

between the low level operations of the system. This results in the structure for the abstraction layers as seen in Figure 5.2 below:

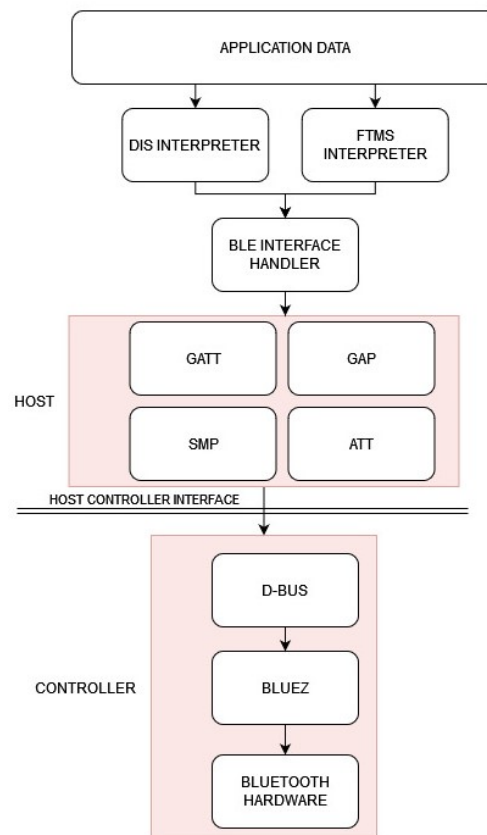


Figure 5.2: BLE Protocol Stack

The abstraction all the way up to the host already exists and is implemented on the Raspberry Pi. The D-Bus is an Inter-Process Communication (IPC) method that allows for Remote Procedure Calls (RPC) between the various processes. The role of the BLE Interface Handler is thus to handle communication between the main process and Bluez. Bluez is the official Linux Bluetooth protocol stack, and is what controls the Bluetooth operations of the system. (Lee, 2020)

The FTMS and Device Information Service (DIS) Interpreters receive and send various BLE commands, requests and replies between the BLE Interface Handler and the running application. It is here where messages are split up into their