12th International Conference on Industrial Informatics (INDIN), 27-30 July 2014

Locomotive monitoring system using wireless sensor networks

P. L. Croucamp¹, S. Rimer¹ and C. Kruger²

Email: ckruger1@csir.co.za

Abstract

Theft of cables used for powering a locomotive not only stops the train from functioning but also paralyzes the signalling and monitoring system. This means that information on certain locomotive's cannot be passed onto other locomotives which may use the same track at different times hence increasing the possibility of accidents which can be costly. We propose to design and implement a standalone wireless sensor system that can be used to monitor a locomotive and which runs on a separate platform than that used to actually operate the locomotive.

¹Department of Electrical and Electronic Engineering University of Johannesburg Johannesburg, South Africa Email: suvendic@uj.ac.za

²Advanced Sensor Networks, Meraka. CSIR Pretoria, South Africa