

EEP-Tool, Manual

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1. Introduction

1.1. General

The EEP-tool is a web-based application which helps companies designing and submitting a new EEP according to the requirements of a new or redesigned EnOcean device.

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.

The tool guides the user through the design of the EEP with the goal to reduce the workload for him and the approval process. Xml-data required for automated reading by gateways or development tools will be generated as well as a representation in a pdf file, the test containers and the IP representation.

If you need support for defining an EEP please contact your module manufacturer or Graham Martin graham.martin@enocean-alliance.org who can help you finding a paid consultant.

If you need help with the usage of the EEP tool or you want to report a bug, please contact Armin Pelka by mail certification@enocean-alliance.org .

1.2. System requirements

The EEP-tool is a web-based application and is optimized for the following browsers:

- Google Chrome
- Firefox
- Opera

It is NOT recommended to run the EEP-tool via Internet Explorer. Verification was not successful.

If not all data fields are shown on your screen, scroll down, please.

1.3. EEP guideline

1.3.1. Common requirements

- (1) Every submitted EEP is subject to change by the EAC, and may be turned down by the TWG.
- (2) New profiles within the 1BS EEP family are not permitted and are not supported by the EEP-tool.
- (3) RPS profiles are exclusively reserved for energy harvesting applications. If required, apply the old template to submit a RPS profile, please.
- (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 constitutes 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

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unavailable. Therefore, a parameter should include status information coded like this: '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 (i.e. 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 (i.e. the combination of R-ORG, FUNC, and TYPE) will be defined by the EAC. The EEP-tool's defaults are FF.
- (9) As EEPs form the basis of interoperability between EnOcean devices from various manufacturers, profile definitions within the EEP Specification have to be clear and understandable.

1.3.2. Recommendations

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

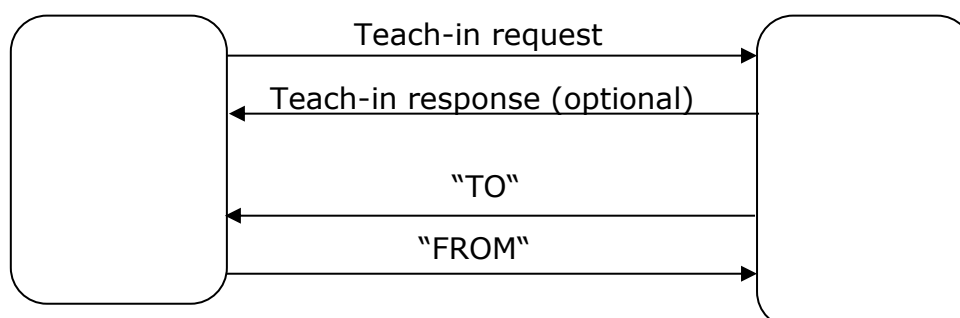
1.3.3. Restrictions

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.

1.3.4. 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.



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Device on the left is typically an actuator or a sensor. Device on the right is typically a gateway.

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

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

2. Approval Process

2.1. Profile definition (duration: up to the submitter)

- Specify your application in detail.
- Check the latest EEP Specification 2.6.8 and all new EEPs issued after the latest release of the EEP Specification for existing profiles that could be used for your application (If there is a suitable EEP, the process ends here).
- Define a new profile with the EEP-Tool according to your requirements following the EEP proposal guidelines (chapter 1.3.) and this manual.
- Save your work in order to make any requested corrections later on!

2.2. Profile submission (duration: approx. 4 weeks)

- Officially submit your profile proposal to the EnOcean EEP Approval Committee (EAC) via e-mail (eed-proposal@enocean-alliance.org).
Kindly submit the generated .pdf, .xml and saved work files. Incomplete submissions will be rejected. See chapters 3.5. and 3.6.
- The EAC will review the profile proposal and:
 - a. ...contact the submitter to discuss the proposal.
 - b. ...provide change requests if necessary.
 - c. ...evaluate made changes.
 - d. ...make a recommendation for the profile presentation to the TWG.
- After that, the EAC will forward the profile proposal to the TWG.

2.3. Profile approval (duration: approx. 4 weeks)

- The submitter presents the profile during an official TWG conference call.
- The EAC recommends the profile for approval (or rejection).
- The TWG discusses the presented EEP proposal(s).
- The official TWG review phase (4 weeks) commences.
- Every TWG member is allowed to provide questions, remarks or objections during the review phase, which are then forwarded to the submitter for response.
- The review phase ends with:
 - a. The approval (no objections, no change requests) => the profile can be applied officially.
 - b. A change request => the profile is returned to the submitter and must be re-submitted.

