**IEEE P802.19**

**Wireless Coexistence**

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| Re: | [] | |
| Abstract | Text Proposal for Annex C of IEEE 802.19.1 Rev | |
| Purpose | [] | |
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# **Executive Summary**

This submission provides the text proposal for Annex C of IEEE 802.19.1 Rev.

The proposal contains the followings:

* Merge ASN.1 codes of 802.19.1 and 802.19.1a so as not to conflict each other.
* Fix ASN.1 compiling error in the existing text of Annex C of 802.19.1
* Editorial changes for better readability

**------------------------------------------- Proposed Changes ---------------------------------------**

# **(normative) Messages**

IEEE802191Message DEFINITIONS AUTOMATIC TAGS ::= BEGIN

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

**--Imported data types**

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

--Imported data types

IMPORTS

--Coexistence protocol entity ID

CxID,

--Status

Status,

--CxMedia status

CxMediaStatus,

--Coexistence service

CoexistenceService,

--Subscribed service

SubscribedService,

--Network technology

NetworkTechnology,

--Network type

NetworkType,

--Location

Geolocation,

--Discovery information

DiscoveryInformation,

--Coverage area

CoverageArea,

--Installation parameters

InstallationParameters,

--List of available frequencies

ListOfAvailableFrequencies,

--List of operating frequencies

ListOfOperatingFrequencies,

--List of available channel numbers

ListOfAvailableChNumbers,

--List of operating channel numbers

ListOfOperatingChNumbers,

--List of supported frequencies

ListOfSupportedFrequencies,

--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,

--Coexistence report

CoexistenceReport,

--Channel priority

ChannelPriority,

--Measurement capability

MeasurementCapability,

--Failed parameters

FailedParameters,

--Channel classification information

ChClassInfo,

--Required information description

ReqInfoDescr,

--Requested information value

ReqInfoValue,

--Event parameters

EventParams,

--Negotiation status

NegotiationStatus,

--Negotiation information

NegotiationInformation,

--Winner CM ID list

ListOfWinnerCMID,

-- Slot time position list

ListOfSlotTimePosition,

--Measurement description

MeasurementDescription,

--Measurement result

MeasurementResult,

--Mobility Information

MobilityInformation,

--Entity profile

EntityProfile,

--List of master CM candidate

ListOfMasterCMCandidates,

--List of neighbor CMs

ListOfNeighborCMs,

--List of desired performances

ListOfDesiredPerformances,

--Range

Range,

--ListOfCandidateServingCMs

ListOfCandidateServingCMs,

--ListOfGCOs

ListOfGCOs,

--ListOfCEs

ListOfCEs,

--Region

Region,

--ListOfMovingGCOs

ListOfMovingGCOs,

--ListOfCandidateServedGCOs

ListOfCandidateServedGCOs,

--ListOfAccessibleCMs

ListOfAccessibleCMs,

--ListOfEstimatedAvailBandwidth

ListOfEstimatedAvailBandwidth,

--GCODescriptor

GCODescriptor,

--ListOfCoexistenceReports

ListOfCoexistenceReports,

--ListOfSpecUsageInfo

ListOfSpecUsageInfo,

--SpecAllocationSupportingInfo

SpecAllocationSupportingInfo,

--SpecRequestModification

SpecRequestModification

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 {

--CM association request (Profile 3)

cmAssociationRequest CMAssociationRequest,

--CM association response (Profile 3)

