

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Clarification on CS Specific Service Flow Encodings</b>	
Date Submitted	<b>2005-09-07</b>	
	Mary Chion Sean Cai Yunsong Yang Irving Wang  ZTE San Diego Inc. 10105 Pacific Heights Blvd. San Diego, CA 92121	<a href="mailto:mchion@ztesandiego.com">mchion@ztesandiego.com</a> <a href="mailto:scai@ztesandiego.com">scai@ztesandiego.com</a>  Voice: 858-554-0387 Fax: 858-554-0894
Re:	Response to Sponsor Ballot on IEEE802.16e/D10 document	
Abstract		
Purpose	To incorporate the text changes proposed in this contribution into the 802.16e/D11 draft.	
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) < <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard."  Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < <a href="mailto:r.b.marks@ieee.org">mailto:r.b.marks@ieee.org</a> > as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.	

## Clarification on CS Specific Service Flow Encodings

Mary Chion , Sean Cai , Yunsong Yang, Irving Wang

ZTE San Diego Inc. USA

### 1. Problem Statement

Fix problems in section 11.13.19 text and re-number types of several CS service flow encoding to keep it consistent with Cor1/D4.

### 2. Proposed Solutions

### 3. Specific Text Changes

*[Modify the following section:]*

#### 11.13 Service flow management encodings

.....

#### Service flow management encodings

Type	Parameter
.....	.....
33	MBS zone identifier assignment
34	Traffic Indication Preference
35	<del>Unsolicited grant interval</del> <a href="#">Global Service Class Name</a>
36	<del>Unsolicited polling interval</del> <a href="#">Reserved</a>
37	SN Feedback Enabled
38	<del>HARQ Service Flows</del> <a href="#">Reserved</a>
39	CID allocation for Active BSs
<a href="#">40</a>	<a href="#">Unsolicited Grant Interval</a>
<a href="#">41</a>	<a href="#">Unsolicited Polling Interval</a>
<a href="#">42</a>	<a href="#">PDU SN extended subheader for HARQ reordering</a>
<a href="#">43</a>	<a href="#">MBS contents IDs</a>
<a href="#">44</a>	<a href="#">HARQ Service Flows</a>
<a href="#">45</a>	<a href="#">Authorization Token</a>
<a href="#">46</a>	<a href="#">HARQ Channel mapping</a>

*[Modify the following table:]*

#### 11.13.19.3.4.16 Large Context ID for ROHC- or ECRTP-compressed packet or ROHC feedback packet

.....

Type	Length	Value
[145/146]. <del>27</del> <a href="#">cst.3.16</a>	2	0~65535: Context ID

[Modify the following table:]

**11.13.26 MBS zone identifier assignment**

.....

Type	Length	Value	Scope
[145/146]. <del>38</del> 33	8	MBS zone identifier	DSA-REQ/RSP DCD

[Modify the following section:]

**11.13.30 CID allocation for Active BSs**

The value of this field specifies a list of CIDs assigned by active BSs in the diversity set except for the anchor BS for the service flow with non-null admittedQoSParamSet or ActiveQoSParamSet. There is one CID per active BS and the CID is used when the active BS becomes the anchor BS. If CID assignment is sent for each active BS in MOB-BSHO-RSP and MOB\_BSHO-REQ messages, the DSx messages shall contain CID allocation for Active BSs. The CID for anchor BS is defined by 11.13.2. The (Num of active BS) used to calculate length is the number of BSs in the diversity set.

Type	Length	Value	Scope
[145/146].39	variable Length is defined as: (Num of active BS -1) * 2	List of CIDs for the active BSs. Starting from the first byte, every 2 bytes contains one CID value per active BS. CIDs are listed based on the TEMP_BS_ID of the active BS. The TEMP_BS_IDs are sorted in an ascending order	DSA-REQ/RSP DSC-REQ/RSP

~~HARQ is enabled on a CID basis.~~

~~To deal with ordering implication of HARQ, each connection may enable ARQ or PDU SN mechanisms on top of the enabled HARQ connection.~~

~~Time stamp of first HARQ burst transmission is used as a the time relevance for all MAC specific Management messages and Sub headers (such as BW requests, Fast feedback, ARQ feedbacks etc.) that been transmitted in this burst.~~

**11.13.31 Authorization Token**

The value of this field specifies an authorization token which may be used when MS creates or modifies a service flow by sending DSA-REQ or DSC-REQ message. An authorization token identifies a session and

Type	Length	Value	Scope
------	--------	-------	-------

<del>[145/146].39</del>	variable Length is defined as: (Num of active BS - 1) * 2	List of CIDs for the active BSs. Starting from the first byte, every 2 bytes contains one CID value per active CIDs are listed based on the TEMP_BS_ID of the active BS. The BS. The TEMP_BS_IDs are sorted in an ascending order	DSA-REQ/RSP DSC-REQ/RSP
-------------------------	---	---	----------------------------

its QoS parameters, and it is used for authorizing the QoS for one or more IP flows generated by higher-level service creation/modification procedures. The token is provided to the MS by the higher-level service through some mechanism that is outside the scope of this specification. The MS must include the token in this TLV exactly as received from the higher-level service and must treat the token as an opaque octet string whose meaning is of significance only to those higher-level services. The field should not be included in the DSA-REQ or DSC-REQ messages which is sent by BS.

Type	Length	Value	Scope
[145/146]. <del>40</del> <a href="#">45</a>	variable	Authorization token which is used for authorizing the QoS for one or service flows generated by MS-initiated higher-level service flow creation or modification procedures	DSA-REQ DSC-REQ

*[Modify the following table:]*

#### 11.13.32 HARQ Channel mapping

....

Type	Length	Value	Scope
[145/146]. <del>41</del> <a href="#">46</a>	8	HARQ channel Index (1 byte each)	DSA-REQ, DSA-RSP, REG-REQ, REG-RSP

## 4. References

- [1] IEEE 802.16- 2004 IEEE Standards for local and metropolitan area networks part 16: Air interface for fixed broadband wireless access systems
- [2] IEEE P802.16e-D10-2005