# Dimmer and Switch control via EmpirBus PGN 65280 API component

EmpirBus 3rd party API transmits and receives dimmer and switch states via PGN 65280. The EmpirBus plugin relies on the "Data Model 2" to read and write per instance of an EmpirBus Application Specific PGN component the status of 2x dimmers with EmpirBus values 0..1000 and 8x switches with values 0|1. The two word values combined with the two first bits represent the dimming value and state of two dimmers. The remaining 6 bits can be used for up to 6 switches.
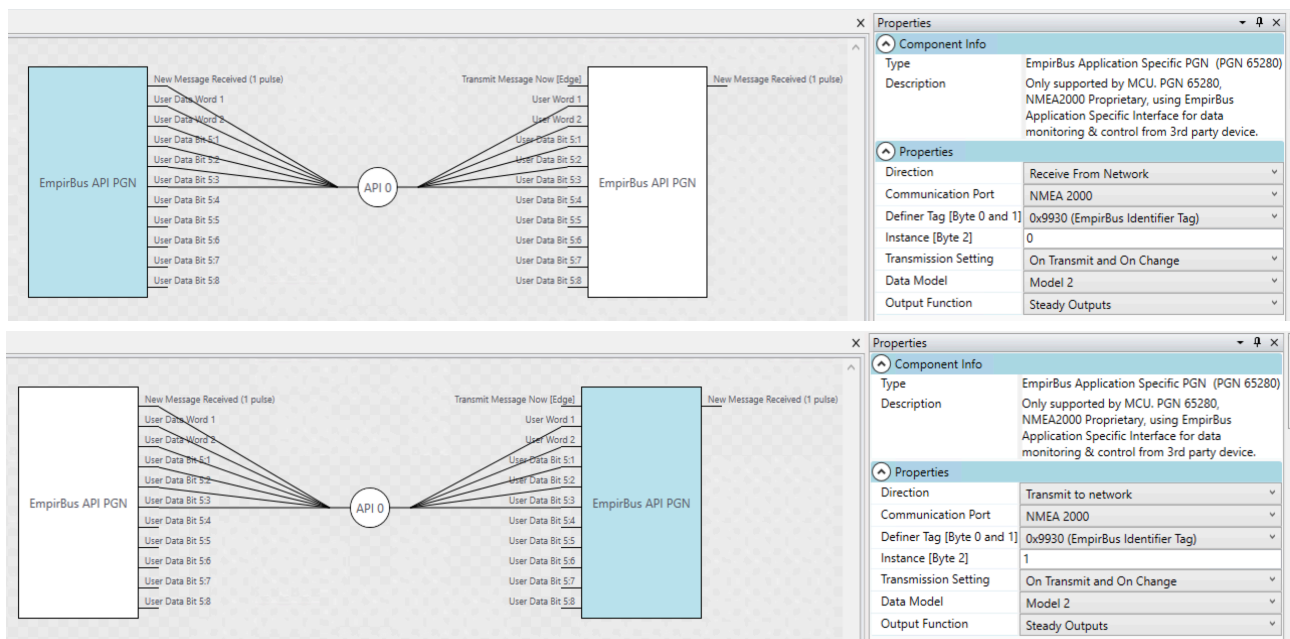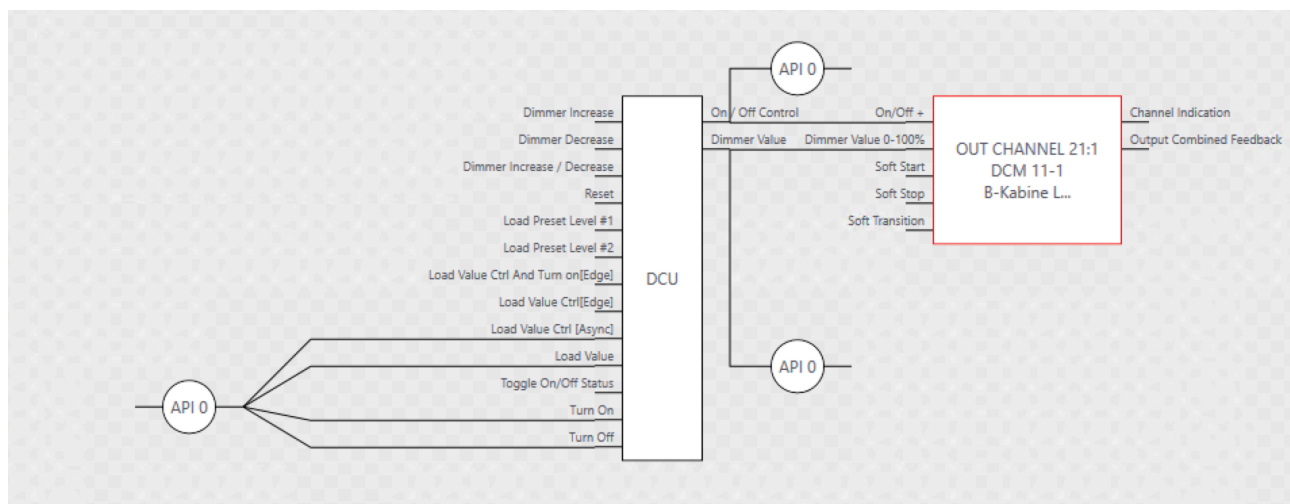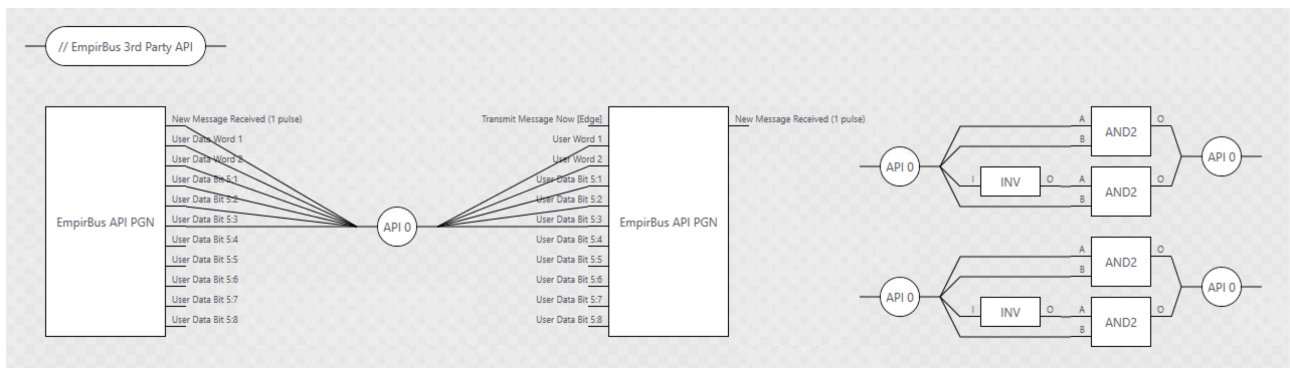

Note that Output Function has to be „Steady Outputs".

Instances of receiving and transmitting EmpirBus Application Specific PGN components have to be incremented:

"Receive from network": X (e.g. 0, 2, 4, 6, ...)
"Transmit to network": X + 1 (e.g. 1, 3, 5, 7, …)

Example dimmer control setup

Loading a dimmer level is triggered by "New Message Received (1 pulse)" with one pulse.

To set the dimmer and switch states you have to produce signals for switching on and off with combination of state bit / inverted state bit and new messages signal.