JSON Message Formats for Scenario Based Function Lists of Bluetooth Mesh Devices

February 25, 2020

v1.12

Revision History

Revision	Date	Author(s)	Description
1.0	2019-04-02	OIE,EE	Created
1.1	2019-04-24	OIE,EE	Added New Devices
1.2	2019-04-25	OIE,EE	Typo Fixed,Improved IR Blaster
1.3	2019-05-02	OIE,EE	Updated smart plug
1.4	2019-06-13	OIE,EE	Updated IR Blaster Message, Added Common Part
1.5	2019-06-15	OIE,EE	Updated Common Part
1.6	2019-06-28	OIE,EE	Removed System Control Messages
1.7	2019-08-09	OIE,EE	Added New Devices, Added Device Indentify
1.8	2019-09-11	OIE,EE,BT	Updated Light Bulb
1.9	2019-10-04	OIE,EE,KK	Added System Control Message, Added Peripheral OTA
1.10	2019-12-12	OIE,SE,KK	Fixed Typo, Added Unit Part, Added New Messages
1.11	2019-12-16	OIE,SE,KK	Fixed Typo, Added forceRead for all
1.11.1	2019-12-19	OIE,SE,KK	Updated incorrect appliance id type
1.12	2020-02-25	OIE,SE,KK	Added connection loss message

Contents

1 Door Sensor

1.1 Monitor:


```
{
  "header": {
    "msgId": 305,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_DOOR_OPEN",
          "val": true
        }
      ]
    }
  }
}
```

1.2 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 211,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_DOOR_OPEN",
          "val": true
        }
      ]
    }
  }
}
```

1.3 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

1.4 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

1.5 System Control + Monitor as Report (Disable Report):

```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

1.6 System Control + Monitor as Report (Enable Device):


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

1.7 System Control + Monitor as Report (Disable Device):


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242461111",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242461111",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

2 Smart Button

2.1 Monitor:


```
{
  "header": {
    "msgId": 155,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        }
      ]
    }
  }
}
```


2.2 Signal Emit(Single Pressed):


```
{
  "header": {
    "msgId": 75,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_SINGLE_PRESSED",
          "val": true
        }
      ]
    }
  }
}
```

2.3 Signal Emit(Double Pressed):


```
{
  "header": {
    "msgId": 75,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_DOUBLE_PRESSED",
          "val": true
        }
      ]
    }
  }
}
```


2.4 Signal Emit(Long Pressed):


```
{
  "header": {
    "msgId": 75,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_LONG_PRESSED",
          "val": true
        }
      ]
    }
  }
}
```

2.5 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242462222",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 211,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        }
      ]
    }
  }
}
```

2.6 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242462222",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

2.7 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242462222",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

2.8 System Control + Monitor as Report (Disable Report) :


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242462222",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242462222",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

3 Boiler Controller

3.1 Monitor:


```
{
  "header": {
    "msgId": 236,
    "sourceDeviceId": "F999975862293242463333",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```


3.2 Control:


```
{
  "header": {
    "msgId": 245,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```


This control message is expected to generate a "fullStateReport" message which is not considered as a response but should be interpreted as an asynchronous change notification.

3.3 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 236,
    "sourceDeviceId": "F999975862293242463333",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

3.4 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242463333",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```


3.5 Device Identification:


```
{
  "header": {
    "msgId": 245,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "identifyDevice"
  },
  "payload": {
    "data": {}
  }
}
```

3.6 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242463333",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

3.7 System Control + Monitor as Report (Disable Report) :


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242463333",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

4 Motion Sensor

4.1 Monitor:


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_MOTION_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

4.2 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 211,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_MOTION_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

4.3 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

4.4 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

4.5 System Control + Monitor as Report (Disable Report) :


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

4.6 System Control + Monitor as Report (Enable Device):


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": true
        }
      ]
    }
  }
}
```

4.7 System Control + Monitor as Report (Disable Device):


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 20
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.1"
        },
        {
          "func": "ATR_DEVICE_ACTIVE",
          "val": false
        }
      ]
    }
  }
}
```

5 Temperature and Humidity Sensor

5.1 Monitor (Example 1):


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_TEMPERATURE",
          "val": 35.0
        },
        {
          "func": "STT_HUMIDITY",
          "val": 44.4
        }
      ]
    }
  }
}
```

