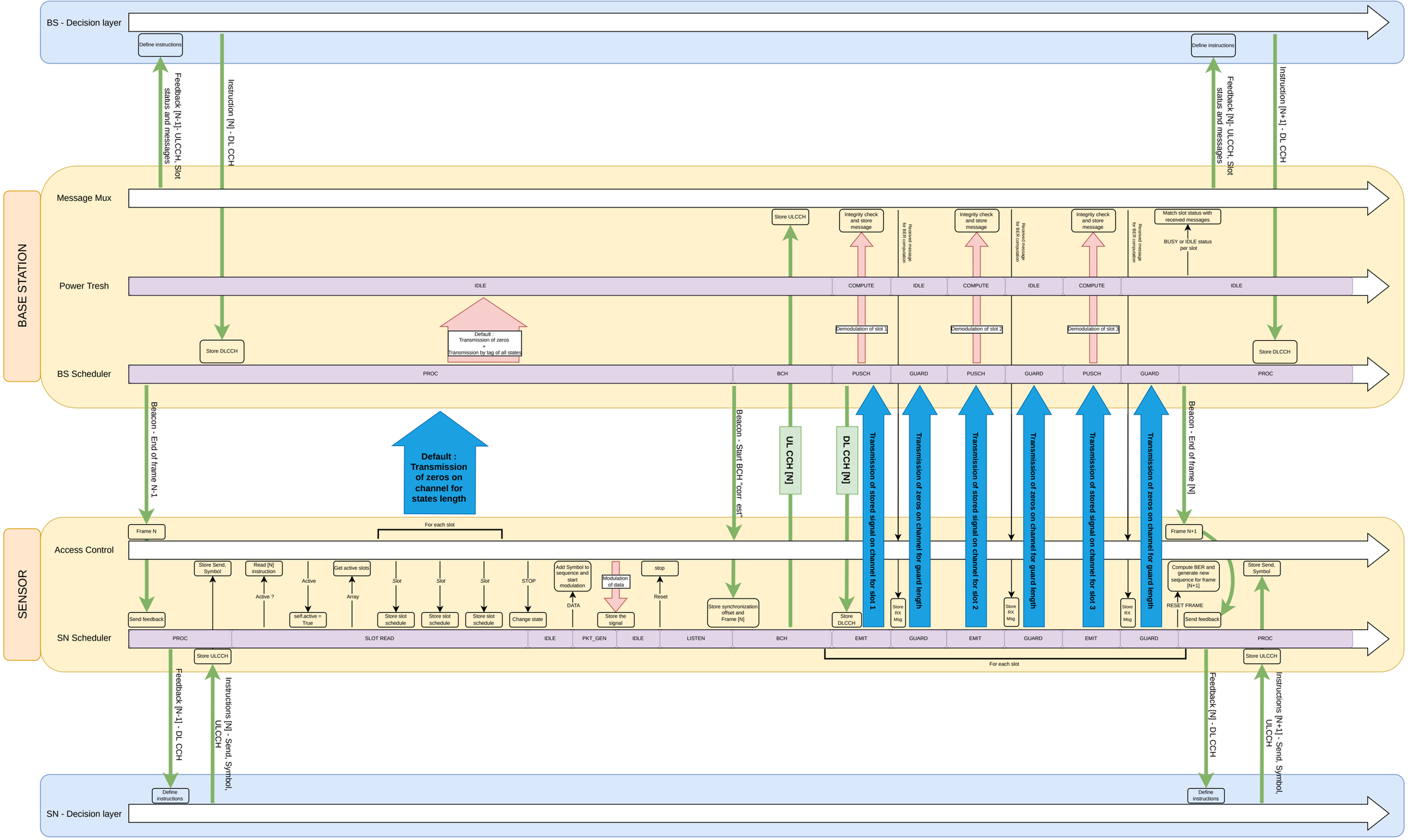

GR_EPHYL : States of an active frame

This is a diagram made to describe the behavior of most blocks involved in a transmission for the modified version of the gr_ephyl framework. In this version, in addition to transmit in a synchronized and slotted system, you can also transmit on a control and error free channel and choose to transmit on the channel a defined symbol, based on the result of the previous frame.

Instructions :

Send [Bool] - Decision to transmit or not for the coming frame

Symbol [Char] - Character to transmit on the channel in each slot for the coming frame (modification needed to transmit a different symbol on each slot)

UL/DL CCH [Str] - Message to pass in the error free control channel for the coming frame

Sensor feedback :

{
    frame : frame number [int]
    node : ID of the node [char]
    DL CCH : Content of the received DL CCH message [str]
}

Sensor instruction :

{
    frame : frame number [int]
    node : ID of the node [char]
    UL CCH : Content of the UL CCH message to send [str]
    Send : Send or not a message on channel [bool]
    Sequence : Symbol to send on each slot if active frame [char]
}

Base station feedback :

{
    frame : frame number [int]
    RX : List of status and received message on channel for each slot :
        (
            slot number [int],
            slot status [*IDLE* / *BUSY* / *RX*],
            message content [only if RX - (node ID, message)]
)
    UL CCH : List of received UL CCH message for each node [frame, node ID, UL CCH message]
}

Base station instruction :

{
    frame : frame number [int]
    DL CCH : List of DL CCH message to send for each node [node ID, DL CCH message]
}