

Digital television techniques 2013

Exercise 5

Report: Do a lab report, where you describe what you did, and the results achieved during the lab, expressed as suitable graphs and explanations.

- A. Use the GNU-Radio system for analyzing the performance of a small communication system. Use explanation given in the lab to perform simulations.

- B. Use the DVB-T2 simulator developed at the ES lab / ÅA to perform simulations for the following.
 - a. Select 2 scenarios (modulation / FEC / channel model) and do a SNR / BER curve
 - b. Use one of the scenarios from above, but let one of the parameters (either FEC code rate or modulation) vary. Now, plot a the modulations points in a bits/s/Hz vs. SNR. The point to be plotted is where the BER reaches the $1e-5$.

NOTE. Instructions given at the lab!