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- c. A refusal => the profile is not accepted and may NOT be applied officially.

2.4. Official release

- An approved profile will be added to the 'specification/new EEPs since 2.6.8' folder on the EnOcean Alliance platform.
- The pdf and xml files are stored in the respective subfolders.
- In each subfolder the approved EEPs are sorted according to their profile number.

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 sufficient 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 not shorten the review and approval phase. For this reason, the EEP should be submitted at least 10 weeks 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 may be delayed when submitting profiles during this period.

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3. Basic screen description

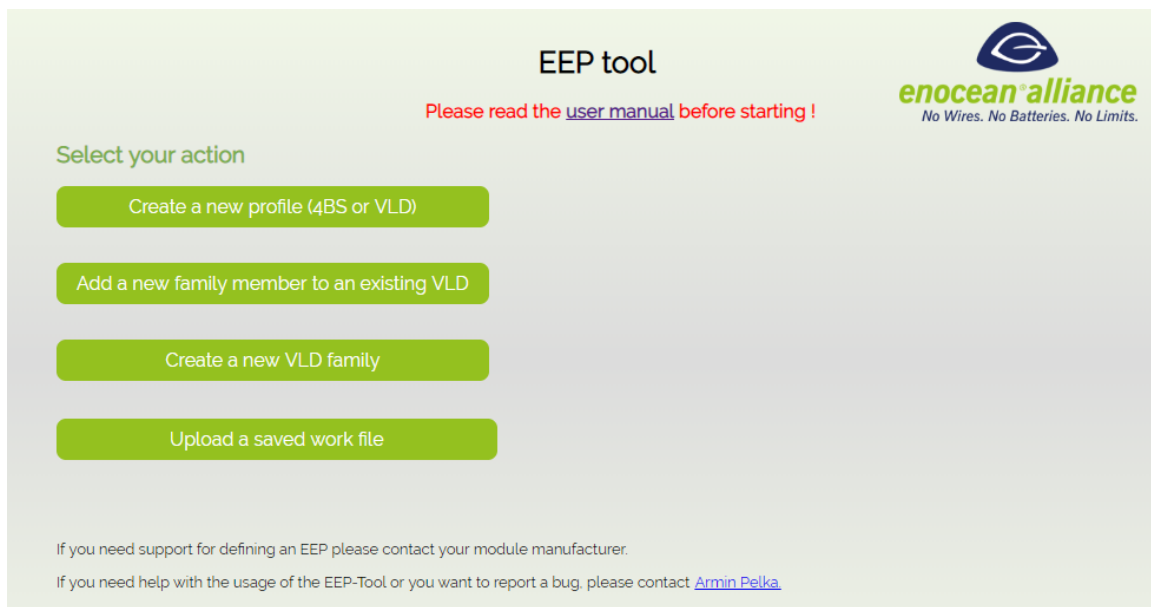
This chapter describes principles and screens for all supported actions.

3.1. Home screen

To start the design of an EEP, enter the home URL of the EEP submission tool

<http://tools.enocean-alliance.org/web/eepool0/index.php#>

In the current version, no authentication is necessary. This is planned for future releases.



