

## ABSTRACT

Natural Disaster is an event that can happen anytime and unexpected. In the case of massive Natural Disaster, not only causing big casualty and loss of property but it may interference or damage the infrastructure of communication network such as Cellular Network, PSTN Network and Internet Network. The Delay Tolerant Network (DTN) can be one of suitable solutions for intermittent network.

Delay Tolerant Network is a network that designed for the challenging conditions, where the Internet Protocol Suite could not handle it properly. These conditions include Intermittent Connectivity, Long Delay, Assymmetric Data Rates and High Error Rates.

The results of the implementation are that large number of nodes on ION-DTN is effecting the transmission process. It is because the store and forward method started working at the node which is crossed over the rhyme. So while the transmission between 2 nodes , the data transmission have little possibility to arrive at the destination.

**Key Word :** Delay Tolerant Network, DTN, Interplanetary Overlay Network, ION-DTN