## ABSTRAKSI

Digital Audio Broadcasting (DAB) is a technique of transmitting radio services trough the sequence of bits that capable to provide radio services with a near quality CD or provide data services which can be received by a special receiver. DAB is a digital audio broadcasting standard that was designed to replace the analog radio transmition AM/FM.

There are some protection levels in Digital Audio Broadcasting that can be done by using *forward error correcting code* (FEC) and combined with the code rate that transmitted to handle the errors introduced by the channel. The encoded bits that is produced by the convolutional encoder will be decoded by viterbi decoder that is use the hard decision and soft decision algorithm. On this final project the performance of Digital Audio Broadcasting will be analyzed trough the factors of level of protections and the viterbi decoder that is used to the variation of the channel.

Based on simulation result will be known that any level of protection that is introduced by DAB is able to work well with the variation of channel. It's also known that the use of soft decision viterbi decoder will give better performance compared to hard decision viterbi decoder.

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