

# EEP Submission Template How To

V1.0

## Introduction

The following explanations will help you finding an existing EnOcean Equipment Profile (EEP) for your application or designing and submitting a new EEP according to the requirements of your new or redesigned EnOcean device. Consider these guidelines as a best practise summary that provides hints and instructions to increase the probability of a quick and easy profile approval by the EnOcean Technical Working Group (TWG). Please refer to the following EEP approval guide with its EEP approval process and the given checklists for profile definitions.

## EEP Approval Guide

### Approval Process:

1. Profile definition (duration: up to the submitter)
  - a. Specify your application in detail.
  - b. Check the latest EEP Specification for existing profiles that could be used for your application. (If there is a fitting EEP, the process ends here.)
  - c. Use the latest version of the EEP proposal template (this document).
  - d. Define a new profile according to your requirements following the EEP proposal guidelines.
  
2. Profile submission (duration: approx. 4 weeks)
  - a. Officially submit your profile proposal to the EnOcean EEP Approval Committee (EAC) via e-mail ([eeep-proposal@enocean-alliance.org](mailto:eeep-proposal@enocean-alliance.org)).
  - b. The EAC will review the profile proposal and:
    - i. ...contact the submitter to discuss the proposal.
    - ii. ...provide change requests if necessary.
    - iii. ...evaluate made changes.
    - iv. ...make a recommendation for the profile presentation to the TWG.
  - c. After that the EAC will forward the profile proposal to the TWG.
  
3. Profile approval (duration: approx. 4 weeks)
  - a. The submitter presents the profile during an official TWG call.
  - b. The EAC recommends the profile for an approval or denial.
  - c. The TWG discusses the presented EEP proposal(s).
  - d. The official TWG review phase (4 weeks) starts.
  - e. Every TWG member is allowed to provide questions, remarks or objections during the review phase which are forwarded to the submitter.
  - f. The review phase ends with:

- i. The approval (no objections, no change requests) => The profile can officially be used.
- ii. A change request => The profile is returned to the submitter and has to be resubmitted.
- iii. A denial => The profile is not accepted and may not be used officially.

#### 4. Official release

- a. An approved profile will be added to the 'submitted profiles folder' on the EnOcean Alliance platform.
- b. The Profile is published with the next official EEP Specification document release. Every profile that is approved by March 31<sup>st</sup>, will be included in the spring release. Every profile that is approved by September 30<sup>th</sup>, will be included in the fall release.

### **Naming:**

When submitting a profile please add your company name, the proposed EEP number, the FUNC description and a version to the filename of the template.

Example: EEPProposal\_Diehl\_D2-01-08\_switches-and-dimmers\_0v7.docx

### **Please note:**

The normal processing time for an approval process is, at best, about 8 weeks. For this reason, it is recommended to specify a new EEP as early as possible and send it to the EAC team. The EAC team then has enough time to verify the new profile and can optionally support the submitter if changes need to be done to get the profile to the TWG for the review phase.

The argument that the product is "ready to ship" will no longer shorten the review and approval phase. For this reason, the EEP should be submitted at least 10 weeks (recommendation) before the start of production.

Due to holiday seasons the EAC team cannot guarantee in-time profile reviews during the following periods:

- Mid June until End August
- Mid December until Mid January

Please be aware that your product introduction can be delayed when submitting profiles during these days.

### **Common EEP guideline:**

1. Every submitted EEP is subject to being changed by the EAC or even denied by the TWG.
2. New profiles within the 1BS EEP family are not allowed.
3. RPS profiles are reserved for energy harvesting applications only.
4. Configuration parameters for commissioning or the application setup have to be part of Remote Commissioning and not of the EEP data definitions.
5. Every EEP represents an application. Profiles are not meant to combine different applications. Every application using a certain profile has to support all defined commands and parameters.
6. Certain parameters within a profile can be optional as their values are not permanently available during runtime. Furthermore, it is possible to declare a parameter as 'not supported' if the application wants to show that the value is not only temporarily unavailable. Therefore, a parameter should include status information coded like that: 'valid' (value is valid), 'invalid' (value is temporarily invalid), 'not supported' (value is permanently invalid). This opportunity does not suspend point 5.
7. Profiles dealing with similar applications and data are bundled in EEP families (same FUNC). Within these EEP families commands and parameters are used in the same way and new TYPES can be created by defining a new combination of parameters and/or adding new commands or parameters.
8. The unique profile number (R-ORG, FUNC, TYPE) will be defined by the EAC.
9. As EEPs are the fundament of interoperability between EnOcean devices of all different manufacturers, profile definitions within the EEP Specification have to be clear and understandable.

### **Recommendations:**

1. Sophisticated applications should be considered to use the Generic Profiles approach.
2. Profile titles, descriptions and parameters should use common terms (e.g. from existing profiles) to keep the profile documentations as plain as possible.
3. Abstract parameter names (like ,battery level or similar) should be explained briefly.
4. The bits and bytes order should follow the data transmission order and alignment.
5. 4BS profiles should not be created as the user data is limited to 4 bytes. New profiles therefor should use VLD.

### **Restrictions:**

The data content of new profiles should be unique. For this reason, new profiles may not include different scaling of data in different data bytes, where the valid scaling/data byte only is marked by a bit.