5.2 Monitor (Example 2):


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_TEMPERATURE",
          "val": 9.0
        },
        {
          "func": "STT_HUMIDITY",
          "val": 0.0
        }
      ]
    }
  }
}
```

5.3 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 210,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_TEMPERATURE",
          "val": 9.0
        },
        {
          "func": "STT_HUMIDITY",
          "val": 0.0
        }
      ]
    }
  }
}
```

5.4 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

5.5 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

5.6 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

6 Light Bulb

6.1 Monitor (Example Initial):


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 255
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 255
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 255
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 50
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.2 Control + Monitor as Report(Example RGB Mode):


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 50
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.3 Control + Monitor as Report(Example Brightness):


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.4 Control + Monitor as Report(Example White Mode):


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": null
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": null
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": null
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": null
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.5 Control + Monitor as Report(Example ON):

6.5.1 White Mode


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": null
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": null
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": null
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": null
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.5.2 RGB Mode


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.6 Control + Monitor as Report(Example OFF):

6.6.1 White Mode


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": null
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": null
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": null
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": null
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

6.6.2 RGB Mode


```
{
  "header": {
    "msgId": 123,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

6.7 Force Read + Monitor as Response(Example ON, Device is connected):

6.7.1 White Mode


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport",
    "reqMsgId" : 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": null
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": null
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": null
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": null
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.7.2 RGB Mode


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport",
    "reqMsgId" : 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

6.8 Force Read + Monitor as Response(Example OFF, Device is connected):

6.8.1 White Mode


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport",
    "reqMsgId" : 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": null
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": null
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": null
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": 45
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": null
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

6.8.2 RGB Mode


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "fullStateReport",
    "reqMsgId" : 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_COLOR_RED",
          "val": 95
        },
        {
          "func": "ATR_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "ATR_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "ATR_COLOR_WHITE",
          "val": null
        },
        {
          "func": "ATR_BRIGHTNESS",
          "val": 75
        },
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        }
      ]
    }
  }
}
```

6.9 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242466666",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

6.10 Device Identification:


```
{
  "header": {
    "msgId": 245,
    "targetDeviceId": "F999975862293242466666",
    "msgType": "identifyDevice"
  },
  "payload": {
    "data": {}
  }
}
```


6.11 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

6.12 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

7 Smart Plug

7.1 Monitor:


```
{
  "header": {
    "msgId": 118,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 50.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": false
        }
      ]
    }
  }
}
```

7.2 Control + Monitor as Report:


```
{
  "header": {
    "msgId": 119,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 500.00
        },
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 120,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 471.28
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 2.15
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 219.20
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 500.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": false
        }
      ]
    }
  }
}
```

7.3 Control (Disable Power Threshold) + Monitor as Report:


```
{
  "header": {
    "msgId": 119,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 0.00
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 120,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 471.28
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 2.15
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 219.20
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 0.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": false
        }
      ]
    }
  }
}
```

7.4 Monitor (Exceed Power Threshold):


```
{
  "header": {
    "msgId": 121,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 508.54
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 2.32
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 219.20
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 500.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": true
        }
      ]
    }
  }
}
```

7.5 Signal Emit (Over Current) + Monitor as Report:


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_OVER_CURRENT_PROTECTION",
          "val": true
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 124,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 0.00
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 500.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": false
        }
      ]
    }
  }
}
```

7.6 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 120,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 240,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport",
    "reqMsgId": 120
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        },
        {
          "func": "STT_POWER_MEASUREMENT",
          "val": 440.00
        },
        {
          "func": "STT_CURRENT_MEASUREMENT",
          "val": 2.00
        },
        {
          "func": "STT_VOLTAGE_MEASUREMENT",
          "val": 220.00
        },
        {
          "func": "ATR_MAX_POWER_MEASUREMENT_THRESHOLD",
          "val": 500.00
        },
        {
          "func": "STT_MAX_POWER_THRESHOLD_EXCEEDED",
          "val": false
        }
      ]
    }
  }
}
```

7.7 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

7.8 Device Identification:


```
{
  "header": {
    "msgId": 245,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "identifyDevice"
  },
  "payload": {
    "data": {}
  }
}
```

7.9 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

7.10 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

8 IR Blaster

8.1 Control (Store) :

8.1.1 Storing the first device code + Monitor as Report:


```
{
  "header": {
    "msgId": 111,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_STORE_DEVICE_IR_DATA",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "val": 1
            },
            {
              "prm": "PRM_DEVICE_LIBRARY_ID",
              "val": "8-3-5-9"
            },
            {
              "prm": "PRM_DEVICE_IR_DATA_PATH",
              "val": "/tmp/irData1_8-3-5-9"
            },
            {
              "prm": "PRM_DEVICE_NUMBER_OF_IR_DATA",
              "val": 15
            }
          ]
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 112,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "",
            "",
            "",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.1.2 Storing the second device code + Monitor as Report:


