## **ABSTRACT**

Broadband antennas is useful for radio system of economical channel multi canal, since 2008 until the middle 2008 had result some model antenna with gain 3.4 dBi up to tens dBi broadband, ultra band, and multi band with range 300 MHz - 3000 MHz. Based on match, broadband for dwitunggal or composition called Bhinneka Tunggal Ika, using connector  $50\Omega$  unbalance. To thrift space, using connector monopole local material.

Appropriate with Network Analyzer in ITTELKOM with range frequency 300 MHz – 3000 MHz using connector SMA, so within 4 month will be designed and realized 1 model prototype Chebyshev Unidirectional seven of ivories Antenna with (0.3-3.0) GHz, Monopole ration, using connector SMA,  $VSWR \leq 1.5$ , Gain more than 3.4 dBi and linier polarization with waste principal.

The fact antenna. Had got frequency 961.20 MHz - 2540.04 MHz at with limited VSWR  $\leq 1.5$ . While gain equal to, 10.98 dBi at 1650 MHz, and the other more than 3.4 dBi. Based on result of measurement, polarization is ellipse with form like number eight and pattern radiation is unperfected unidirectional.

Key word: chebyshev, seven of ivories, SMA and Unidirectional