Service Description (SD) Arrowhead Z-wave System Demonstrator – Switch Plug State service

**Abstract**

This document defines the template for the Service Description of Arrowhead compliant Services. A Service Description provides an abstract description of what is needed for systems/devices/units/software to provide and/or consume a specific service. SD’s for Application Services are created (specified) by the Pilots WP’s and by the common Arrowhead framework. The SD shall make it possible for an engineer with technical programming knowledge to achieve an Arrowhead compliant realization of a provider and/or consumer of description of how the service is implemented/realized by using the Communication Profile and the chosen technologies. A Service Description (SD) is the Service in a specific technology. All systems/devices/units/software implementing an Interface Design Description which complies with this SD will be able to exchange information with each other. All Arrowhead Service Description should be specified using this template and stored on a common repository (available on the SVN server), in order to document and formalize the pilot demonstrators and the common Arrowhead framework.

1. Service Description Overview

This service Switch the Binary Switch Plug ON or OFF and adds a record to the Plug device manager.

The encrypted JSON object contains the following fields:

**Request:**

{

"state" : 0,

"serviceType" : "switch-plug-state",

"deviceType" : "Plug"

}

**Response**:

It indicates if the request is received or not.

1. Abstract Interfaces

This Service provides one functionality.

# POST:

This is used to switch the Binary Switch Plug ON or OFF and create a record for the service invocation into Plug device manager using Post API.

1. Abstract Information Model

Table 1 Switch Plug State Service Request

|  |  |
| --- | --- |
| **Field** | **Description** |
| state | Either 0 or 255 to switch the plug OFF or ON respectively |
| serviceType | switch-plug-state to switch ON or OFF the binary Plug |
| deviceType | Plug |

Table 2 Switch Plug State Service Response

|  |  |
| --- | --- |
| **Field** | **Description** |
| Output | It indicates if the request is received or not. |

1. Non-functional Requirements

The service has none non-functional requirements.

1. Revision history

# Amendments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No. | Date | Version | Subject of Amendments | Author |
| 1 | 2021-01-6 | 0.1 | First draft | Salman Javed |

# Quality Assurance

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Date | Version | Approved by |
| 1 |  |  |  |