

ABSTRACT

Nowadays TV-Broadcast systems have earned to use the technology of satellite communication. This system enable for service user of satellite communication to witness the broadcast TV from anywhere during still in region of the satellite coverage.

This final assignment describes about planning a network of digital TV-Broadcast via Palapa C-2 at Ku-band frequency from viewpoint of technical and economic aspect, where the analysis conducted by placing my self as consultant for the broadcaster that want to build a reliable national TV-Broadcast network, and of course fulfill all standards that obtained by regulator.

Indonesia that included in tropical country with high rainfall, become a main problem for satellite planning using Ku-band frequency. From the technical analysis, known that to transmit video MPEG2 at bit rate 5 Mbps with bandwidth 5063.8 KHz, need C/N about 11.449 dB at condition of availability system 98%. And to reach the link quality that capable to fulfill BER 10^{-7} , then need power transmit of earth station about 60.3 dB with 10.8 dB OBO transponder and TVRO that used have diameter 1 meter. While from the economic analysis, known that bandwidth which needs to rent to reach the link quality that desired is about 16744 KHz.

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