### **IP Profile representation guideline<sup>1</sup>:**

1. IP Representation is executed as last step. Have the EEP Profile ready and confirm with EEP Guidelines and Checklist.
2. Select for each telegram value an KEY. Please refer to document ProfileRepresentationByKeyComponents.
  - a. If no suitable KEY is listed in document define a new one.
  - b. Some telegram values can be omitted in IP representation. (e.g. Message identifier, unit selections, etc.) or two telegram values can be joined to one KEY representation (e.g. values from 1 – 100 and overRage).
3. For enumerative telegram values (includes also booleans) select the used VALUES for the specified KEY. For available VALUES of a KEY please refer to document ProfileRepresentationByKeyComponents.
  - a. If not suitable VALUE is listed in document define a new one.
4. For all non-enumerative telegram values select a unit. Available units are listed in document ProfileRepresentationByKeyUnits.
  - a. Define the range and step size.
5. Define a Meaning for all Values / Units of all KEYS. The meaning can be same as the description of telegram values.
6. Define the direction of an telegram between "to" and "from"
7. Optional - define default VALUES for KEYS in telegram with direction "to".
8. Describe any special handling logic on how the telegram values needs to be processed to correspond to the selected VALUES.

### **IP Profile representation recommendation:**

1. Before start of creating the IP representation profiles check out IP representation of EEP profiles you know. This way you get a feeling how the IP representation should look like and how it operates.<sup>2</sup>
2. Try to reuse existing KEYS and VALUES / Units as much as possible.
3. It is a good practice to review existing profiles which use the corresponding KEY and VALUE you plan to use.
4. If you reuse a KEY and VALUE the meaning should be correlating to the defined meaning in other profiles.
5. Not all telegram values needs to be used in IP representation of the the profile. They can be joined together with other fields or completely omitted.

---

<sup>1</sup> After official release of IP Specification mandatory representation of new EEPs in IP format is required. The key start date is: XXXX

<sup>2</sup> IP representation of profiles is available here:

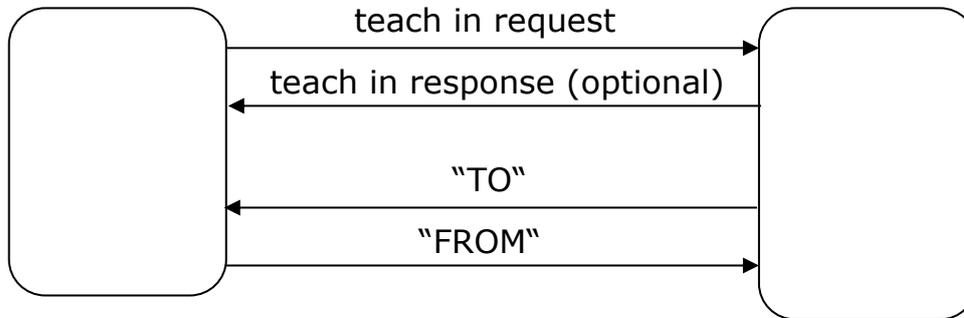
| <b>EEP Guidelines (Checklist)</b>  | <input checked="" type="checkbox"/> |
|--|-------------------------------------|
| Check for latest EEP Submission template   | <input type="checkbox"/>            |
| Check for equal /similar profiles to be used<br>(within the latest EEP Specification document)     | <input type="checkbox"/>            |
| Check for new, approved profiles to be used<br>(on the EnOcean Alliance platform)                  | <input type="checkbox"/>            |
| Check for existing profile families to integrate a new profile                                     | <input type="checkbox"/>            |
| Usage of UTE and VLD for bidirectional profiles  | <input type="checkbox"/>            |
| Usage of UTE for every VLD profile   | <input type="checkbox"/>            |
| Definition of addressing type<br>(broadcast or unicast / addressed telegrams [ADT])                | <input type="checkbox"/>            |
| Description of all data fields   | <input type="checkbox"/>            |
| Description of all enumerated values   | <input type="checkbox"/>            |
| Description of all binary values   | <input type="checkbox"/>            |
| No optional parameters or data fields  | <input type="checkbox"/>            |
| No undefined bits (every bit marked as used or 'reserved')   | <input type="checkbox"/>            |
| Data byte order down from DBx.7 to DB0.0   | <input type="checkbox"/>            |
| Full support of defined value ranges by the application  | <input type="checkbox"/>            |
| Transmission direction referenced for all unidirectional messages within<br>bidirectional profiles | <input type="checkbox"/>            |
| Response timeouts for bidirectional communication documented                                       | <input type="checkbox"/>            |
| Documentation of message dependencies (e.g. request & response)                                    | <input type="checkbox"/>            |
| Summary of all supported parameters within the EEP family table                                    | <input type="checkbox"/>            |
| Have IP Representation of EEP Profile  | <input type="checkbox"/>            |

*automatic check box → only a mouse click*



**Direction Definition:**

For EEP commands a direction has to be specified. There are two valid directions "FROM" and "TO". This is defined by the device that sent the teach-in request.



Device on the left typically is an actor or a sensor. Device on the right typically is a Gateway

FROM: mainly used for 'response' or 'status' messages

TO: mainly used for 'set' or 'get/query' messages