

ABSTRACT

Along with growth of telecommunication technology, then satellite communication system is very efficient and reliable to use in a competitive world of business. Why is it efficient and reliable ? Because in satellite communication system, we can reach a wider area. This satellite communication system and all of its advantages make it used in communication of data in generally beside voice and picture.

peripheral of communications satellite in this time which expanding is VSAT (Very Small Aperture Terminal). VSAT using antenna, have diameter which is minimize enough so that easy to to be attached and replaceable. Application of VSAT we can see a lot in ATM of bank. Generally private banks in Indonesia work equal with network operator such as PT CSM, PT Lintasarta, and PT Tangara Mitrakom to operate this network VSAT.

The purpose of making this final thesis is determining whether by method access DS-CDMA (Direct Sequence Code Division Multiple Access) or recognized also by the name of CDMA (Code Division Multiple Access) can be implemented in real at VSAT network. As we know that in peripatetic communications system, quality of CDMA is better compared to TDMA (GSM). Whether with this perception can be said that CDMA also will be good if applied at network VSAT ? As study case we taken bank of BNI.

From feasibility analysis with system Fixed, Reserved And Pure ALOHA in CDMA, we get result that CDMA might possibly be applied in VSAT's network at Bank of BNI, but also need paying attention for trade off. Such as bandwidth, space, power and cost which must be provided in its installation. Where in Fixed required 9600 PN-CODE, with Reseved ALOHA required 65 PN-CODE with $Bw = 7,29$ MHZ, and with Pure ALOHA required 530 PN-CODE with $Bw = 15,08$ MHZ.