cmAssociationResponse CMAssociationResponse,

--WSO/GCO subscription request

subscriptionRequest SubscriptionRequest,

--WSO subscription response

subscriptionResponse SubscriptionResponse,

--WSO subscription change request

subscriptionChangeRequest SubscriptionChangeRequest,

--WSO subscription change response

subscriptionChangeResponse SubscriptionChangeResponse,

--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,

--Coexistence report request

coexistenceReportRequest CoexistenceReportRequest,

--Coexistence report response

coexistenceReportResponse CoexistenceReportResponse,

--CM registration request

cmRegistrationRequest CMRegistrationRequest,

--Coexistence set information announcement

coexistenceSetInformationAnnouncement CoexistenceSetInformationAnnouncement,

--Coexistence set information confirm

coexistenceSetInformationConfirm CoexistenceSetInformationAnnouncement,

--Coexistence set information request

coexistenceSetInformationRequest CoexistenceSetInformationRequest,

--Coexistence set information response

coexistenceSetInformationResponse CoexistenceSetInformationResponse,

--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,

--CM Reconfiguration request

cmReconfigurationRequest CMReconfigurationRequest,

--CM Reconfiguration response

cmReconfigurationResponse CMReconfigurationResponse,

--WSO channel classification request

channelClassificationRequest ChannelClassificationRequest,

-- WSO channel classification response

channelClassificationResponse ChannelClassificationResponse,

--CM channel classification request

cmChannelClassificationRequest CMChannelClassificationRequest,

-- CM channel classification response

cmChannelClassificationResponse CMChannelClassificationResponse,

-- WSO channel classification update

channelClassificationAnnouncement ChannelClassificationAnnouncement,

--Available channel list request from WSO

availableChannelsRequest AvailableChannelsRequest,

-- Available channel list response from WSO

availableChannelsResponse AvailableChannelsResponse,

--Information acquiring request

infoAcquiringRequest InfoAcquiringRequest,

--Information acquiring response

infoAcquiringResponse InfoAcquiringResponse,

-- Event indication

eventIndication EventIndication,

-- Event confirm

eventConfirm EventConfirm,

--WSO/GCO measurement request

measurementRequest MeasurementRequest,

--WSO/GCO measurement response

measurementResponse MeasurementResponse,

--WSO/GCO measurement confirm

measurementConfirm MeasurementConfirm,

--Master/Slave CM request

masterCMRequest MasterCMRequest,

--Master/Slave CM response

masterCMResponse MasterCMResponse,

--Master/Slave CM configuration request

masterSlaveCMConfigurationRequest MasterSlaveCMConfigurationRequest,

--Master/Slave CM configuration response

masterSlaveCMConfigurationResponse MasterSlaveCMConfigurationResponse,

--Negotiation request

negotiationRequest NegotiationRequest,

--Negotiation announcement

negotiationAnnouncement NegotiationAnnouncement,

--Deregistration request

deregistrationRequest DeregistrationRequest,

-- Deregistration response

deregistrationResponse DeregistrationResponse,

--Inter-CM information announcement

interCMInformationAnnouncement InterCMInformationAnnouncement,

--Inter-CM information confirm

interCMInformationConfirm InterCMInformationConfirm,

--Inter-CM information request

interCMInformationRequest InterCMInformationRequest,

--Inter-CM information response

interCMInformationResponse InterCMInformationResponse,

-- CE Proxy Coexistence Service Request (Used in Profile 3)

ceProxyCoexistenceServiceRequest CEProxyCoexistenceServiceRequest,

-- CM Proxy Coexistence Service Request (Used in Profile 3)

cmProxyCoexistenceServiceRequest CMProxyCoexistenceServiceRequest,

--Inter-CM association request (Used in Profile 3)

interCMAssociationRequest InterCMAssociationRequest,

--Inter-CM association response (Used in Profile 3)

interCMAssociationResponse InterCMAssociationResponse,

--Inter-COE association request (Used in Profile 3)

interCOEAssociationRequest InterCOEAssociationRequest,

--Inter-COE association response (Used in Profile 3)

interCOEAssociationResponse InterCOEAssociationResponse,

--Operating frequency information request (Used in Profile 3)

operatingFreqInfoRequest OperatingFreqInfoRequest,

--Operating frequency information response (Used in Profile 3)

operatingFreqInfoResponse OperatingFreqInfoResponse,

--Inter-COE operating frequency information request (Used in Profile 3)

interCOEOperatingFreqInfoRequest InterCOEOperatingFreqInfoRequest,

--Inter-COE operating frequency information request (Used in Profile 3)

interCOEOperatingFreqInfoResponse InterCOEOperatingFreqInfoResponse,

...

}

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

**--CM Association**

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

--CM association request (Used in Profile 3)

CMAssociationRequest ::= SEQUENCE {

--GCO subscription ID

clientID IA5String OPTIONAL,

...

}

--CM association response (Used in Profile 3)

CMAssociationResponse ::= SEQUENCE {

--Status

status Status OPTIONAL,

...