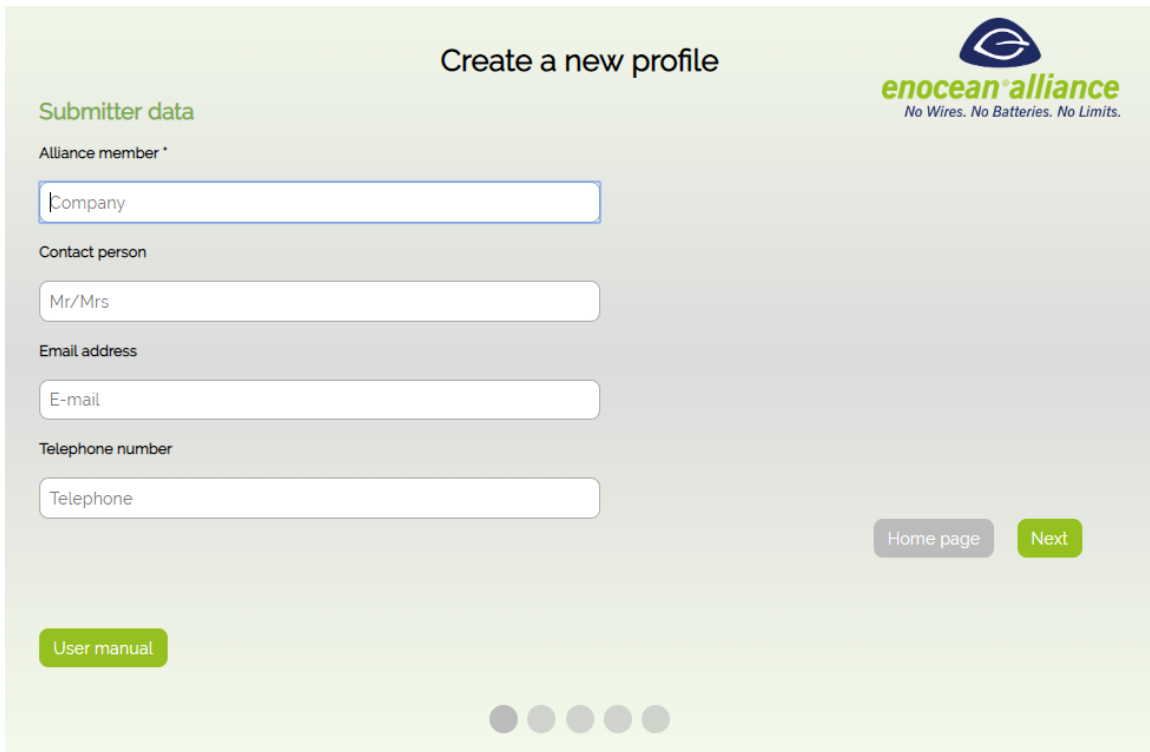
The user can select his desired action:

- **Create a new profile (4BS or VLD)**
Use this to create a new single 4BS or VLD profile, not a family.
- **Add a new family member to an existing VLD**
Use this to add a new family member to an existing VLD profile. In the next step, the family function number can be set and new type(s) can be created. If the family is not in the data base, use the “Create a new VLD family” button and enter all data for this family member there. We do not import all the legacy data in the data base.
- **Create a new VLD family**
Creation of a new VLD profile family (new VLD function number)
- **Upload a saved work file**
The user selects a saved work file in order to return to a previous item of work, so there is no need to repeat the whole process if a change is needed.

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3.2. Submitter data

For all actions, the user starts by filling in the submitter data.



The screenshot shows a web form titled "Create a new profile" with the "enocean alliance" logo in the top right corner. The form is for "Submitter data" and includes the following fields:

- Alliance member ***: A text input field with the placeholder "Company".
- Contact person**: A text input field with the placeholder "Mr/Mrs".
- Email address**: A text input field with the placeholder "E-mail".
- Telephone number**: A text input field with the placeholder "Telephone".

At the bottom of the form, there are two buttons: "Home page" (grey) and "Next" (green). A "User manual" button is also visible in the bottom left. At the bottom center, there are five grey circular indicators, with the first one being slightly larger and darker, indicating the current step in the process.

- Alliance member: The name of the company.
- Contact person: The name of the submitter.
- Email address: company or submitter email.
- Telephone number: company or submitter phone number.

All data should be filled in. This will facilitate the processing of the submission by the EAC and the TWG.

Pressing "Next" will progress to the next page, pressing "Home page" will go back to the home screen. The reader can go to the appropriate chapter for his action, but in the next chapter the principle of creating an EEP will be explained first.

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3.3. Array definition

This chapter is valid for all actions supported by the EEP-tool, and the process of creating the array definition of commands - or parameters - is the same. The following description uses the example to create a new profile data, but it is also valid when creating a new VLD family or adding members to an existing one.

The idea of designing the EEP is that pre-defined keys of EEPs existing already can be selected and reused. All pre-defined keys are in the data base and the user may select an existing key - or, as an exception, add a new key if she/he does not find a fitting one for her/his entry. By working with pre-defined keys, the advantage is that automatically an IP-Representation is available when defining the array structure of a profile.

Array definition

| Offset | Key | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger |
|--------|-----|------|-------------|-----------|-----------|-----------|-----------|------|------|---------|
|--------|-----|------|-------------|-----------|-----------|-----------|-----------|------|------|---------|

-Select a key- Add a new key

Delete the last key

Previous Next

BROADCAST

- handleClosedClick
- handleClosedCounter
- handleOpenedCounter
- handleTiltedCounter
- Heating
- HeatingChannel
- Hemisphere
- Hour
- humidity**
- HumidityControl
- HumidityControlStatus
- HumiditySetpoint
- HumidityThreshold
- HumidityValidityFlag
- HydrogenSulfide
- IOChannel
- Illumination
- Illumination1
- Illumination2
- IlluminationEltako

-Select a key- Add a new key

Delete the last key

When the drop-down list is selected, a list of all available pre-defined keys will be shown in alphabetical order and the user can select the appropriate one.

