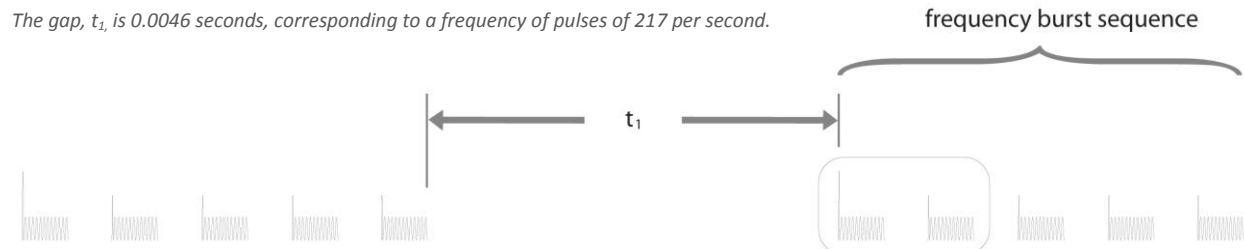


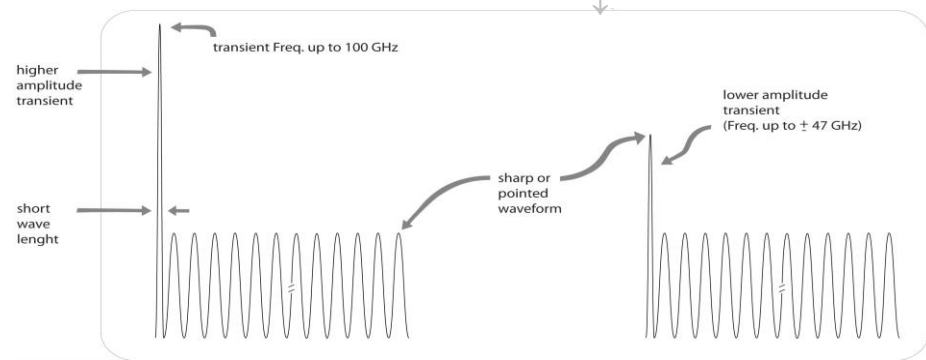
## THE PROBLEM: Illustration of the mobile phone signal

The radio technology used in a mobile telephone is a time multiplexed multi frequency system consisting of seven frequencies. 2 are used for internal data control and 5 are for speech transmission. In order to serve more than 5 users at the same time, the system is timed multiplexed, meaning that each user gets a slot in the time domain. The speech is digitalized, and each of the frequency sequences below represents a 0 or a 1. The biggest time gap between the periods of 5 sequences below represents the time multiplexing where there is no communication with the phone. The sequences occur so rapidly that it is perceived as continuous, much like a TV where still pictures put together rapidly is perceived as continuous movement. Each sequence generates a high frequency transient in the beginning, and the first sequence after each time multiplexing has an even worse transient. This is a simplified sketch of common mobile telephone radiation:

The gap,  $t_1$ , is 0.0046 seconds, corresponding to a frequency of pulses of 217 per second.



The transients are disruptive to our cell-communication, and together with the sharp waveform and the harmonics in every second octave, these noise signals are creating a measurable impact on human cells (even with low SAR).



## THE SOLUTION: Illustration of the SaferWave technology

A matrix resonates coherently with the mobile phone signal via a suitably designed aerial. Through the matrix's multilayers of specific shape and material, it transmits a modified signal. All electromagnetic fields synchronize with similar fields and become one field. The dominating fields, which are necessary for the mobile phone to work, have the same field strength and frequency. But the waveform is softened, and the subtle harmonics and other noise signals are almost eliminated. The high frequency transients are reduced in strength and frequency to a safer level.



SaferWave reduce the transients and harmonics to a minimum, and also softens the waveform. The SaferWave phone unit reduce the measurable effects on the human organism by 98%. When also using the SaferWave headset unit, the mobile phone is completely safe.

