

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	ASN.1 coding for AAI-ARS-CFG-CMD message in IEEE 802.16.1a	
Date Submitted	2012-09-13	
Source(s)	Eunkyung Kim, Jaesun Cha, Anseok Lee, Wooram Shin, Kwangjae Lim ETRI	Voice: +82-42-860-5415 E-mail: ekkim@etri.re.kr
Re:	In response to Sponsor Ballot on P802.16.1a	
Abstract	ASN.1 coding for AAI-ARS-CFG-CMD message in GRIDMAN Draft Standard	
Purpose	To discuss and adopt the proposed text in the draft amendment document on GRIDMAN	
Notice	<i>This document does not represent the agreed views of the IEEE 802.16 Working Group or any of its subgroups.</i> It represents only the views of the participants listed in the "Source(s)" field above. It is offered as a basis for discussion. It is not binding on the contributor(s), who reserve(s) the right to add, amend or withdraw material contained herein.	
Copyright Policy	The contributor is familiar with the IEEE-SA Copyright Policy < http://standards.ieee.org/IPR/copyrightpolicy.html >.	
Patent Policy and Procedures	The contributor is familiar with the IEEE-SA Patent Policy and Procedures: < http://standards.ieee.org/guides/bylaws/sect6-7.html#6 > and < http://standards.ieee.org/guides/opman/sect6.html#6.3 >. Further information is located at < http://standards.ieee.org/board/pat/pat-material.html > and < http://standards.ieee.org/board/pat >.	

ASN.1 coding for AAI-ARS-CFG-CMD message in IEEE 802.16.1a

Eunkyung Kim, Jaesun Cha, Anseok Lee, Wooram Shin, Kwangjae Lim
ETRI

1. Introduction

This document provides ASN.1 encoding for AAI-ARS-CFG-CMD message in P802.16.1a.

2. References

- [1] IEEE 802.16-12-0132-00, GRIDMAN System Requirement Document including SARM annex, January 2012.
- [2] IEEE P802.16nTM/D5, Air Interface for Broadband Wireless Access Systems - Draft Amendment: Higher Reliability Networks, June 2012.
- [3] IEEE P802.16.1aTM/D5, WirelessMAN-Advanced Air Interface for Broadband Access Systems - Draft Amendment: Higher Reliability Networks, June 2012.
- [4] IEEE P802.16TM-2012, IEEE Standard for Air Interface for Broadband Wireless Access Systems, August 2012.
- [5] IEEE P802.16.1TM-2012, IEEE Standard for WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems, September 2012.

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

[-----Start of Text Proposal-----]

[Remedy: Replace text in line#38-47, page 249, P802.16.1a/D5 by following]

```
-- *-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
-- Relay Messages
-- *-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*
RelayZoneAllocation ::= SEQUENCE {
    rUCASSB0 BIT STRING (SIZE (3..5)),
    rUCASMB0 BIT STRING (SIZE (3..5)),
    uUCASi BIT STRING (SIZE (1..3))
}

STRForHRMSActingAsRS ::= SEQUENCE {
    frameConfigurationIndex INTEGER (0..63),
    fftSizes BIT STRING {
        fft2048 (0),
        fft1024 (1),
        fft512 (2)
    } (SIZE (3)),
    dlCarrierFrequencyBSandRS INTEGER (0..1023) OPTIONAL,
    ulCarrierFrequencyBSandRS INTEGER (0..1023) OPTIONAL,
    dlCarrierFrequencyRSandMS INTEGER (0..1023) OPTIONAL,
    ulCarrierFrequencyRSandMS INTEGER (0..1023) OPTIONAL,
    superframeNumActionLSB4 INTEGER (0..15)
}
```

```

1  }
2
3  TTRForHRBSActingAsRS ::= SEQUENCE {
4      subordinateStationIsBs SEQUENCE {
5          tA INTEGER (0..2047),
6          tBs INTEGER (0..31),
7          tRs INTEGER (0..31)
8      }
9      startOfBSOperation INTEGER (0..31),
10     rRTIInd BOOLEAN OPTIONAL,
11     supportingSubordinateRS CHOICE {
12         allocation SEQUENCE {
13             dlRelayZone RelayZoneAllocation,
14             ulRelayZone RelayZoneAllocation
15         }
16         preserveHarqContext BOOLEAN
17     }
18 }
19 -- +-----+
20 -- ARS Configuration Command
21 -- +-----+
22 AAI-ARS-CFG-CMD ::= SEQUENCE {
23     arsCfgCmd CHOICE {
24         normalArsCfgCmd SEQUENCE {
25             dlRelayZoneDuration INTEGER (1..8),
26             ulRelayZoneDuration INTEGER (1..8),
27             relayZoneAMSAllocInd BOOLEAN,
28             mimoMidambleTxInRelayZones BOOLEAN,
29             amsAllocation CHOICE {
30                 amsAllocatedInRelayZones NULL,
31                 allocation SEQUENCE {
32                     dlRelayZone RelayZoneAllocation,
33                     ulRelayZone RelayZoneAllocation
34                 }
35             }
36         },
37         hrArsCfgCmd NULL -- Non TTR
38     }
39     arsCfgCmdMSactingAsRs SEQUENCE {
40         saPreambleIndex PreambleIndex,
41         msFunctionalityMaintenanceInd BOOLEAN,
42         cellBar CellBar,
43         strForHRMSActingAsRs STRForHRMSActingAsRS OPTIONAL,
44         ttrForHRBSActingAsRs TTRForHRBSActingAsRS OPTIONAL
45     } OPTIONAL,
46     ...
47 }
48
49
50
51 -- +-----+
52 -- Reset Command
53 -- +-----+
54 AAI-RES-CMD ::= SEQUENCE {
55     ...
56 }
57
58
59 [-----End of Text Proposal-----]
60
61
62
63
64
65

```