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After a key is selected via the drop-down list, a new row will be filled with correlating default values.

Array definition

| Offset | Key | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger | |
|--------|-------------|------|--------------------------------------|-----------|-----------|-----------|-----------|------|------|---------|-----|
| 0 | temperature | 8 | Measurement of Temperature in linear | 0 | 255 | 0 | 0 | C | | | ↑ ↓ |

- **Offset:** This field is automatically calculated by the EEP-Tool depending on the size of the previous rows. It shows the bit offset of the entry.
- **Key:** Is the name of the selected pre-defined key. This field shall only be edited when adding a new key.
- **Size:** Size in Bits of the entry. Default is 8, value may be corrected by the user.
- **Description:** This is the description of the pre-defined key, which is stored in the data base. The description can be edited for a clearer view.
- **Range min:** The field contains the minimum data value of the entry. In most cases it starts with 0, but may be edited for other values.
- **Range max:** The field contains the maximum data value of the entry, depending on the adjusted size. In most cases it is the maximum value $2^{(size)}$, but may also be a different value.
- **Scale min:** Minimum scale value is the representation of the Range min entry in the unit of the entry. For temperature profiles, it is the minimum temperature of the profile. Floating point numbers are allowed.
- **Scale max:** Maximum scale value is the representation of the Range max entry in the unit of the entry. For temperature profiles, it is the maximum temperature of the profile. Floating point numbers are allowed.
- **Unit:** Is the unit of the entry. For a temperature it is in °C.
- **Enum:** This field is used for enum entries. It is important to use the following format:
<enum value>: <enum text> Example: *0: contact open*
 It is also possible to enter ranges of enums in the following format:
<enum value min> ... <enum value max>: <enum text> Example: *17 ... 31: reserved*
 It is allowed to fill the enum field also when entries in the Range and Scales fields are made for entries, where we have additional enums to range fields.
- **Trigger:** select this field if this entry may trigger a telegram transmission.

After editing, the entry may look like this:

Array definition

| Offset | Key | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger | |
|--------|-------------|------|--------------------------------------|-----------|-----------|-----------|-----------|------|------|---------|-----|
| 0 | temperature | 10 | Measurement of Temperature in linear | 0 | 250 | -20 | 60 | °C | | X | ↑ ↓ |

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If it is really necessary to add a new key, which really should be an exception, this can be done by pressing the “add new key” button.

Array definition

| Offset | Key | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger | |
|--------|-------------|------|-----------------------------------|-----------|-----------|-----------|-----------|------|------|---------|-----|
| 0 | temperature | 10 | Measurement of Temperature linear | 0 | 250 | -20 | 60 | °C | | X | ↑ ↓ |
| 10 | | 4 | | | | | | | | | ↑ ↓ |

The offset of the new row will be calculated by the size of the previous row(s). If it is necessary to have unused bits in the definition of the profile, just set the size of this row and keep all other columns empty.

If a new key has to be defined, enter the key with its name and fill all the other columns accordingly. Please note that, at this point, the new key will not be stored in the data base. This new key will be added only after the release of the submission.

With the arrow buttons, a whole row can be shifted up and down to change the order while designing the array. To delete a row, shift it as the last row and press the “Delete the last row” button.

The following example screen shot shows the array definition for profile A5-04-02:

Array definition


| Offset | Key | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger | |
|--------|-------------------|------|---------------------------------------|-----------|-----------|-----------|-----------|------|---|---------|-----|
| 0 | | 8 | | | | | | | | | ↑ ↓ |
| 8 | humidity | 8 | Measurement of Relative Humidity | 0 | 250 | 0 | 100 | % | | X | ↑ ↓ |
| 16 | temperature | 8 | Measurement of Temperature linear | 0 | 250 | -20 | 60 | °C | | X | ↑ ↓ |
| 24 | | 4 | | | | | | | | | ↑ ↓ |
| 28 | LrnBit | 1 | LrnBit key | | | | | | 0: Teach-in telegram 1: Data telegram | | ↑ ↓ |
| 29 | | 1 | | | | | | | | | ↑ ↓ |
| 30 | TemperatureSensor | 1 | Availability of the TemperatureSensor | | | | | | 0: TemperatureNotSupported 1: TemperatureSupported | | ↑ ↓ |
| 31 | | 1 | | | | | | | | | ↑ ↓ |

When creating a 4BS-Profile the tool checks, if the LrnBit key is on the correct position and the sum of the bits is less than 48. The remaining bits will be filled as “unused”.

