

CoWiSMoN: A framework for cognitive wireless sensor mobile network system for emergency rescue management

Abstract:

One of the crucial aspects of disaster management of emergency situations is the early assessment of needs and damages. In most disaster situations, higher fatality and increased casualty results from lack of access to timely available emergency services rather than the initial disaster itself. This is usually caused by lack of access to the affected area in order to properly assess the situation for relevant and urgent measures. Cognitive wireless sensor networks provide an opportunity to overcome this situation especially through interconnection via mobile systems. This paper presents a cognitive wireless sensor mobile networks-based framework (CoWiSMoN), designed to offer real-time emergency services to victims and rescue personnel in event of disasters. Critical issues underlying the implementation of such a system are discussed and analyzed.

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