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<th><strong>Project</strong></th>
<th><strong>IEEE 802.16 Broadband Wireless Access Working Group</strong> <a href="http://ieee802.org/16">http://ieee802.org/16</a></th>
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<td><strong>Title</strong></td>
<td><strong>ASN.1 coding for AAI-SCD message in IEEE 802.16.1a</strong></td>
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<td><strong>Date Submitted</strong></td>
<td><strong>2012-09-13</strong></td>
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**Re:** In response to Sponsor Ballot on P802.16.1a

**Abstract**  
ASN.1 coding for AAI-SCD message in GRIDMAN Draft Standard

**Purpose**  
To discuss and adopt the proposed text in the draft amendment document on GRIDMAN

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1. Introduction

This document provides ASN.1 encoding for AAI-SCD message in P802.16.1a.

2. References


3. Proposed Text on the IEEE 802.16.1a Amendment Draft Standard

[Remedy: Add the following text in line#24, page 237, P802.16.1a/D5]

--- ++++++++++++++++++++++ ++++++++++++++++++++++
-- AAI-SCD message
-- ++++++++++++++++++++++ ++++++++++++++++++++++
AAI-SCD ::= SEQUENCE {
    configChangeCount INTEGER (0..15),
    bsRestartCount INTEGER (0..15),
    -- SA Preamble partition per ABS type
    -- 1: macro hot-zone,
    -- 2: Relay,
    -- 3: OSG femto,
    -- 4: CSG-open femto
    -- 5: CSG-closed femto ABSs
    -- Indicates the SA-Preamble partition information.
    -- Each 4 bits represent a partition range for each cell type,
    -- as defined in 6.3.5.1.2 and Table 165
    saPreamblePartitions SEQUENCE (SIZE (5)) OF PreamblePart,
    triggers TriggerConditions,
    defaultTriggerAveParamForIntra ENUMERATED {
        one,
        half,
        quarter,
one-8th,  
one-16th,  
one-32th, 
one-64th,  
one-128th,  
one-256th,  
one-512th
},

defaultTriggerAveParamForInter ENUMERATED {
  one,
  half,
  quarter,
  one-8th,
  one-16th,
  one-32th,
  one-64th,
  one-128th,
  one-256th,
  one-512th
},

olMimoParameters SEQUENCE {
  olRegionType0On BOOLEAN,
  olRegionType1NLRUSize INTEGER (0..15),
  olRegionType1SLRUSize INTEGER (0..15),
  olRegionType2SLRUSize INTEGER (0..15)
} OPTIONAL,

rangingSyncInfo RangingSyncInfo OPTIONAL,

periodOfPeriodicRngTimer PeriodOfPeriodicRngTimer,

ulpcDataChannelIe UlpcDataChannelSet,

ulpcControlChannelIe UlpcControlChannelSet,

TReTxInterval TReTxInterval,

-- BR Channel Configuration MIN Access Class for frame i, i+1, i+2,  
-- and i+3 frame
brChCfgMINAccessClassForFrame SEQUENCE (SIZE (4)) OF SEQUENCE {
  accessClass INTEGER (0..3)
} OPTIONAL,

-- Sounding sequence
-- D is decimation value for frequency decimation multiplexing
-- P is number of codes for code division multiplexing
-- Present when Uplink AAI subframes for sounding in S-SFH SP1 is
-- not set to 0b000
multiplexingType MultiplexingType,

shiftValueUForsoundingSymbol INTEGER (0..255),

relayZoneAmsAllocIndc INTEGER (0..1) OPTIONAL,

embsConfigParameters EMBSConfigParameters OPTIONAL,

ulFeedbackInfoArray SEQUENCE (SIZE (1..8)) OF SEQUENCE {
  primaryCarrierIndex PhyCarrierIndex OPTIONAL,
    -- The start DLRUs index for feedback channel
  startDLRUIndex INTEGER (0..127),
    -- The number of DLRUs for feedback channel per UL AAI sub-frame
  numberOfDLRUs INTEGER (0..15),
    -- The number of HARQ feedback channel per HARQ feedback region.
  -- Describes LHPB in 6.3.7.3.3.2. Channel numbers represented
  -- by the two bits (0, 1, 2, 3) are as follows.
  -- For 512 FFT size, 6, 12, 18, 24
  -- For 1024 FFT size, 6, 12, 24, 30
  -- For 2048 FFT size, 12, 24, 48, 60
  numberOfHARQChannels HarqfdbkChannels
} OPTIONAL,