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3.4. Summary

When all definitions are made, a summary will be shown and the files needed for the submission can be created.



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No Wires. No Batteries. No Limits.

Create a new profile

Summary

A5: 4BS Telegram
A5-04: Temperature and Humidity Sensor

| | | |
|------|----|-------------------------------------|
| RORG | A5 | 4BS Telegram |
| FUNC | 04 | Temperature and Humidity Sensor |
| TYPE | 02 | Range -20 C to +60 C and 0% to 100% |

Submitter: Etako

Description
In contrast to EEP A5-04-01, the temperature range is extended -20C ... 60C.

Data exchange
Direction: unidirectional
Addressing: broadcast
Communication trigger: event_time_trigger
Communication interval:
Timing description: Heartbeat timing is not defined

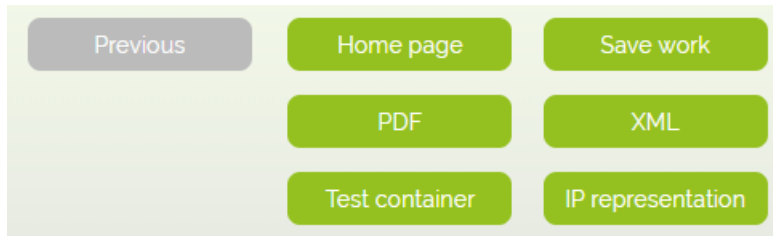
Teach-in
Teach-in method: 4BS teach in 1

Security
Encryption supported: No

| Offset | Size | Bitrange | Data | Description | Valid Range | Scale | Unit |
|--------|------|--------------|----------------|-----------------------------------|--|---------|------|
| 0 | 8 | DB3.7..DB3.0 | Not Used (= 0) | | | | |
| 8 | 8 | DB2.7..DB2.0 | humidity | Measurement of Relative Humidity | 0..250 | 0..100 | % |
| 16 | 8 | DB1.7..DB1.0 | temperature | Measurement of Temperature linear | 0..250 | -20..60 | C |
| 24 | 4 | DB0.7..DB0.4 | Not Used (= 0) | | | | |
| 28 | 1 | DB0.3 | LmBit | LmBit key | Enum: 0: Teach-in telegram 1: Data telegram | | |
| 29 | 1 | DB0.2 | Not Used (= 0) | | | | |
| 30 | 1 | DB0.1 | TSensor | TSensor key | Enum: 0: TemperatureNotAvailable 1: TemperatureAvailable | | |
| 31 | 1 | DB0.0 | Not Used (= 0) | | | | |

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3.5. Saving all necessary files for EEP submission



- Previous: If a mistake is found or a change is needed, the user can go back one step and re-do it. Do NOT use the “back” button of the browser, otherwise all the entered data is lost. Only use the “previous” button of the tool to navigate back.
- Home page: Return back to home interface. **All entered data is lost!**
- Save work: Save the current work as .xml file on the local PC. This file may be used when the submitter later wants to return back to his work. It is required by the EAC to make final changes. This file is part of the submission of the proposal.
- PDF: A PDF file will be generated and shown in a new tab, but WITHOUT being saved locally. It may be saved in next step using save PDF button. The PDF file is part of the submission of the proposal.
- XML: An XML file will be generated and saved on the local PC. This file can be used for testing of the application with tools like Dolphin View. The XML file is part of the submission of the proposal.
- Test container: An XML file will be generated and saved on the local PC. This file can be used for testing of the application with the Profile Checking tool. The test container file is part of the submission of the proposal.
- IP representation: A PDF file will be generated and saved on the local PC. This file is part of the submission of the proposal.

If there are more than one types of an EEP defined, the test container and IP representation files will be packed each in a zip file.

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A5: 4BS Telegram

A5-04: Temperature and Humidity Sensor

| | | |
|-------------|----|-------------------------------------|
| RORG | A5 | 4BS Telegram |
| FUNC | 04 | Temperature and Humidity Sensor |
| TYPE | 02 | Range -20 C to +60 C and 0% to 100% |

Submitter: Eltako

Description

In contrast to EEP A5-04-01, the temperature range is extended: -20C ... 60C.

