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# Modifications to RACH transmission due to chiprate change

### 1. Introduction

In 677, "Impact of OHG harmonization recommendation on UTRA/FDD and UTRA/TDD", it was proposed that there would be 15 access slots per 2 frames. This paper contains the text proposal to TS 25.211 based on that assumption.

## 2. Text proposal to TS 25.211

#### 5.2.2.1.1 RACH transmission

The random-access transmission is based on a Slotted ALOHA approach with fast acquisition indication. The UE can start the transmission at a number of well-defined time-offsets, relative to the frame boundary of <u>every second frame of</u> the received BCH of the current cell. The different time offsets are denoted *access* <u>slots</u>. There are 15 access <u>slots per two frames</u> and they are spaced  $\frac{1.25}{20/15} = 1.333$  ms apart<u>a</u> as illustrated in Figure 2 Figure 2 shows the access slot numbers and their spacing to each other. Information on what access slots are available in the current cell is broadcast on the BCH.

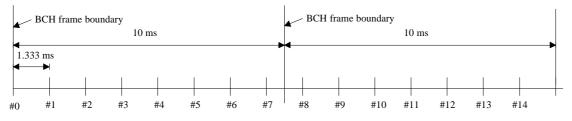
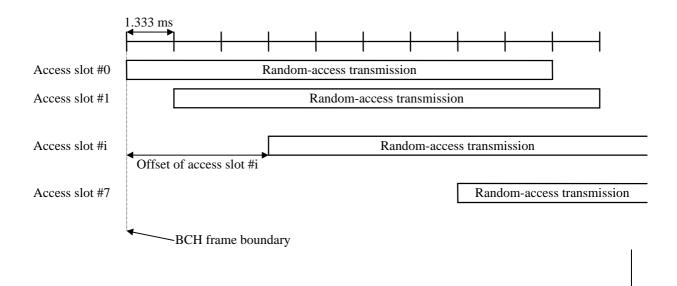
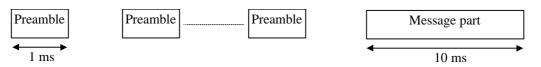


Figure 2. RACH access slot numbers and their spacing.



#### Figure 2 Figure 3: PRACH allocated for RACH access slots.

The structure of the random-access transmission of <u>Figure 3</u>. Figure 2, is shown in <u>Figure 4</u>. Figure 3. The random-access transmission consists of one or several *preambles* of length 1 ms and a *message* of length 10 ms.



*Figure 3<u>Figure 4</u>: Structure of the random-access transmission.*