

SELECTION CRITERIA OF WSN FOR IPTS PLANNING AND DEPLOYMENT IN DEVELOPING COUNTRIES

**VINEET KUMAR GOYAL¹, RANJANA D. RAUT²
AND NIKHIL ARORA³**

¹ Department of Electronics & Communication Engineering,
MJRP University, Jaipur, India

² Associate Prof. Dept. of Applied Electronics & In-charge CIC,
SGB Amravati University, India

³ Scientist/Engineer SD, ISRO Bangalore, India

Abstract

Wireless Sensor Network (WSN) is an emerging technology in Intelligent Public Transport System (IPTS) and has vast potential to be utilized in vital circumstances. An appropriate and systematic IPTS plays a key role in financial sector of a country. But IPTS, in most of the developing countries is not running efficiently and appropriately because of financial issues for enhancing technologies and deficient in systematic planning and deployment. WSN selection for IPTS is important because it has major applications such as remote traffic environmental monitoring as static installation or target tracking by placing on board. It is difficult to choose an appropriate WSN for better performance in developing countries. This paper describes Sensors techniques used for IPTS applications, a review of influencing factors for sensor selection and case study for hypothetical cost estimation with RSRTC IPTS network with different WSNs.

Keywords: Wireless Sensor Network (WSN), Intelligent Public Transportation System (IPTS), Bus Rapid Transit (BRT), Automatic Vehicle Location (AVL), GSM, GPRS, GPS, CCTV and RFID.