}

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

**--WSO/GCO and CM subscription**

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

--WSO/GCO 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 OPTIONAL,

--Coexistence service to which WSO is subscribed

subscribedService SubscribedService OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL

}

--WSO/GCO 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 OPTIONAL,

--Status

cxMediaStatus CxMediaStatus OPTIONAL

}

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

**--WSO/GCO subscription change**

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

--Request to change subscription

SubscriptionChangeRequest ::= SEQUENCE {

--Coexistence service to which WSO is subscribed

subscribedService SubscribedService OPTIONAL,

coexistenceService CoexistenceService OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL,

--GCO subscription ID (Only in Profile 3)

clientID IA5String OPTIONAL

}

--Response for subscription change

SubscriptionChangeResponse ::= SEQUENCE {

--Status

cxMediaStatus CxMediaStatus OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL,

--GCO subscription ID (Only in Profile 3)

clientID IA5String OPTIONAL,

--Status

status Status OPTIONAL

}

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

**--WSO/GCO registration**

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

CERegistrationRequest ::= SEQUENCE OF SEQUENCE {

--New registration, registration update or deregistration

operationCode OperationCode OPTIONAL,

--WSO ID

wsoID OCTET STRING OPTIONAL,

--Network ID

networkID OCTET STRING OPTIONAL,

--Network technology

networkTechnology NetworkTechnology OPTIONAL,

--Network type

networkType NetworkType OPTIONAL,

--Location

geolocation Geolocation OPTIONAL,

--Discovery information

discoveryInformation DiscoveryInformation OPTIONAL,

--Coverage area

coverageArea CoverageArea OPTIONAL,

-- Mobility information

mobilityInformation MobilityInformation 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,

--List of available channel number

listOfAvailableChNumbers ListOfAvailableChNumbers OPTIONAL,

--List of supported channel number

listOfSupportedChNumbers SEQUENCE OF INTEGER OPTIONAL,

-- List of supported frequencies

listOfSuppFrequencies ListOfSupportedFrequencies OPTIONAL,

--List of operating channel number

listOfOperatingChNumbers ListOfOperatingChNumbers OPTIONAL,

--Required resource

requiredResource RequiredResource OPTIONAL,

--Measurement capability

measurementCapability MeasurementCapability OPTIONAL,

addNetworkTechnolgoy NetworkTechnology OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL,

--List of desired performance (Only in Profile 3)

listOfDesiredPerformances ListOfDesiredPerformances OPTIONAL,

--Spectrum transition capability (Only in Profile 3)

spectrumTransitionCapability BOOLEAN OPTIONAL,

--Operation region (Only in Profile 3)

operationRegion Range OPTIONAL

}

--Registration response

RegistrationResponse ::= SEQUENCE {

--Registration status

status Status OPTIONAL,

--Registration update duration [s] (Only in Profile 3)

registrationUpdateDuration REAL OPTIONAL,

--List of candidate serving CMs

listOfCandidateServingCMs ListOfCandidateServingCMs OPTIONAL

}

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

**--WSO/GCO reconfiguration**

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

--Reconfiguration request

ReconfigurationRequest ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING OPTIONAL,

--Operating frequency

operatingFrequency FrequencyRange OPTIONAL,

--List of operating channel number

listOfOperatingChNumber SEQUENCE OF INTEGER OPTIONAL,

--Transmission power limit [dBm]

txPowerLimit REAL OPTIONAL,

--Indication whether the channel is shared

channelIsShared BOOLEAN OPTIONAL,

--Transmission schedule

txSchedule TxSchedule OPTIONAL,

-- Channel classification information

chClassInfo ChClassInfo OPTIONAL,

-- Mobility information

mobilityInformation MobilityInformation OPTIONAL,

--Additionally operable network technology

addNetworkTechnology NetworkTechnology OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL,

--List of operating frequencies and related parameters to be configured (Only in Profile 3)

listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

--Network technology to be configured (Only in Profile 3)

netNetworkTechnology NetworkTechnology OPTIONAL,

--Spectrum request modification (Only in Profile 3)

specRequestModification SpecRequestModification OPTIONAL

}

--Reconfiguration response

ReconfigurationResponse ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING OPTIONAL,

