

2016 IEEE International and Society (ISTAS), 20-22 Symposium on Technology October 2016, Trivandrum

## **TownshipNet: A localized hybrid TVWS-WiFi and cloud services network**

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### **ABSTRACT**

**This paper describes a network architecture to provide low cost last mile access and cloud services for local content sharing in a poorly resourced township environment. We describe how ICT solutions are developed in close partnership with the local community who will benefit from the interventions. We analyze the data usage patterns of mobile users in the township to provide us with a real understanding of the needs of the community. This data usage analysis is used to inform the design of the network and of the localized cloudlet services. The network consists of hybrid TV White Space and WiFi backhaul and WiFi public access points.**