IEEE 802.19.1a
Wireless Coexistence

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| Text proposal on Annex B |
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Abstract

This document provides text proposal on Annex B.

Text in this submission is made by 19-16/0016r1, 19-16/0020r1, 19-16/0022r1, 19-16/0051r1, 19-16/0053r1, 19-16/0055r1, 19-16/0058r0, 19-16/0060r2, 19-16/0083r0, 19-16/0084r0, 19-16/0086r0 and 19-16/0088r0 with some changes.

# Annex B **(normative)**Primitives for IEEE 802.19.1a

## **B.1 Transport SAP**

IEEE802191aTRSAPPrimitive DEFINITIONS AUTOMATIC TAGS::= BEGIN

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

--Imported data types

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

--Imported data types

IMPORTS

 --Coexistence protocol entity ID

 CxID,

 --Status

 Status

FROM IEEE802191aDataType;

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

--Transport service configuration

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

--Transport service configuration request

TrConfigurationRequest ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL,

 --Destination ID

 destinationID CxID OPTIONAL,

 --Destination IP address

 destinationIPAddress OCTET STRING OPTIONAL,

 --Destination port number

 destinationPortNumber INTEGER OPTIONAL

}

--Transport service configuration response

TrConfigurationResponse ::= SEQUENCE {

 --Destination ID

 destinationID CxID OPTIONAL,

 --Configuration status

 status Status OPTIONAL

}

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

--Connection establishment

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

--Request for connection

TrConnectionRequest ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL,

 --Destination ID

 destinationID CxID OPTIONAL,

 --Keep alive interval

 keepAliveInterval INTEGER OPTIONAL

}

--Indication of the received connection request

TrConnectionIndication ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL

}

--Response to the received connection request

TrConnectionResponse ::= SEQUENCE {

 --Destination ID

 destinationID CxID OPTIONAL,

 --Connection status

 status Status OPTIONAL

}

--Confirmation to the connection request

TrConnectionConfirm ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL,

 --Connection status

 status Status OPTIONAL

}

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

--Connection termination

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

--Connection termination request

TrDisconnectionRequest ::= SEQUENCE {

 --Destination ID

 destinationID CxID OPTIONAL

}

--Connection termination indication

TrDisconnectionIndication ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL

}

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

--Sending a coexistence protocol message

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

--Request to send coexistence protocol message

TrSendRequest ::= SEQUENCE {

 --Destination ID

 destinationID CxID OPTIONAL,

 --Encoded coexistence protocol message

 cxMessage OCTET STRING OPTIONAL

}

--Confirmation of sending coexistence protocol message

TrSendConfirm ::= SEQUENCE {

 --Destination ID

 destinationID CxID OPTIONAL,

 --Status of sending coexistence protocol message

 status Status OPTIONAL

}

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

--Receiving a coexistence protocol message

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

--Indication of received coexistence protocol message

TrReceiveIndication ::= SEQUENCE {

 --Source ID

 sourceID CxID OPTIONAL,

 --Encoded coexistence protocol message

 cxMessage OCTET STRING OPTIONAL

}

END

## **B.2 Coexistence Media SAP**

IEEE802191aMEDIASAPPrimitive DEFINITIONS AUTOMATIC TAGS::= BEGIN

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

--Imported data types

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

--Imported data types

IMPORTS

 --Status

 Status,

 --CxMedia status

 CxMediaStatus,

 --Coexistence service

 CoexistenceService,

 --Network technology

 NetworkTechnology,

 --Network type

 NetworkType,

 --GCO Descriptor

 GCODescriptor,

 --Geolocation

 Geolocation,

 --Coverage area

 CoverageArea,

 --Installation parameters

 InstallationParameters,

 --List of available frequencies

 ListOfAvailableFrequencies,

 --List of operating frequencies

 ListOfOperatingFrequencies,

 --List of supported frequencies

ListOfSupportedFrequencies,

 --Required resource

 RequiredResource,

 --Transmission schedule

 TxSchedule,

 --Coexistence protocol entity ID

 CxID,

 --Frequency range

 FrequencyRange,

 --Coexistence report

 CoexistenceReport,

 --List of coexistence reports

 ListOfCoexistenceReports,

 --Measurement capability

 MeasurementCapability,

 -- Operation code

 OperationCode,

 --Mobility Information

 MobilityInformation,

 --Entity profile

 EntityProfile,

 --List of recommended operation Frequencies

 ListOfRecommendedOperationFrequencies,

 --List of desired performances

 ListOfDesiredPerformances,

 SpecRequestModification,

 Range

FROM IEEE802191aDataType;