--Reconfiguration status

status Status OPTIONAL,

--Failed parameters

failedParameters FailedParameters OPTIONAL,

--GCO ID (Only in Profile 3)

gcoID OCTET STRING OPTIONAL,

--list of available frequencies (Only in Profile 3)

listOfAvailableFrequencies ListOfAvailableFrequencies OPTIONAL

}

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

**--Stop operation**

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

--Stop operation announcement

StopOperationAnnouncement ::= SEQUENCE {}

--Stop operation confirm

StopOperationConfirm ::= SEQUENCE {

--Stop operation status

status Status OPTIONAL}

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

**--Coexistence report**

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

--Coexistence report announcement

CoexistenceReportAnnouncement ::= SEQUENCE OF SEQUENCE {

--Subject WSO ID

wsoID OCTET STRING OPTIONAL,

--List of subject WSO available frequencies

listOfSubjectWSOAvailableFrequencies ListOfSubjectWSOAvailableFrequencies OPTIONAL}

--Coexistence report confirm

CoexistenceReportConfirm ::= SEQUENCE {

--Coexistence report status

status Status OPTIONAL}

--Request for coexistence report

CoexistenceReportRequest ::= SEQUENCE {}

--Response for coexistence report

CoexistenceReportResponse ::= SEQUENCE {

--Coexistence report information

coexistenceReport CoexistenceReport OPTIONAL,

--Channel priority information

channelPriority ChannelPriority OPTIONAL}

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

**--CM registration**

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

--CM registration request

CMRegistrationRequest ::= SEQUENCE {

--CM profile

cmProfile EntityProfile OPTIONAL,

--CM registration

cmRegistration CMRegistration OPTIONAL,

--CE registration

ceRegistration CERegistration OPTIONAL,

--Operationg code

operationCode OperationCode OPTIONAL,

--CE ID

ceID CxID OPTIONAL,

--Network ID

networkID OCTET STRING OPTIONAL,

--Network technology

networkTechnology NetworkTechnology OPTIONAL,

--Network type

networkType NetworkType OPTIONAL,

--Discovery information

discoveryInformation DiscoveryInformation OPTIONAL,

--List of supported channel number

listOfSupportedChNumbers SEQUENCE OF INTEGER OPTIONAL,

-- List of supported frequencies

listOfSuppFrequencies ListOfSupportedFrequencies OPTIONAL,

--Maximum number of controllable GCO

maximumNumberOfControllableGCO INTEGER OPTIONAL,

--CM ID(Only in Profile 3)

cmID CxID OPTIONAL

}

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

**--Coexistence set information**

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

--Coexistence set information announcement

CoexistenceSetInformationAnnouncement ::= SEQUENCE {

--List of subject CEs

listOfSubjectCEs ListOfSubjectCEs OPTIONAL,

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

listOfNeighborCMsTransport ListOfNeighborCMsTransport OPTIONAL

}

--Coexistence set information confirm

CoexistenceSetInformationConfirm ::= SEQUENCE {

--Coexistence set information status

status Status OPTIONAL

}

--Request for coexistence set information

CoexistenceSetInformationRequest ::= SEQUENCE {

listOfNetworkIDs SEQUENCE OF OCTET STRING OPTIONAL,

--Operation code (Only in Profile 3)

