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Source(s)	Rainer Ullmann, Jonathan Labs Wavesat Inc. 1375 Trans-Canada Highway Suite 300 Dorval, Quebec H9P 2W8, Canada Voice: +1 (514) 684-0200 x321 Fax: +1 (514) 684-0211 mailto:rullmann@wavesat.com
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Abstract	Correction of Compressed & Reduced Private maps in OFDM
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Corrections to Compressed & Reduced Private Maps for OFDM

Rainer Ullmann, Jonathan Labs
Wavesat Inc.

Description of Problem

The tables describing the format of compressed and reduced private maps in OFDM (section 8.3.6.6 and 8.3.6.7) contain fields that are not relevant in context with OFDM and therefore should be removed. For example the Sector ID in table 251c, or MCS in table 251e. The tables contain an if-clause which read that the HCS is not included when the compressed/reduced UL-MAP is included. However, this is misleading because the HCS is always included, in the latter case it is included as part of the compressed/reduced UL-MAP. The HCS is computed across all UL and DL maps, hence it is much cleaner to remove the HCS from the compressed/reduced UL maps and take the HCS out of the if-clause. Furthermore, these types of maps were introduced for usage in DL subchannelized and/or AAS zone. The compressed private map uses the DL_MAP_IE in the table with an extra sentence stating to use SBCH_DL_MAP_IE instead. The reduced private map lacks the SCI to support subchannelized allocations – a sentence in section 8.3.6.7 to use SBCH_DL_MAP_IE instead of DL_MAP_IE (which would have included the SCI) does not solve this problem, because the DL_MAP_IE is not included in that map, only the relevant entries of the DL_MAP_IE (hence lacking the SCI !!) were included directly into the reduced private DL-MAP.

The following changes correct these problems and simplify the tables.

Proposed Text Changes

In section 8.3.6.6, p.255, delete lines 32 and 33, in section 8.3.6.7. p.258, delete lines 33 and 34:

~~If the compressed private map is used within a DL subchannelization zone it shall use the SBCH_DL_MAP_IE format to describe the DL bursts instead of DL_MAP_IE format.~~

In tables 251d (Compressed Private UL-MAP message format) and 251f (Reduced private UL-MAP message format) remove the following line :

~~HCS~~	~~8~~	

Also remove the HCS parameter descriptor under table 251d, i.e. p.258, delete lines 6-9:

~~**HCS**~~
~~A HCS value, as defined in 6.3.2.1.1, is appended to the end of the compressed maps data. The HCS is computed across all bytes of the compressed maps starting with the byte containing the Compressed map indicator.~~

Table 251d also has a typo: UL-MAP_I~~D~~E()

In section 8.3.6.6.1 (p.256 l.5ff) modify:

Table 251c—Compressed Private DL-MAP message format

Syntax	Size (bits)	Notes
Compressed_Private_DL-MAP() {	—	—
Compressed map indicator	2	Set to 0b11 for compressed format
Reserved	1	Shall be set to zero
UL-MAP appended	1	—
Compressed Map Type	1	Shall be set to 0 for compressed private map
Map message length	11	—
DCD Count	8	—
Base Station ID	4	4 LSBs of BSID. The burst specified by the DLFP shall not be decoded if these bits do not match those of the BS on which it is registered
~~**Sector ID**~~	~~8~~	~~—~~
DL IE Count	8	—
for (i=1;i<=DL IE count;i++){	—	—
~~**DL-MAP_IE()**~~ **SBCH_DLP_MAP_IE()**	variable	—
}	—	—
if !(bypte boundary) {	—	—
Padding Nibble	4	Padding to reach byte boundary
}	—	—
if (UL-MAP appended) {	—	—
Compressed_Private_UL-MAP( )	variable	
}		
~~else {~~		
HCS	8	—
~~}~~	~~—~~	~~—~~
}	—	—

In section 8.3.6.6.1 (p.257 l.16) modify:

HCS
A HCS value, as defined in 6.3.2.1.1, is appended to the compressed private DL-MAP ~~if it is not followed by a ULMAP~~.
The HCS is computed across all bytes of the compressed map(s) starting with the byte containing the Compressed map indicator and including appended UL-MAP, if present.

In section 8.3.6.7.1 (p.259 l.4ff) modify:

Table 251e —Reduced private DL-MAP message format

Syntax	Size(bits)	Notes
Reduced Private DL_MAP()		
Compressed map indicator	2	Set to 0b11 for compressed format
Reserved	1	Shall be set to zero
UL-MAP appended	1	
Compressed Map Type	1	Shall be set to 1 for reduced private map
CID Included	1	1 = CID included. The CID shall be included in the first compressed private MAP if it was pointed to by a DL-MAP IE with a multicast CID
DCD Count Included	1	1 = DCD Count included. The DCD count is expected to be the same as in the broadcast map that initiated the private map chain. The DCD count can be included in the private map if it changes.
PHY modication Included	1	1 = included.
~~**Separate MCS Enabled**~~ Reserved	1	~~Separate coding applied for reduced AAS_Private_MAP and DL data burst~~ Shall be set to zero
Map message length	11	
~~If (Separate MCS Enabled) {~~		
~~**Duration**~~	~~10~~	~~Slot duration for reduced AAS Private Map~~
~~**DIUC**~~	~~4~~	~~Modulation & Coding Level~~
~~Reserved~~	~~2~~	~~Shall be set to zero~~
~~}~~		
if (CID Included) {		
CID	16	
}		
if (DCD Count Included) {		
DCD Count	8	
}		
if (PHY modification Included) {		
Preamble Time Shift	8	Updated preamble time shift to be used starting with the next frame.
}		
Preamble Present	1	
Start Time	11	
Duration	10	
Subchannel Index	5	
Reserved	~~6~~1	Shall be set to zero
If (UL-MAP appended) {		
Reduced Private UL_MAP()	Variable	
} ~~else {~~		
HCS	8	
~~}~~		
}		

In section 8.3.6.7.1 (p.260 l.64) modify :

Map message length

This value specifies the length of the reduced map message(s) beginning with the byte containing the Compressed map indicator ,including the Reduced Private UL maps if present, and ending with the last byte of the Reduced Private DL-MAP message, the computed 8-bit HCS value.

HCS

An HCS value, as defined in 6.3.2.1.1, is appended to the end of the reduced ~~compressed~~ map(s) data. The HCS is computed across all bytes of the reduced ~~compressed~~ map(s) starting with the byte containing the Compressed map indicator and including appended Reduced Private UL-MAP(s), if present.

~~Since the reduced Private_DL_MAP specifies the two-dimensional region for reduced Private_MAP and DL data burst, the data burst are transmitted through the remaining slots after assigning slots for reduced Private_MAP when Separate MCS Enabled.~~