State diagram with the following states and transitions:

- **Charging**
- **Communicating**
- **Idle**
- **Initial**

Transitions:

- Charging → Idle: "Finished Charging or Bird leaves nest"
- Idle → Charging: "Charging needed"
- Idle → Communicating: "Wifi time window starts"
- Communicating → Idle: "Wifi time window is over"
- Communicating → Charging: "Wifi time window is over or Charging needed"
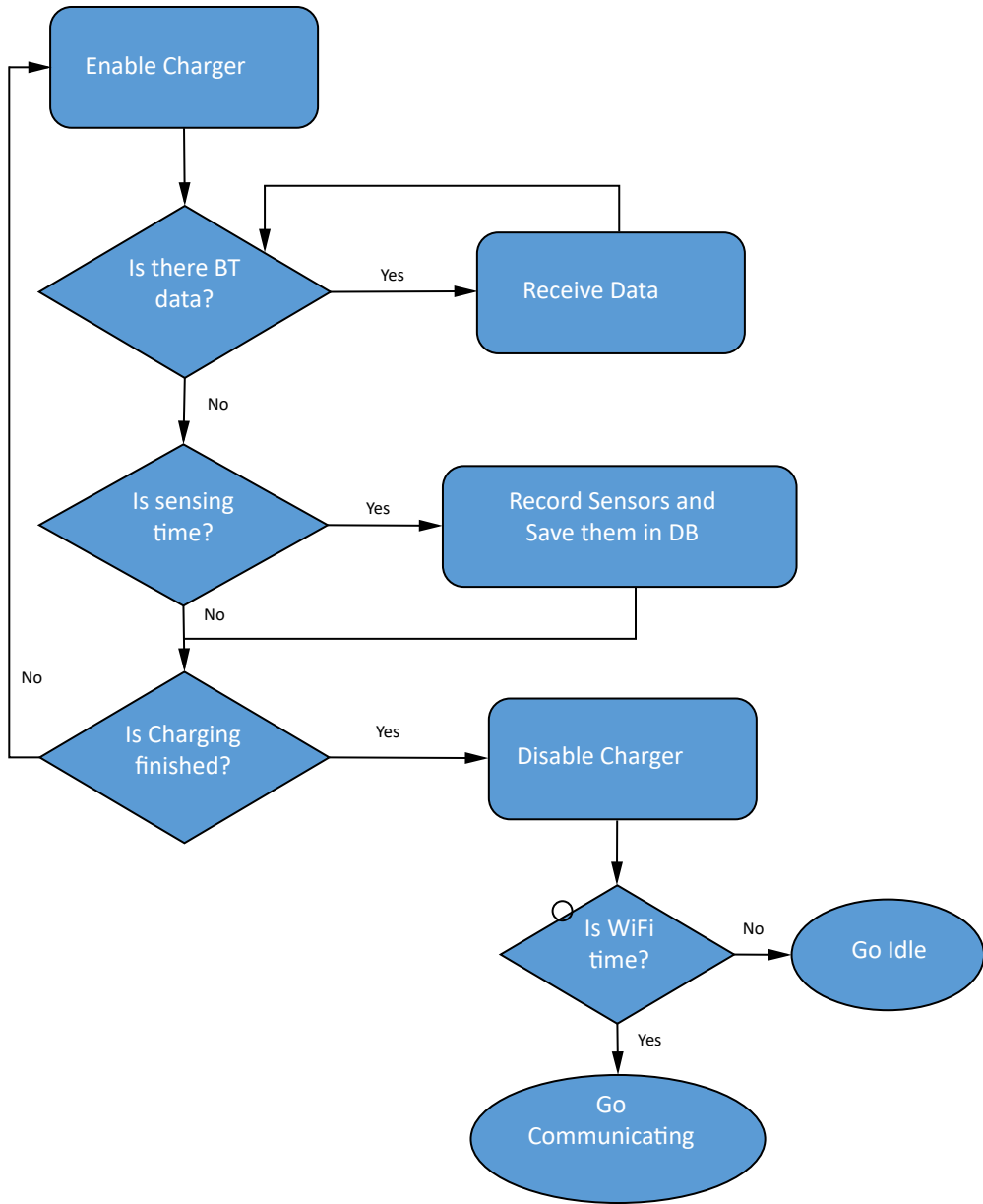- Communicating → Charging: "Wifi time window starts and Charging not needed"
- Initial → Idle

Charging state

Initialize State

Initialize all drivers

Go to IDLE

Raspberry Pi → Oscilador 915MHz

20dBm

5 VDC

915MHz

32dBm

Pérdidas en circuito 2dB

DC/DC → Amplificador de Potencia

15 VDC

12 VDC

G = 14dB

34dBm

Power Manager

9 dBm ~ 14 dBm

P110B

6 dBm ~ 12 dBm

Bateria Mochila