



RESEARCH ARTICLE

Intelligent Routing Protocol for Decentralized Cyber Physical System Using Smart Grid Applications

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Abstract— Sensors have been playing a crucial role in cyber physical decision making system. The performance quality of a cyber-physical system depends on the number of sensor feedback data applied to it and how it works on them. A sensor network is a network of low-powered, energy-constrained nodes equipped with sensor(s) and wireless communication devices that are intended to sense some physical phenomena from the area of deployment. Recent technological advances in the field of micro-electro mechanical systems (MEMS) have made the development of multi-functional sensor nodes technically and economically feasible. The sensor nodes in a sensor network are usually resource constrained, which means they have limited energy, limited processing and memory. Sharing all the available sensor data to all the cyber physical system is impractical due to bandwidth constraint. An intelligent router system is proposed in this system to effectively route the sensor data to the relevant high impact voltage grids, by using effective maximum link time routing path to the bandwidth constraints.

Full Text: <http://www.ijcsmc.com/docs/papers/July2013/V2I7201319.pdf>