**IEEE P802.19**

**Wireless Coexistence**

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| --- | --- |
| Project | IEEE P802.19.1 Rev |
| Title | **Text Proposal for Annex C of IEEE 802.19.1 Rev** |
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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 --------------------------------------------**