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

--GCO subscription

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

--Request for subscription information

CxMediaSubscriptionRequest ::= SEQUENCE {}

--Subscription information

CxMediaSubscriptionResponse ::= SEQUENCE {

 --GCO subscription ID

 clientID IA5String OPTIONAL,

 --GCO subscription password

 clientPassword IA5String OPTIONAL,

 --Coexistence service to which GCO is subscribed

 coexistenceService CoexistenceService OPTIONAL

}

--Request to change subscription

CxMediaSubscriptionIndication ::= SEQUENCE {

 --Coexistence service to which GCO is subscribed

 coexistenceService CoexistenceService OPTIONAL

}

--Subscription status

CxMediaSubscriptionConfirm ::= SEQUENCE {

 --Subscription status

 cxMediaStatus CxMediaStatus OPTIONAL

}

--Request to change subscription

CxMediaChangeSubscriptionRequest ::= SEQUENCE {

 --Coexistence service to be changed

 coexistenceService CoexistenceService OPTIONAL

}

--Response for subscription change

CxMediaChangeSubscriptionResponse :: = SEQUENCE {

 --Status

 cxMediaStatus CxMediaStatus OPTIONAL

}

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

--GCO registration

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

--Request for registration information

CxMediaRegistrationRequest ::= SEQUENCE {}

--Registration information

CxMediaRegistrationResponse ::= SEQUENCE OF SEQUENCE {

 --GCO ID

 gcoID OCTET STRING OPTIONAL,

 --Network ID

 networkID OCTET STRING OPTIONAL,

 --GCO descriptor

 gcoDescriptor GCODescriptor OPTIONAL,

 --Installation parameters

 installationParameters InstallationParameters OPTIONAL,

 --List of available frequencies

 listOfAvailableFrequencies ListOfAvailableFrequencies OPTIONAL,

 --List of operating frequencies

 listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

 -- List of supported frequencies

 listOfSuppFrequencies ListOfSupportedFrequencies OPTIONAL,

 --Transmission schedule is supported or not

 txScheduleSupported BOOLEAN OPTIONAL,

 --Measurement capability

 measurementCapability MeasurementCapability OPTIONAL,

 --Required resource

 requiredResource RequiredResource OPTIONAL,

 --Mobility Information

 mobilityInformation MobilityInformation OPTIONAL,

--List of desired performance

 listOfDesiredPerformances ListOfDesiredPerformances OPTIONAL,

 --Spectrum transition capability

 spectrumTransitionCapability BOOLEAN OPTIONAL,

 --Operation region

 operationRegion Range OPTIONAL

}

--Updated registration information

CxMediaRegistrationIndication ::= SEQUENCE OF SEQUENCE {

 --GCO ID

 gcoID OCTET STRING OPTIONAL,

 --Network ID

 networkID OCTET STRING OPTIONAL,

 --List of available frequencies

 listOfAvailableFrequencies ListOfAvailableFrequencies OPTIONAL,

 --List of operating frequencies

 listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

 --Required resource

 requiredResource RequiredResource OPTIONAL,

 --Transmission schedule is supported or not

 txScheduleSupported BOOLEAN OPTIONAL,

 -- List of supported frequencies

 listOfSuppFrequencies ListOfSupportedFrequencies OPTIONAL,

 --Measurement capability

 measurementCapability MeasurementCapability OPTIONAL,

 --Mobility information

 mobilityInformation MobilityInformation OPTIONAL,

--List of desired performance

 listOfDesiredPerformances ListOfDesiredPerformances OPTIONAL,

 --Spectrum transition capability

 spectrumTransitionCapability BOOLEAN OPTIONAL,

 --Operation region

 operationRegion Range OPTIONAL

}

--Registration confirmation

CxMediaRegistrationConfirm ::= SEQUENCE {

 --CxMedis status

 cxMediaStatus CxMediaStatus OPTIONAL,

 --Registration update duration [s]

 registrationUpdateDuration REAL OPTIONAL

}

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

--GCO reconfiguration

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

--Reconfiguration request

CxMediaReconfigurationRequest ::= SEQUENCE OF SEQUENCE {

 --GCO ID

 gcoID OCTET STRING OPTIONAL,

--List of operating frequencies

 listOfOperatingFrequencies ListOfOperatingFrequencies OPTIONAL,

 --Network technology to be configured

 newNetworkTechnology NetworkTechnology OPTIONAL,

 specRequestModification SpecRequestModification OPTIONAL

}

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

--Coexistence report

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

--Request for coexistence report

CxMediaCoexistenceReportRequest ::= SEQUENCE {}

--Response for coexistence report

CxMediaCoexistenceReportResponse ::= SEQUENCE {

--Coexistence report information

 coexistenceReport CoexistenceReport OPTIONAL,

 listOfCoexistenceReports ListOfCoexistenceReports OPTIONAL

}

END