```
{
  "header": {
    "msgId": 113,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_STORE_DEVICE_IR_DATA",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "val": 2
            },
            {
              "prm": "PRM_DEVICE_LIBRARY_ID",
              "val": "1-8-9-3"
            },
            {
              "prm": "PRM_DEVICE_IR_DATA_PATH",
              "val": "/tmp/irData2_1-8-9-3"
            },
            {
              "prm": "PRM_DEVICE_NUMBER_OF_IR_DATA",
              "val": 15
            }
          ]
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 114,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "1-8-9-3",
            "",
            "",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.1.3 Storing the third device code + Monitor as Report:


```
{
  "header": {
    "msgId": 115,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_STORE_DEVICE_IR_DATA",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "val": 4
            },
            {
              "prm": "PRM_DEVICE_LIBRARY_ID",
              "val": "4-8-2-5"
            },
            {
              "prm": "PRM_DEVICE_IR_DATA_PATH",
              "val": "/tmp/irData4_4-8-2-5"
            },
            {
              "prm": "PRM_DEVICE_NUMBER_OF_IR_DATA",
              "val": 15
            }
          ]
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 116,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "1-8-9-3",
            "",
            "4-8-2-5",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.1.4 Fail - Storing the fourth device code + Monitor as Report:


```
{
  "header": {
    "msgId": 115,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_STORE_DEVICE_IR_DATA",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "val": 5
            },
            {
              "prm": "PRM_DEVICE_LIBRARY_ID",
              "val": "4-8-2-5"
            },
            {
              "prm": "PRM_DEVICE_IR_DATA_PATH",
              "val": "/tmp/irData4_4-8-2-5"
            },
            {
              "prm": "PRM_DEVICE_NUMBER_OF_IR_DATA",
              "val": 15
            }
          ]
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 116,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "1-8-9-3",
            "",
            "4-8-2-5",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.2 Control (Invoke):


```
{
  "header": {
    "msgId": 221,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_INVOKE_DEVICE_FUNC",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "value": 1
            },
            {
              "prm": "PRM_IR_DATA_INDEX",
              "value": 3
            }
          ]
        }
      ]
    }
  }
}
```

8.3 Control (Immediate):


```
{
  "header": {
    "msgId": 115,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_IMMEDIATE",
          "params": [
            {
              "prm": "PRM_DEVICE_IR_DATA",
              "val": "data"
            }
          ]
        }
      ]
    }
  }
}
```

8.4 Control(Remove):

8.4.1 Remove a device


```
{
  "header": {
    "msgId": 115,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_REMOVE_DEVICE_LIBRARY",
          "params": [
            {
              "prm": "PRM_DEVICE_INDEX",
              "val": 4
            }
          ]
        }
      ]
    }
  }
}
```


8.4.2 Remove all devices


```
{
  "header": {
    "msgId": 115,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "CMD_REMOVE_ALL_DEVICE_LIBRARIES",
          "params": []
        }
      ]
    }
  }
}
```

8.5 Monitor:


```
{
  "header": {
    "msgId": 222,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "1-8-9-3",
            "",
            "4-8-2-5",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.6 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 224,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport",
    "reqMsgId": 223
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_STORED_DEVICE_LIBRARIES",
          "val": [
            "8-3-5-9",
            "1-8-9-3",
            "",
            "4-8-2-5",
            "",
            ""
          ]
        }
      ]
    }
  }
}
```

8.7 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

8.8 Device Identification:


```
{
  "header": {
    "msgId": 245,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "identifyDevice"
  },
  "payload": {
    "data": {}
  }
}
```

8.9 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

8.10 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

9 Radiator Valve

9.1 Monitor:


```
{
  "header": {
    "msgId": 118,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        },
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 80
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "ATR_TARGET_TEMPERATURE",
          "val": 50
        },
        {
          "func": "STT_TEMPERATURE",
          "val": 9
        },
        {
          "func": "STT_CHILD_LOCK",
          "val": false
        }
      ]
    }
  }
}
```

9.2 Control:


```
{
  "header": {
    "msgId": 118,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        },
        {
          "func": "ATR_TARGET_TEMPERATURE",
          "val": 50
        }
      ]
    }
  }
}
```


This control message is expected to generate a "fullStateReport" message which is not considered as a response but should be interpreted as an asynchronous change notification.