Data exchange

Direction: unidirectional

Addressing: broadcast

Communication trigger: event_time_trigger

Communication interval:

Timing description: Heartbeat timing is not defined

Teach-in

Teach-in method: 4BS teach in 1

Security

Encryption supported: No

| Offset | Size | Bitrange | Data | Description | Valid Range | Scale | Unit |
|--------|------|---------------|----------------|-----------------------------------|--|----------|------|
| 0 | 8 | DB3.7...DB3.0 | Not Used (= 0) | | | | |
| 8 | 8 | DB2.7...DB2.0 | humidity | Measurement of Relative Humidity | 0...250 | 0...100 | % |
| 16 | 8 | DB1.7...DB1.0 | temperature | Measurement of Temperature linear | 0...250 | -20...60 | C |
| 24 | 4 | DB0.7...DB0.4 | Not Used (= 0) | | | | |
| 28 | 1 | DB0.3 | LrnBit | LrnBit key | Enum: 0: Teach-in telegram 1: Data telegram | | |
| 29 | 1 | DB0.2 | Not Used (= 0) | | | | |
| 30 | 1 | DB0.1 | TSensor | TSensor key | Enum: 0: TemperatureNotAvailable 1: TemperatureAvailable | | |
| 31 | 1 | DB0.0 | Not Used (= 0) | | | | |

Save PDF file

Example of a PDF file generated by the EEP-Tool

3.6. EEP submission

Please submit the

- generated .xml file,
- the .pdf file,
- the test container file
- the IP representation file AND
- the saved work file

to the EnOcean Alliance EEP Approval Committee (EAC) via e-mail (eed-proposal@enocean-alliance.org). **The submission will be rejected if incomplete!**

You may add a .pdf file acting as annex for this profile explaining the product or properties, e.g. providing diagrams or photos etc., to facilitate the understanding of the proposal by the EAC.

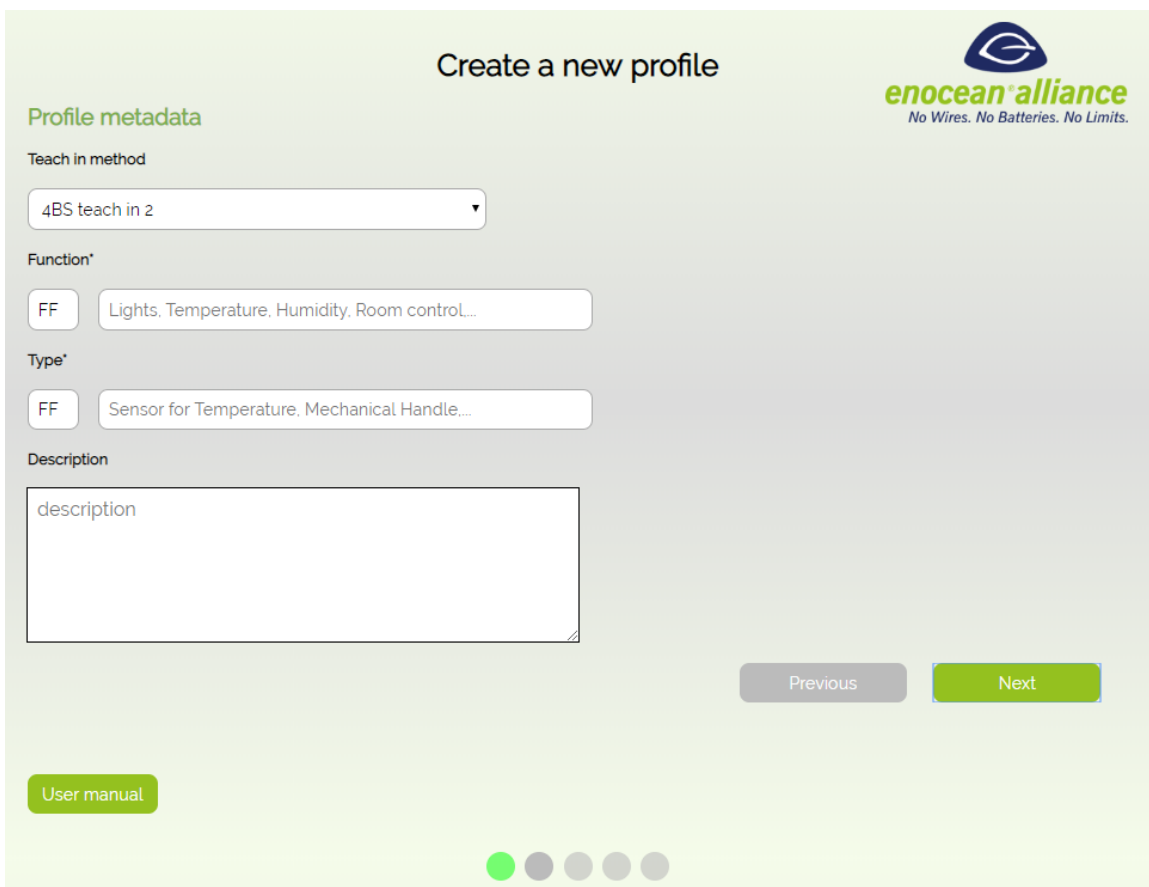
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4. Create a new profile

This chapter describes all screens for creating a new single 4BS or VLD profile, which is no profile family.

