

## SELF ORGANIZING PROTOCOL FOR HIGH-PRIORITY COVERED AREA

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## ABSTRACT

Network life is the Parameter which varies with the application. Researches are done to improve the network life but very less which are concentrated on particular region of network (Priority area), this paper is concentrate on that part. Here an algorithm SOPHCA (Self Organizing Protocol for High-Priority Covered Area) is proposed which explains how to improve the life of priority area. This algorithm can be explained in one line that "If any priority Node dies, a non-priority Node will replace it". To test and verify this algorithm some simulation are done on NS2 simulator, and results are analysed. Results are compared with network without this algorithm, and comparative results shows that the algorithm can improve the life of priority network up to considerable level. This paper explains SOPHCA and discussed how it improves the life of priority network.

**KEYWORDS:** 1) Sensor Network, 2) Node Energy, 3) Priority Area Life, 4) Priority Area, 5) SOPHCA, 6) Node Replacement 7) NS2 and 8) Mobility