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[Open Access](#)**An ingenious multiple communicator concept for next generation smart metering communication system** (Article)Hashim, W.^a, Ismail, A.F.^b, Raj Mohamed, R.M.A.^a, Hasan, M.K.^b, Halim, M.I.A.^a, Kumanan, K.^a^a Department of System and Networking, Universiti Tenaga Nasional, Kajang, Selangor, Malaysia^b Department of Electrical and Computer Engineering, International Islamic University Malaysia, Gombak, Selangor, Malaysia[View references \(17\)](#)

Abstract

In this article, we propose and study a self-switching network concept known as an ingenious multiple communicator mechanism which can be applied to energy provider's smart metering device. We outline reasons why such multiple connections networks are required through real case study scenarios and key components that drive towards such concept. We have gathered actual measurement values for a particular network and identified in what situation this is most suitable and applicable. We have come out with the basic system model for this multiple communicator. We also observed that a less fluctuating and similar pattern of network performance helps to design better network predictive analytics function. Finally numerical examples and analysis of the results are presented. © 2016 SERSC.

Author keywords

Advanced metering infrastructure; Cognitive selection mechanism; Multiple broadband; Smart home; Smart meter

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