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Purpose	Adopt changes.
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Clarification for STC in OFDM mode

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1. Introduction

The STC mode in OFDM lacked from several ambiguities related to the descriptions in the DL-MAP and FCH-STC. 2 modes of operation were implied but not described fully, and certain inconsistencies remained. The following makes this clear, and cleans up related details such as randomizer initialization, pilot modulation and DL-MAP start time.

2. Text changes

2.1. PMP zone

Modify the text section 8.3.5.1 page 40, starting line 13: (new text underlined blue)

The STC zone starts from a preamble. The BS can choose between 2 modes of operation:

- The preamble is immediately followed by one or several encoded PHY bursts, with no FCH-STC present, and all bursts of the STC zone shall be described in the regular MAP. There shall be no DL-MAP in the STC zone.
- The preamble is immediately followed by an STC encoded FCH-STC burst, which is one symbol with the same payload format as specified in ~~Table 241~~Table 225. The FCH-STC burst is transmitted at BPSK rate _. It is followed by one or several STC encoded PHY bursts. The first burst in the STC zone may contain a DL-MAP applicable only to the STC zone, in which the DL_IEs start time refer to the beginning of the STC zone, including preamble. If DL-MAP is present, it shall be the first MAC PDU in the payload of the burst. The DL map if sent in Burst 1 of the normal frame shall not describe any allocations in the STC region, since these will be described in the FCH-STC and DL-MAP of the STC zone. The STC zone may also contain an UL-MAP, as well as DCD and UCD messages. The randomizer and pilot modulation shall be reinitialized at the beginning of the STC zone.

In the case that there is STC encoded traffic in a specific frame, K, without STC encoded data traffic on the previous frame, K-1, the preceding DL subframe, K-1, may contain an STC zone at the end of the subframe, in which the STC zone consists of only an STC preamble and FCH-STC with no MAP IE, and STC data. The SS will be able to determine that there is no STC data allocation in frame K-1 STC Zone by determining that there has been no STC zone in the previous frame K-2.

2.2. Randomizer

Modify in section 8.3.3.1 p39 :

Modify the paragraph after Figure 197

The bits issued from the randomizer shall be applied to the encoder. On the downlink, the randomizer shall be re-initialized at the start of each frame, and at the start of the STC zone only in the case a FCH-STC is present, with the sequence: 1 0 0 1 0 1 0 1 0 0 0 0 0 0 0. The randomizer shall not be reset at the start of burst ~~#1~~ immediately following FCH or FCH-STC.

Add section 8.3.3.4.2 p39 l50:

2.3. Pilot modulation

8.3.3.4.2 Pilot modulation
Modify the second paragraph

The value of the pilot modulation for OFDM symbol k is derived from w_k. On the downlink the index k represents the symbol index relative to the beginning of the downlink subframe, or to the beginning of the STC zone for bursts contained in the STC zone when the FCH-STC is present.

2.4. DL-MAP Start time

Modify the text section 8.3.6.2 page 42, starting line 16: (new text underlined blue)

Start Time
Indicates the start time, in units of symbol duration, relative to the start of the first symbol of the PHY PDU (including preamble) where the DL-MAP message is transmitted. For a DL-MAP in the STC zone, indicates the start time in units of symbol duration, relative to the start of the first symbol of the STC zone (including preamble). The end of the last allocated burst is indicated by allocating a an End of Map burst (DIUC = 14) with zero duration. The time instants indicated by the Start Time values are the transmission times of the first symbol of the burst including preamble (if present).