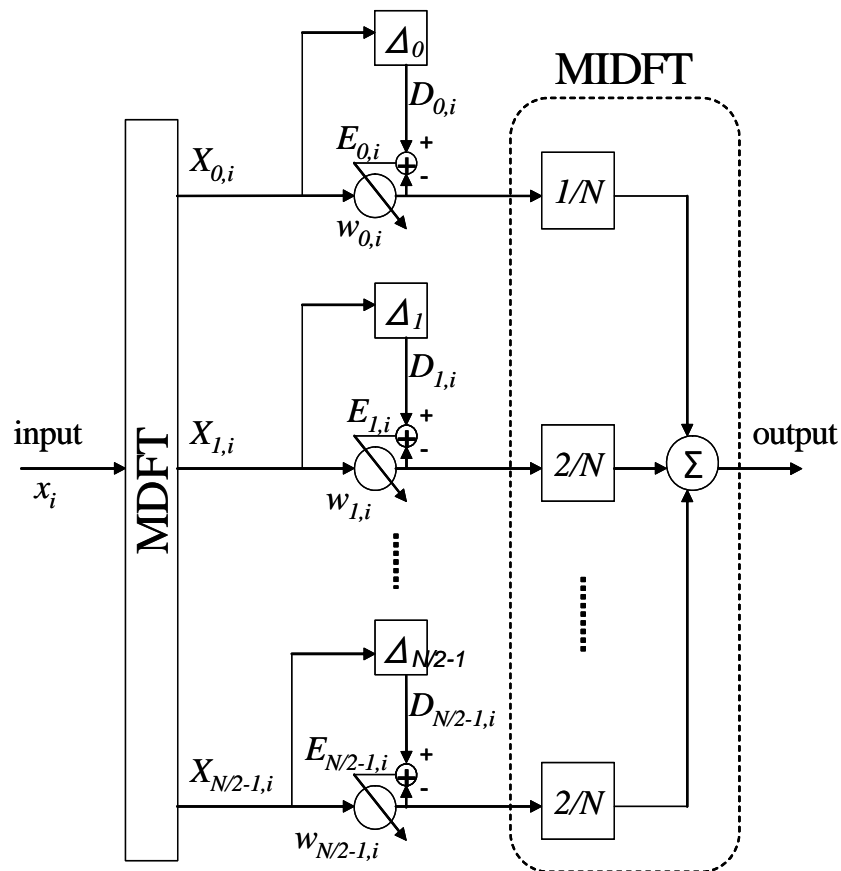# Speech Signal Processing

We have studied noise reduction techniques from noisy speech signals. Especially, our approaches are based on a single-input and processing in a frequency domain. The following figure shows a noise reduction system based on an adaptive line enhancer which is one of adaptive filters in the frequency domain.



We are now researching about decomposition of mixed speech signals by using the auditory scene analysis (ASA) and the modified DFT (MDFT) pair.