9.3 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 118,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "fullStateReport",
    "reqMsgId" : 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "OFF"
        },
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 10
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": true
        },
        {
          "func": "ATR_TARGET_TEMPERATURE",
          "val": 50
        },
        {
          "func": "STT_TEMPERATURE",
          "val": 19
        },
        {
          "func": "STT_CHILD_LOCK",
          "val": false
        }
      ]
    }
  }
}
```

9.4 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242467777",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242467777",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

9.5 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

9.6 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

10 Smoke Sensor

10.1 Monitor:


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_SMOKE_DETECT",
          "val": false
        }
      ]
    }
  }
}
```

10.2 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 211,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_SMOKE_DETECT",
          "val": false
        }
      ]
    }
  }
}
```

10.3 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

10.4 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

10.5 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

11 Water Leak Sensor

11.1 Monitor:


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_LEAK_DETECT",
          "val": false
        }
      ]
    }
  }
}
```

11.2 Force Read + Monitor as Response (Device is connected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 211,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "fullStateReport",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_BATTERY_LEVEL",
          "val": 67
        },
        {
          "func": "STT_BATTERY_LOW",
          "val": false
        },
        {
          "func": "STT_LEAK_DETECT",
          "val": false
        }
      ]
    }
  }
}
```

11.3 Force Read + Signal Emit as Response (Device is Disconnected):


```
{
  "header": {
    "msgId": 210,
    "targetDeviceId": "F999975862293242464444",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {}
  }
}
```

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242464444",
    "msgType": "signalEmit",
    "reqMsgId": 210
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

11.4 System Control + Monitor as Report :


```
{
  "header": {
    "msgId": 3,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 4,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 10
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

11.5 System Control + Monitor as Report (Disable Report):


```
{
  "header": {
    "msgId": 5,
    "targetDeviceId": "F999975862293242465555",
    "msgType": "sendSystemControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 6,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "systemReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_REPORT_PERIOD",
          "val": 0
        },
        {
          "func": "ATR_WAKEUP_PERIOD",
          "val": 15
        },
        {
          "func": "STT_FW_VERSION",
          "val": "0.0.2"
        }
      ]
    }
  }
}
```

12 Gateway

12.1 Sensor

12.1.1 Monitor (Example 1):


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_TEMPERATURE",
          "val": 35.0
        },
        {
          "func": "STT_HUMIDITY",
          "val": 44.4
        },
        {
          "func": "STT_LIGHT_COLOR_RED",
          "val": 95
        },
        {
          "func": "STT_LIGHT_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "STT_LIGHT_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "STT_LIGHT_CLEARANCE",
          "val": 125
        },
        {
          "func": "STT_LIGHT_ILLUMINANCE",
          "val": 10.25
        }
      ]
    }
  }
}
```

12.1.2 Monitor (Example 2):


```
{
  "header": {
    "msgId": 123,
    "sourceDeviceId": "F999975862293242465555",
    "msgType": "fullStateReport"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_TEMPERATURE",
          "val": 9.0
        },
        {
          "func": "STT_HUMIDITY",
          "val": 0.0
        },
        {
          "func": "STT_LIGHT_COLOR_RED",
          "val": 195
        },
        {
          "func": "STT_LIGHT_COLOR_BLUE",
          "val": 85
        },
        {
          "func": "STT_LIGHT_COLOR_GREEN",
          "val": 35
        },
        {
          "func": "STT_LIGHT_CLEARANCE",
          "val": 45
        },
        {
          "func": "STT_LIGHT_ILLUMINANCE",
          "val": 125.00
        }
      ]
    }
  }
}
```

12.2 LED

12.2.1 Example Blinking


```
{
  "header": {
    "msgId": 236,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DURATION",
          "val": 100
        },
        {
          "func": "ATR_ON_TIME",
          "val": 500
        },
        {
          "func": "ATR_OFF_TIME",
          "val": 500
        }
      ]
    }
  }
}
```

12.2.2 Example Turn On


```
{
  "header": {
    "msgId": 236,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DURATION",
          "val": 0
        },
        {
          "func": "ATR_ON_TIME",
          "val": 1
        },
        {
          "func": "ATR_OFF_TIME",
          "val": 0
        }
      ]
    }
  }
}
```

12.2.3 Example Turn Off


```
{
  "header": {
    "msgId": 236,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_DURATION",
          "val": 0
        },
        {
          "func": "ATR_ON_TIME",
          "val": 0
        },
        {
          "func": "ATR_OFF_TIME",
          "val": 1
        }
      ]
    }
  }
}
```

12.3 Buzzer


