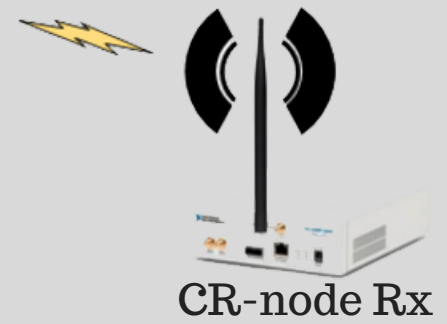
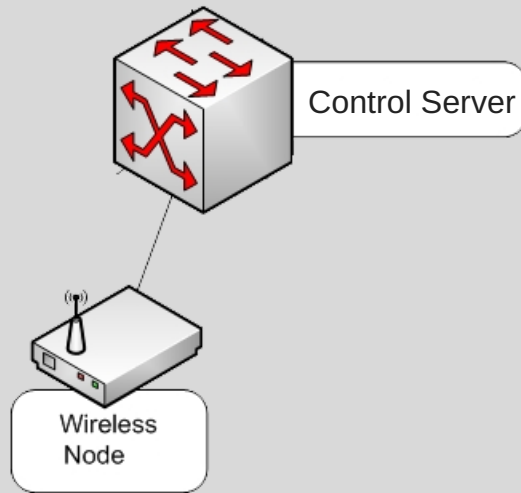
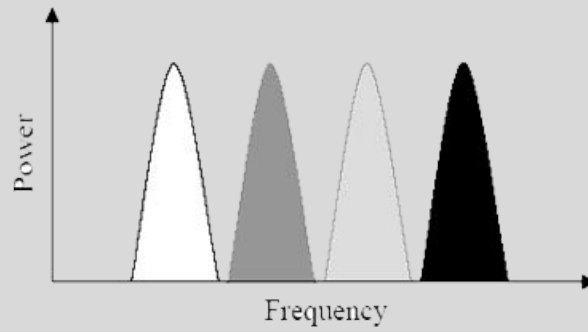
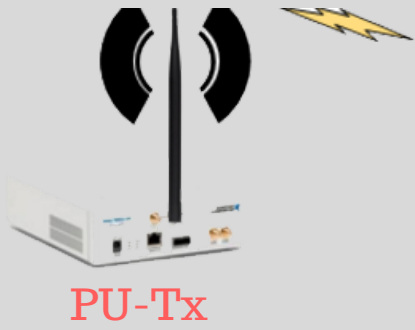




# *Cognitive Radio Network*



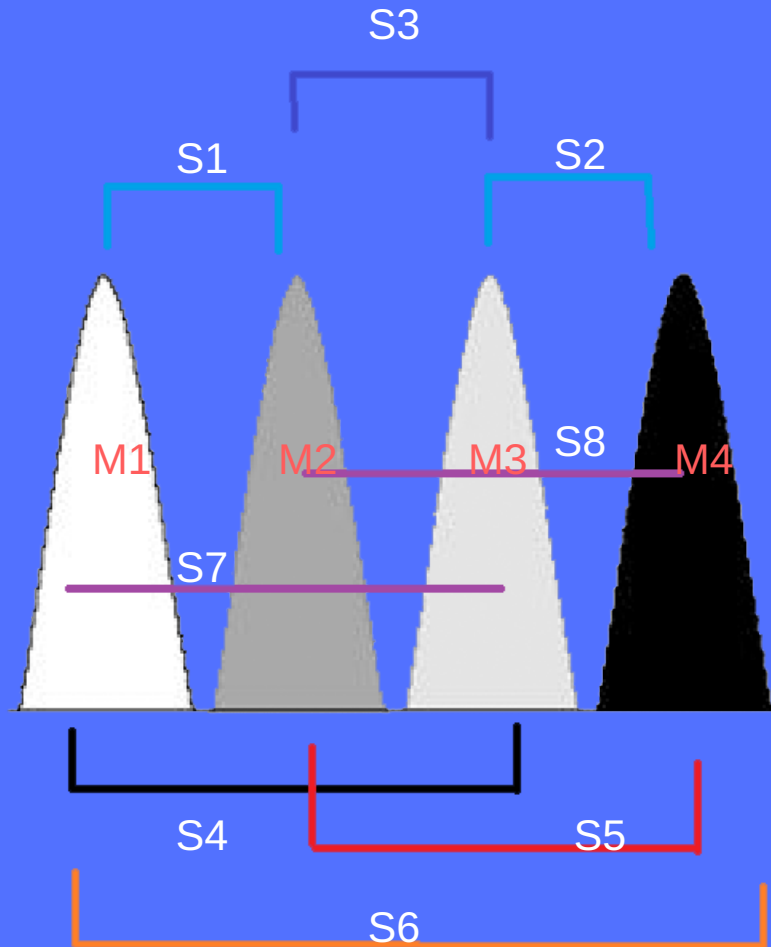
Proposal /Suggested  
Scenario





Cognitive Control Server is responsible for hosting the cognitive engine which includes the spectrum sensing/monitoring Algorithm, the learning and testing function which is based on ANN-Artificial Neural Network-, the Database to store those knowledge and Finally case based decision making.

***So, CCS-Cognitive Control Server Carries the Brain Functions***



Assume We have 4 channels, So we have 2 to the power 4 probability of the Primary user existence [We assign those probability a state ID]

So the CCS determine the available state and Allocate it to the Secondary user to exploit it while its unused.

and for sure, Its state has a different modulation scheme, data rate, tx\_power,..etc.