• Needs to acquire sufficiently accurate digital representation of an EEG signal
• Needs to transmit output wirelessly to a base station
• Capable of transmitting over a minimum range of 20m (indoors), 50m (outdoors)
• Needs to be capable of supporting 3 users simultaneously with one base station
• Needs to operate for at least 24 hours of continuous use on a mobile power source
• Needs to avoid using live mains due to safety considerations
• Needs to allow user to control on/off function on each device
• Needs to allow base station user to control and configure network
• Needs to display visual representation of acquired data
• Needs to cost less than $500.00 per unit to manufacture