operationCode OperationCode OPTIONAL

}

--Response for coexistence set information

CoexistenceSetInformationResponse ::= SEQUENCE {

--Network ID

coexistenceReport CoexistenceReport OPTIONAL,

--Network ID

networkID OCTET STRING OPTIONAL,

--List of neighbor CMs

listOfNeighborCMs ListOfNeighborCMs OPTIONAL,

--List of master CM candidates

listOfMasterCMCandidates ListOfMasterCMCandidates OPTIONAL

}

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

**--Coexistence set element information**

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

--Coexistence set element information announcement

CoexistenceSetElementInformationAnnouncement ::= SEQUENCE OF SEQUENCE{

--CE ID

ceID CxID OPTIONAL,

--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 OPTIONAL

}

--Coexistence set element information request

CoexistenceSetElementInformationRequest ::= SEQUENCE OF SEQUENCE{

--CE ID

ceID CxID OPTIONAL,

--List of neighbor CM WSOs

listOfNeighborCMWSOs ListOfNeighborCMWSOs OPTIONAL

}

--Coexistence set element information response

CoexistenceSetElementInformationResponse ::= SEQUENCE OF SEQUENCE{

--CE ID

ceID CxID OPTIONAL,

--Coexistence service

coexistenceService CoexistenceService OPTIONAL,

--List of neighbor CM WSOs

listOfNeighborCMWSOs ListOfNeighborCMWSOs OPTIONAL

}

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

**--Coexistence set element reconfiguration**

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

--Coexistence set element reconfiguration request

CoexistenceSetElementReconfigurationRequest ::= SEQUENCE{

--List of subject CEs

reconfigListOfSubjectCEs ReconfigListOfCEs OPTIONAL,

--List of neighbor CEs

reconfigListOfNeighborCEs ReconfigListOfCEs OPTIONAL

}

--Coexistence set element reconfiguration response

CoexistenceSetElementReconfigurationResponse ::= SEQUENCE{

--Indicates whether the suggested reconfiguration is accepted or not

requestIsAccepted BOOLEAN OPTIONAL

}

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

**--WSO/GCO reconfiguration for another CM**

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

--Reconfiguration request

CMReconfigurationRequest ::= SEQUENCE {

--Indication for CE to be reconfigured

reconfigTarget CxID OPTIONAL,

--List of operating channel number

listOfOperatingChNumber SEQUENCE OF INTEGER OPTIONAL,

--Transmission power limitation [dBm]

txPowerLimit REAL OPTIONAL,

--Indication whether the channel is shared

channelIsShared BOOLEAN OPTIONAL,

--Transmission schedule

txSchedule TxSchedule OPTIONAL,

-- Channel classification information

chClassInfo ChClassInfo OPTIONAL,

--Additionally operable network technology

newNetworkTechnology NetworkTechnology OPTIONAL,

--WSO ID

wsoID OCTET STRING OPTIONAL,

--CM ID

cmID CxID OPTIONAL,

--Operating frequency to be reconfigured

operatingFreqency FrequencyRange OPTIONAL,

--GCO ID

gcoID OCTET STRING OPTIONAL,

--List of operation parameters to be configured (Only in Profile 3)

listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL

}

--CM Reconfiguration response

CMReconfigurationResponse ::= SEQUENCE {

--Indication for CE to be reconfigured

reconfigTarget CxID OPTIONAL,

--Status

status Status OPTIONAL,

--Failed parameters

failedParameters FailedParameters OPTIONAL

}

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

**--Channel classification**

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

--Channel classification request

ChannelClassificationRequest ::= SEQUENCE {

-- List of network ID

listOfNetworkID SEQUENCE OF OCTET STRING OPTIONAL

}

-- Channel classification response

ChannelClassificationResponse ::= SEQUENCE OF SEQUENCE{

-- Network ID

networkID OCTET STRING OPTIONAL,

--Channel classification information

chClassInfo ChClassInfo OPTIONAL

}

--CM Channel classification request

CMChannelClassificationRequest ::= SEQUENCE {

-- List of network ID

listOfNetworkID SEQUENCE OF OCTET STRING OPTIONAL

}

-- CM Channel classification response

CMChannelClassificationResponse ::= SEQUENCE OF SEQUENCE{

-- Network ID

networkID OCTET STRING OPTIONAL,

--Channel classification information

chClassInfo ChClassInfo OPTIONAL

}

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

**--Channel classification update**

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

--Channel classification update

ChannelClassificationAnnouncement ::= SEQUENCE OF SEQUENCE {

-- Network ID

networkID OCTET STRING OPTIONAL,

--Channel classification information

chClassInfo ChClassInfo OPTIONAL

}

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

**--Information acquiring**

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

-- Information acquiring request

InfoAcquiringRequest ::= SEQUENCE {

ceID CxID OPTIONAL,

listOfReqInfoDescr SEQUENCE OF ReqInfoDescr OPTIONAL

}

-- Information acquiring response

InfoAcquiringResponse ::= SEQUENCE {

ceID CxID OPTIONAL,

reqInfoValue ReqInfoValue OPTIONAL

}

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

**--Available channel list from WSO**

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

-- Available channel request

AvailableChannelsRequest ::= SEQUENCE {}

-- Available channel response

AvailableChannelsResponse ::= SEQUENCE {

--Available channel list information

listOfAvailableChNumbers ListOfAvailableChNumbers OPTIONAL

}

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

**--Event indication**

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

-- Event indication

EventIndication ::= SEQUENCE {

-- Event indication information

eventParams EventParams OPTIONAL

}

-- Event confirm

EventConfirm ::= SEQUENCE {}

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

**--Measurement Request**

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

-- Measurement request

MeasurementRequest ::= SEQUENCE OF SEQUENCE {

--WSO ID

wsoID OCTET STRING OPTIONAL,

-- Measurement request information

measurementDescription MeasurementDescription OPTIONAL

}

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

**-- Measurement Response**

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

-- Measurement response

MeasurementResponse ::= SEQUENCE OF SEQUENCE{

--WSO ID

wsoID OCTET STRING OPTIONAL,

-- Measurement results

measurementResult MeasurementResult OPTIONAL

}

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

**-- Measurement Confirm**

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

-- Measurement confirm

MeasurementConfirm ::= SEQUENCE OF SEQUENCE{

-- WSO ID

wsoID OCTET STRING OPTIONAL,

-- Measurement status

status Status OPTIONAL

}

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

**-- Negotiation**

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

-- Negotiation request

NegotiationRequest ::= SEQUENCE {

-- Negotiation status

negotiationStatus NegotiationStatus OPTIONAL,

-- Negotiation information

negotiationInformation NegotiationInformation OPTIONAL

}

-- Negotiation announcement

NegotiationAnnouncement ::= SEQUENCE {

-- Winner CM ID list

listOfWinnerCMID ListOfWinnerCMID OPTIONAL,

-- Slot time position list

listOfSlotTimePosition ListOfSlotTimePosition OPTIONAL

}

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

**--Master/Slave CM selection**

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

--Master/Slave CM selection request

MasterCMRequest ::= SEQUENCE {

--List of CEs managed by CM that intends to become slave CM

listOfCEs SEQUENCE OF CxID OPTIONAL

}

-- Master/Slave CM selection response

MasterCMResponse ::= SEQUENCE {

--Status

status Status OPTIONAL

}

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

**--Master/Slave CM configuration**

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

--Master/Slave CM configuration request

MasterSlaveCMConfigurationRequest ::= SEQUENCE {

-- List of CEs managed by CM(Only in Profile 1)

listOfCEs SEQUENCE OF CxID OPTIONAL,

--CM ID (Only in Profile 3)

cmID CxID OPTIONAL,

--Operation code (Only in Profile 3)

operationCode OperationCode OPTIONAL,

--CM profile (Only in Profile 3)

cmProfile EntityProfile OPTIONAL,

--CE registration information (Only in Profile 3)

ceRegistration CERegistration OPTIONAL

}

--Master/Slave CM configuration response

MasterSlaveCMConfigurationResponse ::= SEQUENCE {

--Operationg code

operationCode OperationCode OPTIONAL,

--Slave CE ID

slaveCeID CxID OPTIONAL,

--Network ID

networkID OCTET STRING OPTIONAL,

--Network technology

networkTechnology NetworkTechnology OPTIONAL,

--Network type

networkType NetworkType OPTIONAL,

--Discovery information

discoveryInformation DiscoveryInformation OPTIONAL,

--Transmission schedule is supported or not

txScheduleSupported BOOLEAN OPTIONAL,

--List of available channel number

listOfAvailableChNumbers ListOfAvailableChNumbers OPTIONAL,

--List of supported channel number

listOfSupportedChNumbers SEQUENCE OF INTEGER OPTIONAL,

--List of operating channel number

listOfOperatingChNumbers ListOfOperatingChNumbers OPTIONAL,

--Required resource

requiredResource RequiredResource OPTIONAL,

--Measurement capability

measurementCapability MeasurementCapability OPTIONAL,

--Status (Only in Profile 3)

