Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	Proposed structure to harmonize the CMI and CSI timing in control channel
Date Submitted	**2006-09-17**
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Re:	80216h-06_021： Third Working Group Review: P802.16h Working Document (2006-08-10)
Abstract	We need to figure out a common frame structure for the CMI and CSI, so that it can be unified as a whole to form a so called control channel.
Purpose	To consolidate the working document.
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Proposed structure to harmonize the CMI and CSI timing in control channel

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Overview

We could define some terms to substitute CSI and CMI, so that they seem to be unified as a whole mechanism for control channel.

Since CSI is using a keying mechanism which carry only very little information in a slot with more sensitivity and compatibility, and CMI may carry much information but with less sensitivity and compatibility. Considering the information capacity in one slot unit, the usage of CSI is very slow to transmit the information when CMI in relative fast. We may differentiate these two parts of channel as Fast or Slow.

So CSI could be substituted as Slow Control Channel(SCC) or Slow Coexistence Control(SCXCC) Channel, and CMI could be substituted as Fast Control Channel(FCC) or Fast Coexistence Control Channel(FCXCC).

Each part of channel could be divided into uplink and downlink. And the slots used to form these channel could be called as SCC slots our FCC slots, instead of CSI or CMI. This might be more acceptable and sounds more compatible with each other.

The figure below propose a even occupancy of the control channel slots to be used as FCC slots (old CMI) or SCC slots (old CSI).

The 1st and 2nd figure is proposed to substitute Figure h10 in current WD.

The 3rd figure is proposed to be included into 15.3.1.1.1 CSI scheduling.

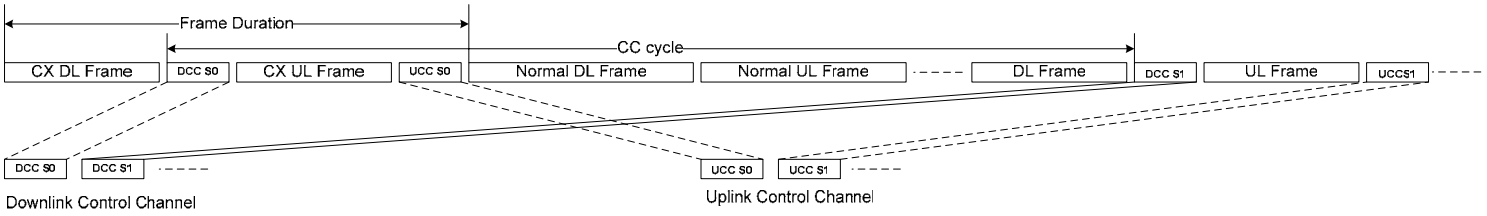

Figure hxx – Uplink and Downlink Control Channel Slots in the frame structure

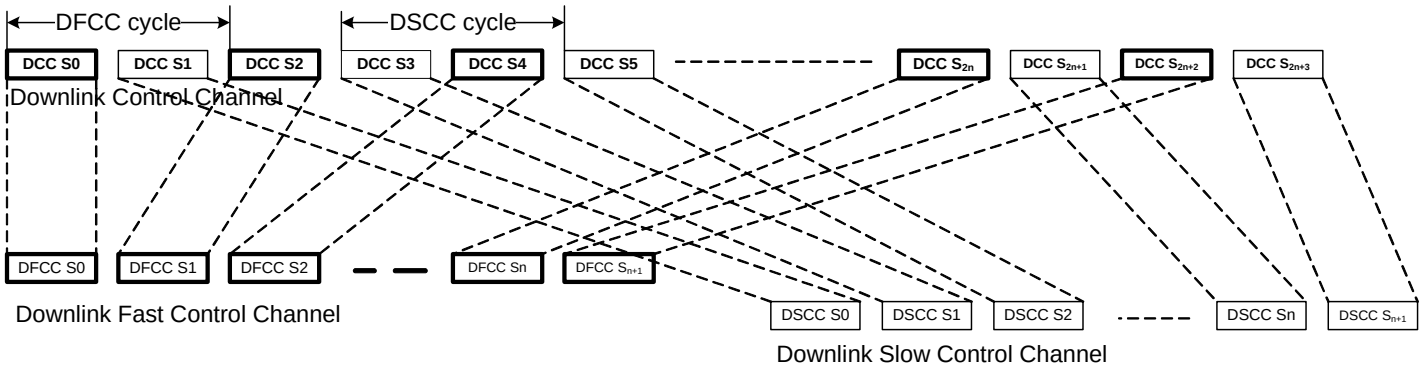

Figure hxx – Slots for Fast Control Channel and Slow Control Channel

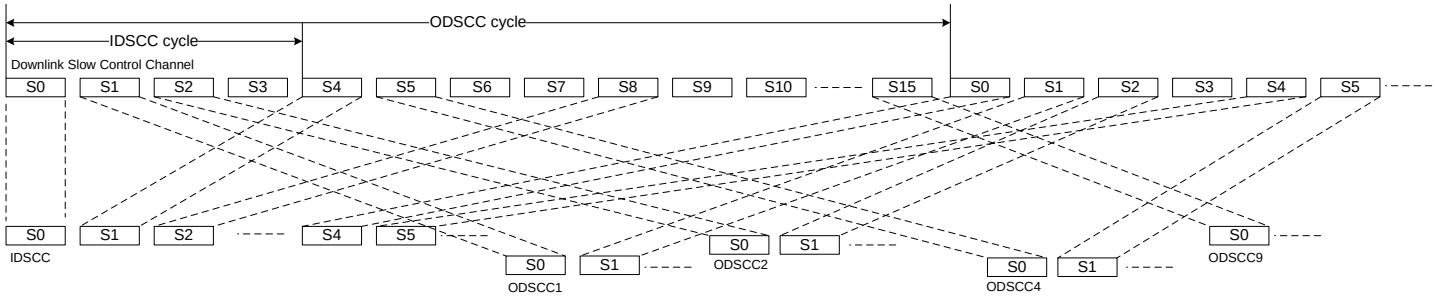

Figure hxx – Slots allocation for IDSCC and ODSCC

Reference:

[1] *IEEE 802.16h-06/019: 802.16h License-Exempt Task Group Meeting Minutes (2006-08-08)*

[2] *IEEE 802.16h-06/015r1: Working Document for P802.16h (2006-08-01)*

[3] *IEEE 802.16h-06/021: Third Working Group Review: P802.16h Working Document (2006-08-10)*