# P802.15.16t D0.3 Document – Slot Allocation and MCS Table Modifications

The description for the below sections were not complete in P802.15.16t D0.3 document.

**6.3.37.5.1.1 Allocation\_IE**

**6.3.37.5.1.1.1 DIUC**

A 4-bit DIUC shall be used to define the data burst and other IEs.

**6.3.37.5.1.1.2 UIUC**

A 4-bit UIUC shall be used to define the data burst and other IEs.

**6.3.37.5.2 Allocation control message (ALLOC-CTRL-MSG) format.**

Please find below the description for the above sections extracted from the 802.16t MAC layer contribution document.

**6.3.37.5.1.1 Allocation\_IE**

|  |  |  |
| --- | --- | --- |
| Syntax | Size  (Bit) | Notes |
| Allocation \_IE () { | \_\_ | \_\_ |
| Direction | 1 | 0: Downlink 1: Uplink |
| Allocation ID | 4 | Identifier |
| DIUC/UIUC | 5 | FEC code |
| Repetition Coding Indication | 8 |  |
| CID | 8 | Basic CID |
| Slots | 8 |  |
| Frame offset | 4 | Frame offset indicating future start frame number |
| Slot offset | 6 | Slot offset within the future frame |
| Interval | 4 | Number of frames in the interval.  1 to 0xFF: Used in UGS, SPS and Bulk allocations.  0 : Instantaneous |
| Validity Period | 8 | In terms of intervals. (Number of repeated allocations)  1 to 0xFE: finite  0xFF: infinite  0: Instantaneous |
| } |  |  |

Table 3 : Allocation IE format

**6.3.37.5.1.1.1 DIUC**

A 4-bit DIUC shall be used to define the data burst and other IEs.

|  |  |
| --- | --- |
| DIUC value | Usage |
| 0-13 | Different burst profiles  QPSK 1/2 R128 : 0  QPSK 1/2 R64 : 1  QPSK 1/2 R32 : 2  QPSK 1/2 R16 : 3  QPSK 1/2 R8 : 4  QPSK 1/2 R4 : 5  QPSK 1/2 R2 : 6  QPSK 1/2 : 7  QPSK 3/4 : 8  16 QAM 1/2 : 9  16 QAM 3/4 : 10  64 QAM 3/4 : 11  64 QAM 5/6 : 12  256 QAM 7/8 : 13 |
| 14 | Extended-2 DIUC IE |
| 15 | Extended DIUC |
| 16 -31 | Reserved |

Table 4 : DIUC values

**6.3.37.5.1.1.2 UIUC**

A 4-bit UIUC shall be used to define the data burst and other IEs.

|  |  |
| --- | --- |
| UIUC value | Usage |
| 0 | Fast Feedback channel |
| 1-14 | Different burst profiles  QPSK 1/2 R128 : 1  QPSK 1/2 R64 : 2  QPSK 1/2 R32 : 3  QPSK 1/2 R16 : 4  QPSK 1/2 R8 : 5  QPSK 1/2 R4 : 6  QPSK 1/2 R2 : 7  QPSK 1/2 : 8  QPSK 3/4 : 9  16 QAM 1/2 : 10  16 QAM 3/4 : 11  64 QAM 3/4 : 12  64 QAM 5/6 : 13  256 QAM 7/8 : 14 |
| 15 | Subchannel Group Relocation IE |
| 16 | Power Control IE |
| 17 | CDMA BR/PR |
| 18 | Extended UIUC 2 IE |
| 19 | CDMA Initial ranging/Handover ranging |
| 20 | PAPR reduction allocation, safety zone, Sounding Zone |
| 21 | CDMA Allocation IE |
| 22 | Extended UIUC |
| 23-31 | Reserved |

Table 5 : UIUC values

## **6.3.37.5.2 Allocation control message (ALLOC-CTRL-MSG) format**

|  |  |  |
| --- | --- | --- |
| Syntax | Size(bit) | Notes |
| Allocation\_Control\_Message () { | --- | ---- |
| Management Message Type | 8 | ---- |
| Allocation ID | 4 |  |
| Control code | 4 | 0 : Cancel  1: Acknowledge  2: Activate  3: Terminate  4 to 15 : Reserved |
| } | --- | ---- |

Table 6 : Allocation control message format