status Status OPTIONAL

}

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

**--GCO deregistration**

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

--Deregistration request

DeregistrationRequest ::= SEQUENCE {

--Flag of GCO deregistration

gcoDeregistration BOOLEAN OPTIONAL

}

--Deregistration response

DeregistrationResponse ::= SEQUENCE {

--Status

status Status OPTIONAL

}

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

**--Inter-CM information**

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

--Inter-CM information announcement

InterCMInformationAnnouncement ::= SEQUENCE OF SEQUENCE {

--CE ID

ceID CxID OPTIONAL,

--List of neighbor WSOs

listOfNeighborWSOs SEQUENCE OF SEQUENCE {

wsoID OCTET STRING OPTIONAL,

operatingFrequency ListOfOperatingFrequencies OPTIONAL,

operatingChannel ListOfOperatingChNumbers OPTIONAL

} OPTIONAL

}

--Inter-CM information confirm

InterCMInformationConfirm ::= SEQUENCE {

--Inter-CM information status

status Status OPTIONAL

}

--Inter-CM information request

InterCMInformationRequest ::= SEQUENCE OF SEQUENCE{

--CE ID

ceID CxID OPTIONAL,

--List of neighbor WSOs

listOfNeighborWSOs SEQUENCE OF SEQUENCE {

wsoID OCTET STRING OPTIONAL

} OPTIONAL

}

--Inter-CM information response

InterCMInformationResponse ::= SEQUENCE OF SEQUENCE{

--CE ID

ceID CxID OPTIONAL,

--List of neighbor WSOs

listOfNeighborWSOs SEQUENCE OF SEQUENCE {

wsoID OCTET STRING OPTIONAL,

operatingFrequency ListOfOperatingFrequencies OPTIONAL,

operatingChannel ListOfOperatingChNumbers OPTIONAL

} OPTIONAL

}

-----------------------------------------------------------

--Proxy coexistence service

-----------------------------------------------------------

--CE Proxy Coexistence Service Request (Used in Profile 3)

CEProxyCoexistenceServiceRequest ::= SEQUENCE {

--CE ID

ceID CxID OPTIONAL,

--List of GCOs

listOfGCOs ListOfGCOs OPTIONAL,

...

}

--CM Proxy Coexistence Service Request (Used in Profile 3)

CMProxyCoexistenceServiceRequest ::= SEQUENCE {

--CM ID

cmID CxID OPTIONAL,

--List of CEs

listOfCEs ListOfCEs OPTIONAL,

...

}

--Inter CM Association Request (Used in Profile 3)

InterCMAssociationRequest ::= SEQUENCE {

--CM ID

cmID CxID,

--Management region of the CM

managementRegion Region OPTIONAL,

--List of moving GCOs

listOfMovingGCOs ListOfMovingGCOs OPTIONAL,

--List of candidate served GCOs

listOfCandidateServedGCOs ListOfCandidateServedGCOs OPTIONAL

}

--Inter CM Association Response (Used in Profile 3)

InterCMAssociationResponse ::= SEQUENCE {

--status of request processing

status Status,

--List of accessible CMs

listOfAccessibleCMs ListOfAccessibleCMs OPTIONAL,

--List of estimated available bandwidth

listOfEstimatedAvailBandwidth ListOfEstimatedAvailBandwidth OPTIONAL

}

-- Operating Frequency Information Request (Used in Profile 3)

OperatingFreqInfoRequest ::= SEQUENCE {

--CM ID

cmID CxID,

--region information

region Region,

--target GCO for spectrum allocation

targetGCOForSpectrumAllocation GCODescriptor OPTIONAL,

--Reference point information including location and spectrum

listOfSpecUsageInfoOfRefPoints ListOfSpecUsageInfo OPTIONAL

}

-- Operating Frequency Information Response (Used in Profile 3)

OperatingFreqInfoResponse ::= SEQUENCE {

--Status of request processing

status Status,

--List of coexistence reports

listOfCoexistenceReports ListOfCoexistenceReports,

--Supporting information for spectrum allocation

specAllocationSupportingInfo SpecAllocationSupportingInfo OPTIONAL

}

-- Inter-COE Association Request (Used in Profile 3)

InterCOEAssociationRequest ::= SEQUENCE {

--COE ID

coeID CxID,

--InterCMAssociationRequest

interCMAssociationRequest InterCMAssociationRequest

}

-- Inter-COE Association Response (Used in Profile 3)

InterCOEAssociationResponse ::= SEQUENCE {

--Status

status Status

}

-- Inter-COE Operating Frequency Information Request (Used in Profile 3)

InterCOEOperatingFreqInfoRequest ::= SEQUENCE {

--COE ID

coeID CxID,

--OperatingFreqInformationRequest

operatingFreqInfoRequest OperatingFreqInfoRequest

}

-- Inter-COE Operating Frequency Information Response (Used in Profile 3)

InterCOEOperatingFreqInfoResponse ::= SEQUENCE {

--COE ID

coeID CxID,

--OperatingFreqInformationResponse

operatingFreqInfoResponse OperatingFreqInfoResponse

}

END

**------------------------------------------- End of Changes --------------------------------------------**

**------------------------------------------- Proposed Changes ---------------------------------------**

***Delete all the contents of C.2 in 802.19.1a (all the contents are included in above text)***

**------------------------------------------- End of Changes --------------------------------------------**