| Project                            | IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >  |  |  |  |
|------------------------------------|---|--|--|--|
| Title                              | Changes to OFDMA DL-MAP to e  | hanges to OFDMA DL-MAP to enable inclusion of CIDs                                       |  |  |
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| Re:                                | Task Group Review of IEEE P802.16-REVd/D2-2003  |  |  |  |
| Abstract                           | Changes to OFDMA DL-MAP to enable inclusion of CIDs   |  |  |  |
| Purpose                            | Adoption  |  |  |  |
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*Replace* 8.4.5.3 *with the following text:* 

## 8.4.5.3 DL-MAP IE format

The OFDMA DL-MAP IE defines a two-dimensional allocation pattern as defined in Table 227:

| Table 227—OFDMA DL-MAP_IE format |                 |                                  |  |  |  |
|----------------------------------|-----------------|----------------------------------|--|--|--|
| Syntax                           | Size            | Notes                            |  |  |  |
| DL-MAP_IE() {                    |                 |                                  |  |  |  |
| DIUC                             | 4 bits          |                                  |  |  |  |
|                                  |                 |                                  |  |  |  |
| if $(\frac{1}{2}DIUC == 15)$ {   |                 |                                  |  |  |  |
| Extended DIUC dependent IE       | variable        | AAS_DL_IE() / or-STC_IE() /      |  |  |  |
| Extended bloe dependent in       | variable        | Channel measurement IE(), CID-   |  |  |  |
|                                  |                 | SWITCH IE()                      |  |  |  |
| }                                |                 |                                  |  |  |  |
| else {                           |                 |                                  |  |  |  |
| If (INC_CID == 1) {              |                 | The DL-MAP starts with INC_CID   |  |  |  |
|                                  |                 | =0. INC CID is toggled between 0 |  |  |  |
|                                  |                 | and 1 by the CID-SWITCH IE()     |  |  |  |
|                                  |                 | (8.4.5.3.6)                      |  |  |  |
| N CID                            | <u>8 bits</u>   |                                  |  |  |  |
| For (n=0; n< N CID; n++) {       |                 |                                  |  |  |  |
| CID                              | <u> 16 bits</u> |                                  |  |  |  |
| }                                |                 |                                  |  |  |  |
| }                                |                 |                                  |  |  |  |
| OFDMA Symbol offset              | 10 bits         |                                  |  |  |  |
| Subchannel offset                | 5 bits          |                                  |  |  |  |
| Boosting                         | 3 bits          | 000: normal (not boosted); 001:  |  |  |  |
|                                  |                 | +6dB; 010: -6dB; 011: +9dB; 100: |  |  |  |
|                                  |                 | +3dB; 101: -3dB; 110: -9dB; 111: |  |  |  |
|                                  |                 | -12dB;                           |  |  |  |
| No. OFDMA Symbols                | 9 bits          |                                  |  |  |  |
| No. Subchannels                  | 5 bits          |                                  |  |  |  |
| }                                |                 |                                  |  |  |  |
| }                                |                 |                                  |  |  |  |

## Table 227—OFDMA DL-MAP\_IE format

Add this new section:

## 8.4.5.3.6 CID-SWITCH IE format

In the DL-MAP, a BS may transmit DIUC=15 with the CID-SWITCH\_IE() to toggle the inclusion of the CID parameter in DL-MAP allocations. The DL-MAP shall begin in the mode where CIDs are not included. The first appearance of the CID-SWITCH\_IE() shall toggle the DL-MAP mode to include CIDs. Any subsequent appearance of the CID-SWITCH\_IE() shall toggle the DL-MAP CID inclusion mode.

## Table xxx—OFDMA downlink CID-SWITCH IE

| <u>Syntax</u>     | Size          | <u>Notes</u>      |
|-------------------|---------------|-------------------|
| CID-SWITCH_IE() { |               |                   |
| Extended DIUC     | <u>4 bits</u> | CID-SWITCH = 0x04 |
|                   |               |                   |
| <u>}</u>          |               |                   |