After filling in the submitter data (see chapter 3.2.), the profile metadata has to be defined.

4.1. Profile metadata



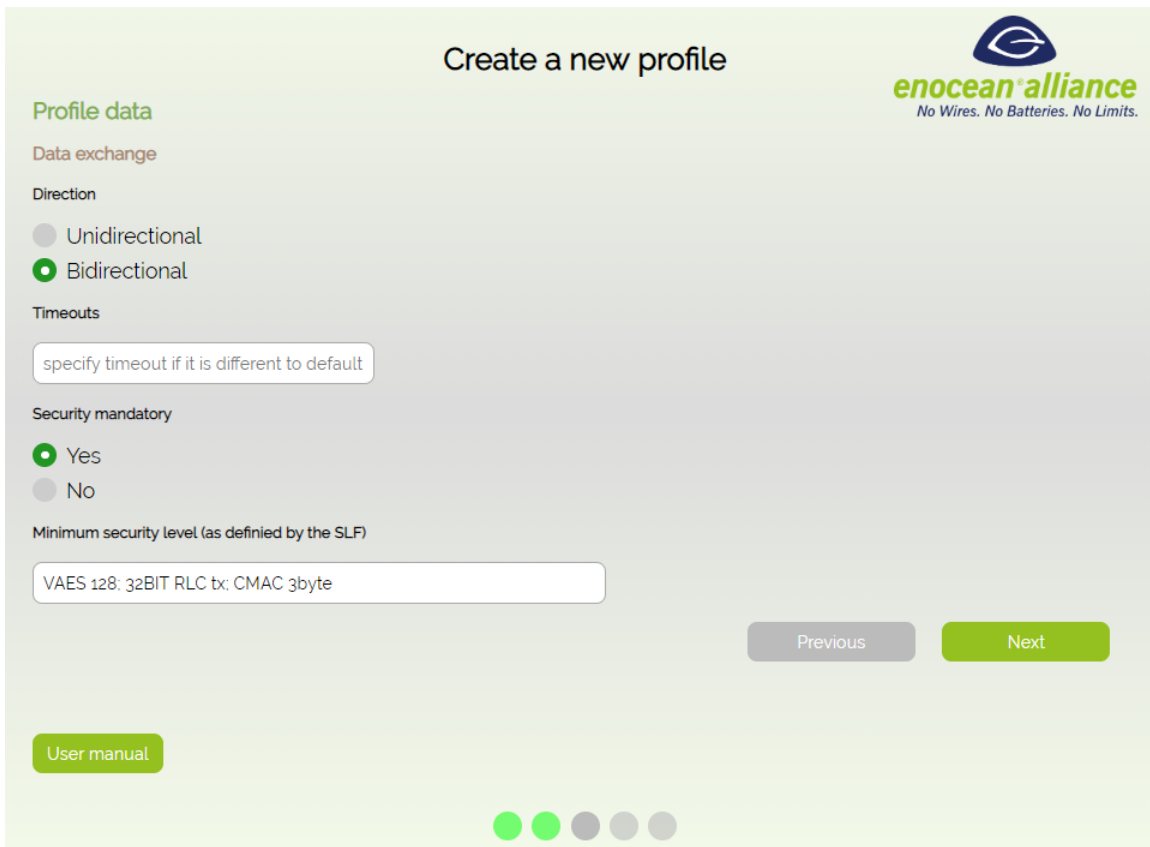
In this screen the user defines the **profile metadata**.

- Teach-in method: it could be 4BS teach-in 2, UTE or Smart-Ack teach-in.
- Function- and Type-Numbers: If they are known at the moment of the submission, they shall be entered here. Otherwise keep the default “FF” and the EAC will assign the numbers during the approval process.
- Function title: If you add a further type of an existing function EEP, copy the same text here. If you assume that a new function will be assigned, find a proper text i.e. the headline or overview of the product
- Type title: finding the text for the type is the responsibility of the submitter. Find a proper description of this special type of device.

