence set element information confirm

CoexistenceSetElementInformationConfirm ::= SEQUENCE {

 --Coexistence set element information status

 status Status}

--Coexistence set element information request

CoexistenceSetElementInformationRequest ::= SEQUENCE OF SEQUENCE{

 --CE ID

 ceID CxID,

 --List of neighbor CM WSOs

 listOfNeighborCMWSOs ListOfNeighborCMWSOs

}

--Coexistence set element information response

CoexistenceSetElementInformationResponse ::= SEQUENCE OF SEQUENCE{

 --CE ID

 ceID CxID,

 --Coexistence service

 coexistenceService CoexistenceService,

 --List of neighbor CM WSOs

 listOfNeighborCMWSOs ListOfNeighborCMWSOs

}

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

**--Coexistence set element reconfiguration**

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

--Coexistence set element reconfiguration request

CoexistenceSetElementReconfigurationRequest ::= SEQUENCE{

 --List of subject CEs

 reconfigListOfSubjectCEs ReconfigListOfCEs,

 --List of neighbor CEs

 reconfigListOfNeighborCEs ReconfigListOfCEs

}

--Coexistence set element reconfiguration response

CoexistenceSetElementReconfigurationResponse ::= SEQUENCE{

 --Indicates whether the suggested reconfiguration is accepted or not

 requestIsAccepted BOOLEAN

}

END