Agri-Tech Real Time Service Provisioning In an Enterprise Class Heterogeneous Network

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A Joint Collaboration between A.I.T. and
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Abstract. The ubiquitous deployment of IEEE 802.11 standard based Wi-Fi networks has facilitated non-real-time applications effectively, however challenges now exist for new applications operating over network deployments based on IEEE 802.15.4 standard, which require strict delay bounds. Applications such as Real Time Location Systems (RTLS) now require intelligent service provisioning in order to meet these strict delay bounds. Many challenges are faced including integration issues with bandwidth; energy constrained wireless sensor networks and real-time service delivery for these RTLS technologies. One application of this research is focused on the provision of services for precision agriculture. Collaboration has commenced between the Wireless Networking Group in A.I.T. and the Agro-tech Centre at the University Malaysia Perlis (UniMAP), Malaysia for mission critical applications.