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Corrected text proposal for secondary synchronization codes (SSC)

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As pointed out by Ericsson and Nortel on the 3Gpp reflector, there is a typo in the current secondary synchronization codes in [1, 2]. In this submission we correct for the typo.

---------------------------------------Begin text proposal for TS 25.213---

5.2.3 Synchronisation codes

5.2.3.1 Code Generation

The Primary code sequence, C_p is constructed as a so-called generalised hierarchical Golay sequence. The Primary SCH is furthermore chosen to have good aperiodic auto correlation properties.
Letting a = <x_1, x_2, x_3, …, x_{16}> = <0, 0, 0, 0, 0, 0, 1, 1, 0, 1,0, 1, 0, 1, 1, 0> and
b = <x_1, x_2, x_3, …, x_8, x_1, x_2, x_3, …, x_8 >.
The PSC code is generated by repeating sequence 'a' modulated by a Golay complementary sequence.

Letting $y =< a,a,a,\bar{a},\bar{a},a,\bar{a},\bar{a},a,a,a,\bar{a},a,\bar{a},a,a >$

The definition of the PSC code word C_p follows (the left most index corresponds to the chip transmitted first in each time slot):
C_p=<y(0),y(1),y(2),...,y(255)>.

Let the sequence z = <*b, b, b, b, b, b, b, b, b, b, b, b, b, b, b, b*>. Then the Secondary Synchronization code words, {C_1,…,C_{17}} are constructed as the position wise addition modulo 2 of a Hadamard sequence and the sequence *z*.
The Hadamard sequences are obtained as the rows in a matrix H_8 constructed recursively by:

$$H_0 = (0)$$
$$H_k = \begin{pmatrix} H_{k-1} & H_{k-1} \\ H_{k-1} & \overline{H_{k-1}} \end{pmatrix}, \quad k \geq 1$$

The rows are numbered from the top starting with row *0* (the all zeros sequence).
The Hadamard sequence *h* depends on the chosen code number *n* and is denoted h_n in the sequel.
This code word is chosen from every 8th row starting with row 2 of the matrix H_8. ~~.~~Therefore, there are 32 possible code words out of which ~~*n* = 1, 2, .., 17~~ n = 0, 1, 2, …, 16 are used. The rows of the matrix H_8 chosen are thus 2, 10, 18, 26, 34, 42, 50, 58, 66, 74, 82, 90, 98, 106, 114, 122 and row 130.
Furthermore, let $h_n(i)$ and $z(i)$ denote the *i*:th symbol of the sequence h_n and *z*, respectively.
~~Then h_n is equal to the row of H_8 numbered by the bit reverse of the 8 bit binary representation of *n*.~~
The definition of the *n*:th SCH code word follows (the left most index correspond to the chip transmitted first in each slot):
$C_{SCH,n}$ = < $h_n(0)+z(0)$, $h_n(1)+z(1)$, $h_n(2)+z(2)$, …,$h_n(255)+z(255)$ >,
All sums of symbols are taken modulo 2.
These PSC and SSC binary code words are converted to real valued sequences by the transformation '0' -> '+1', '1' -> '-1'.
The Secondary SCH code words are defined in terms of $C_{SCH,n}$ and the definition of {C_1,…,C_{17}} now follows as:
$C_i = C_{SCH,i}$, i=1,…,17

---------------------------------------End text proposal for TS 25.213 --

[1] TS 25.213, 3rd Generation Partnership Project (3GPP), Technical Specification Group (TSG), Radio Access Network (RAN), Working Group 1 (WG1), Spreading and Modulation (FDD).
[2] Texas Instruments, “Secondary synchronization codes (SSC) corresponding to the Generalised Hierarchical Golay (GHG) PSC”, Tdoc R1-99574, Cheju, Korea, June1-4, 1999.