-- See Table 152 to TTable 154.
-- Resource Metric of the first power deboosted frequency partition
-- which is defined in Table 141. This parameter does not affect
-- "Configuration Change Count"

resourceMetricFP2 INTEGER (0..15) OPTIONAL,

-- See Table 149 to Table 151
-- Resource Metric of the second power deboosted frequency partition
-- which is defined in Table 141. This parameter does not affect
-- "Configuration Change Count"

resourceMetricFP3 INTEGER (0..15) OPTIONAL,

-- Indicates whether ABS achieves synchronization from backhaul
-- network (0b01) or not (0b00)
networkSynchronization BOOLEAN OPTIONAL,

-- Start for HR-Network

initialRangingBackoffStart INTEGER (0..15) OPTIONAL,
initialRangingBackoffEnd INTEGER (0..15) OPTIONAL,
hmMulticastGroupZoneId HMulticastGroupZoneID OPTIONAL,
hmMulticastIndicationCycle HMulticastIndicationCycle OPTIONAL,
hmMultimodeIndication HMultimodeIndication OPTIONAL,
offsetMaxFwdC INTEGER (0..63) OPTIONAL,
offsetMinFwdC INTEGER (0..255) OPTIONAL,
offsetMaxFwdD INTEGER (0..63) OPTIONAL,
offsetMinFwdD INTEGER (0..63) OPTIONAL,
deltaXlT INTEGER (0..15) OPTIONAL,
deltaXlX INTEGER (0..15) OPTIONAL,

-- It represents the value among -15.5 to 16 dB with 0.5 dB step
offsetMaxFwdC INTEGER (0..255) OPTIONAL,
offsetMinFwdC INTEGER (0..255) OPTIONAL,
offsetMaxFwdD INTEGER (0..255) OPTIONAL,
offsetMinFwdD INTEGER (0..255) OPTIONAL,

-- It represents the value among -15.5 to 16 dB with 0.5 dB step
offsetMaxFwdC INTEGER (0..63) OPTIONAL,
offsetMinFwdC INTEGER (0..63) OPTIONAL,
offsetMaxFwdD INTEGER (0..63) OPTIONAL,
offsetMinFwdD INTEGER (0..63) OPTIONAL,

deltaXlT INTEGER (0..255) OPTIONAL,
deltaXlX INTEGER (0..255) OPTIONAL,

-- It has 4 bits to represent the value among
-- {0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5}.
-- It is different for each frequency partition (FP0, FP1, FP2, FP3).
deltaXlT INTEGER (0..15) OPTIONAL,
deltaXlX INTEGER (0..15) OPTIONAL,

-- It has 4 bits to represent the value among
-- {0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5}.
-- It is different for each frequency partition (FP0, FP1, FP2, FP3).

blindPagingOffset INTEGER (0..4095) OPTIONAL,
blindPagingCycle INTEGER (0..15) OPTIONAL,

logicalChannel SEQUENCE (SIZE (1..8)) OF SEQUENCE {
   p INTEGER (0..7),
   nOfSize INTEGER (0..4095)
} OPTIONAL,

pFrame ENUMERATED {
   -- delay in frames between starting frame for the reception of multicast
   -- the first frame of feedback channel associated with it
   oneFrame,
   twoFrames,
   threeFrames,
   fourFrames
} OPTIONAL,
kSubframe ENUMERATED {
   -- It represents the value among
   -- {0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5}.
   -- It is different for each frequency partition (FP0, FP1, FP2, FP3).
   first,
   second,
   third,
   fourth,
   fifth,
   sixth,
   seventh
} OPTIONAL,
feedbackRngFormat ENUMERATED {
   srCH,
   srCH0, srCH1
}
subcarrierStart
startCodeIndex
codeSpacing
totalNumOfCodes
-- end for HR-Network

[-------------------------------------End of Text Proposal----------------------------------------------------]