```
{
  "header": {
    "msgId": 236,
    "targetDeviceId": "F999975862293242463333",
    "msgType": "sendControlCommand"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_FREQUENCY",
          "val": 4000
        },
        {
          "func": "ATR_DURATION",
          "val": 100
        },
        {
          "func": "ATR_ON_TIME",
          "val": 500
        },
        {
          "func": "ATR_OFF_TIME",
          "val": 500
        }
      ]
    }
  }
}
```

13 Gateway Notifications

13.1 Security Armed


```
{
  "header": {
    "msgId": 223,
    "msgType": "securityArmed"
  },
  "payload": {
    "data": {}
  }
}
```


13.2 Security Disarmed


```
{
  "header": {
    "msgId": 223,
    "msgType": "securityDisarmed"
  },
  "payload": {
    "data": {}
  }
}
```


13.3 Security Warning


```
{
  "header": {
    "msgId": 223,
    "msgType": "securityWarning"
  },
  "payload": {
    "data": {}
  }
}
```

14 Common

14.1 Force Read All:

```
{
  "header": {
    "msgId": 223,
    "msgType": "forceReadAll"
  },
  "payload": {
    "data": {}
  }
}
```

This message is expected to generate a seperated "fullStateReport" message for all stored devices.

14.2 Powered On Signal:

```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_POWERED_ON",
          "val": true
        }
      ]
    }
  }
}
```

14.3 Peripheral OTA:

14.3.1 OTA Avaliable Message to Peripheral


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "otaAvailable"
  },
  "payload": {
    "data": {}
  }
}
```


14.3.2 OTA Ready Message to Event Handler


```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "readyForOta"
  },
  "payload": {
    "data": {}
  }
}
```

14.4 System Force Read:


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "systemForceRead"
  },
  "payload": {
    "data": {}
  }
}
```


This message is expected to generate a "systemReport" message which is not considered as a response but should be interpreted as an asynchronous change notification.

14.5 Connected Signal:

14.5.1 True :


```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": true
        }
      ]
    }
  }
}
```

14.5.2 False :


```
{
  "header": {
    "msgId": 223,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "signalEmit"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "SGN_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```


14.5.3 Trigger To Check Device Connection :


```
{
  "header": {
    "msgId": 223,
    "targetDeviceId": "F999975862293242468888",
    "msgType": "forceRead"
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "STT_DEVICE_CONNECTED_TO_NETWORK",
          "val": false
        }
      ]
    }
  }
}
```

```
{
  "header": {
    "msgId": 236,
    "sourceDeviceId": "F999975862293242468888",
    "msgType": "fullStateReport"
    "reqMsgId": 223,
  },
  "payload": {
    "data": {
      "functions": [
        {
          "func": "ATR_OPERATIONAL_STATUS",
          "val": "ON"
        }
      ]
    }
  }
}
```

14.6 RSSI(AC Devices):

14.6.1 Start RSSI Scan


```
{
  "header": {
    "msgId": 223,
    "msgType": "startRssiScan"
  },
  "payload": {
    "data": {}
  }
}
```


14.6.2 RSSI Scan Result


```
{
  "header": {
    "msgId": 235,
    "msgType": "rssiScanResult"
  },
  "payload": {
    "data": {
      "devices": [
        {
          "id": "1001",
          "key": "b4eeb4ea5a52",
          "rssi" : "-89"
        },
        {
          "id": "1002",
          "key": "7cdb98f0e682",
          "rssi" : "-87"
        },
        {
          "id": "1003",
          "key": "7cdb982cc988",
          "rssi" : "-82"
        }
      ]
    }
  }
}
```

14.7 Chip:

14.7.1 BT Chip Fail


```
{
  "header": {
    "msgId": 223,
    "msgType": "btChipFail"
  },
  "payload": {
    "data": {}
  }
}
```


14.7.2 BT Chip Available


```
{
  "header": {
    "msgId": 223,
    "msgType": "btChipAvailable"
  },
  "payload": {
    "data": {}
  }
}
```

Appendix A UNITS


```
{
  "ATR_REPORT_PERIOD"  : "minute",
  "ATR_WAKEUP_PERIOD"  : "minute",
  "ATR_DURATION"  : "second",
  "ATR_ON_TIME"  : "second",
  "ATR_DURATION"  : "second",
  "ATR_OFF_TIME"  : "second",
  "ATR_FREQUENCY"  : "hertz"
}
```