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## Radio Environment Maps for Military Cognitive Networks: Density of Sensor Network vs. Map Quality

### Tytuł

Radio Environment Maps for Military Cognitive Networks: Density of Sensor Network vs. Map Quality

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Abstract: In this paper we present the dependency between density of sensor network and map quality in the Radio Environment Map (REM) concept. The architecture of REM supporting military communications systems is described. The map construction techniques based on spatial statistics and transmitter location determination are presented. The problem of REM quality and relevant metrics are discussed. The results of field tests for UHF range with different number of sensors are shown. Exemplary REM maps with different interpolation algorithms are presented. Finally, the problem of density of sensors network versus REM map quality is analyzed.

Keywords: Cognitive radio, Radio Environment Map, Spectrum monitoring, Density of sensor network, Deployment of sensors

## Powiązane publikacje

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