

N_{RN}^c . Allocation of RNs for the two steps is a constrained optimization problem. As N_{RN}^I increases, N_{RN}^c has to be decreased. However, if N_{RN}^c is too small, the connectivity of the sparse area of the network is at risk. Since the connectivity of SNs is not satisfied outside the circle of radius d_0 , we arrange the deployment so as to compensate for the weaker connectivity in the area.

7. Conclusion

The deployment of nodes is an important issue in Wireless Sensor Network. The important thing that has to be kept in mind is to maximize the network lifetime as the sensor nodes are equipped with battery and cannot be replaced once they are placed in a sensor field. We have discussed various deployment models so that the network lifetime can be increased. We have also discussed various system models and deployment strategies so that we can use minimum number of sensor nodes and increase the network lifetime

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