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- **Description:** This is the description of this specific type. It would be good to describe the properties of the profile or changes to other types of the same EEP.

4.2. Profile data



Create a new profile

Profile data

Data exchange

Direction

Unidirectional

Bidirectional

Timeouts

specify timeout if it is different to default

Security mandatory

Yes

No

Minimum security level (as defined by the SLF)

VAES 128: 32BIT RLC tx; CMAC 3byte

Previous Next

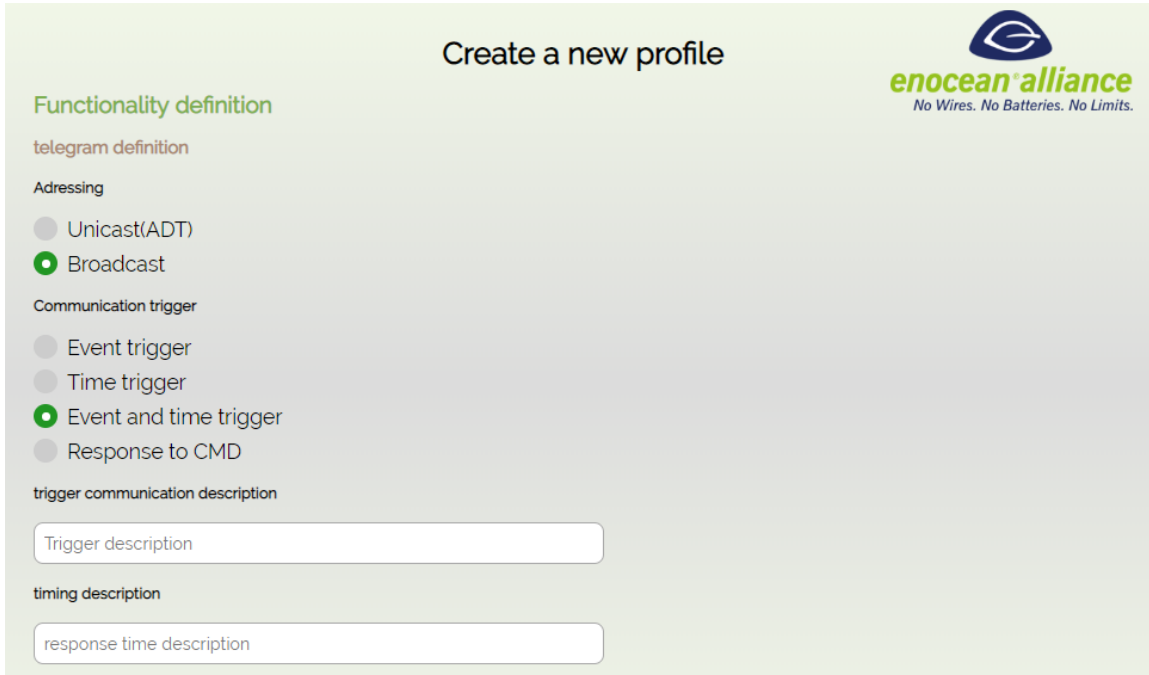
User manual

In this screen the user defines the **profile data**.

- **Direction:** either unidirectional or bidirectional.
- **Timeouts** (only if bidirectional direction): The default is 300 ms. You only need to specify a different value if this profile uses a different timeout. The timeout is to be defined in [ms].
- **Security mandatory:** define if a secure communication is mandatory for this profile. If the user selects “Yes”, then a **security level** field will be shown.
- **Minimum Security level:** define which minimum security level, as defined by the SLF, is required for this profile. It shall be allowed to implement a higher security level as specified here, but not a lower one.

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4.3. Functionality definition



Create a new profile

Functionality definition

telegram definition

Addressing

Unicast(ADT)

Broadcast

Communication trigger

Event trigger

Time trigger

Event and time trigger

Response to CMD

trigger communication description

Trigger description

timing description

response time description

The next step is **functionality definition**, where the submitter defines the telegram characteristic and array structure.

- **Addressing:** Specify if the profile requests communication addressed (unicast, **Adressed Data Telegram**) or broadcast.
- **Communication trigger:** Definition of when a telegram will be sent. This could be an event (i.e. temperature change or pressing a key, a time (heartbeat timeout), a combination of both, or a response to a previously sent CMD request.
- **Trigger communication description:** Detailed description of under what conditions a telegram will be sent.

If the user selects a time trigger communication, a new field appears:

- **Timing description:** Detailed description about the timing of the telegrams. The timing is to be defined in [ms].

Then the submitter defines the array structure. See chapter 3.3.

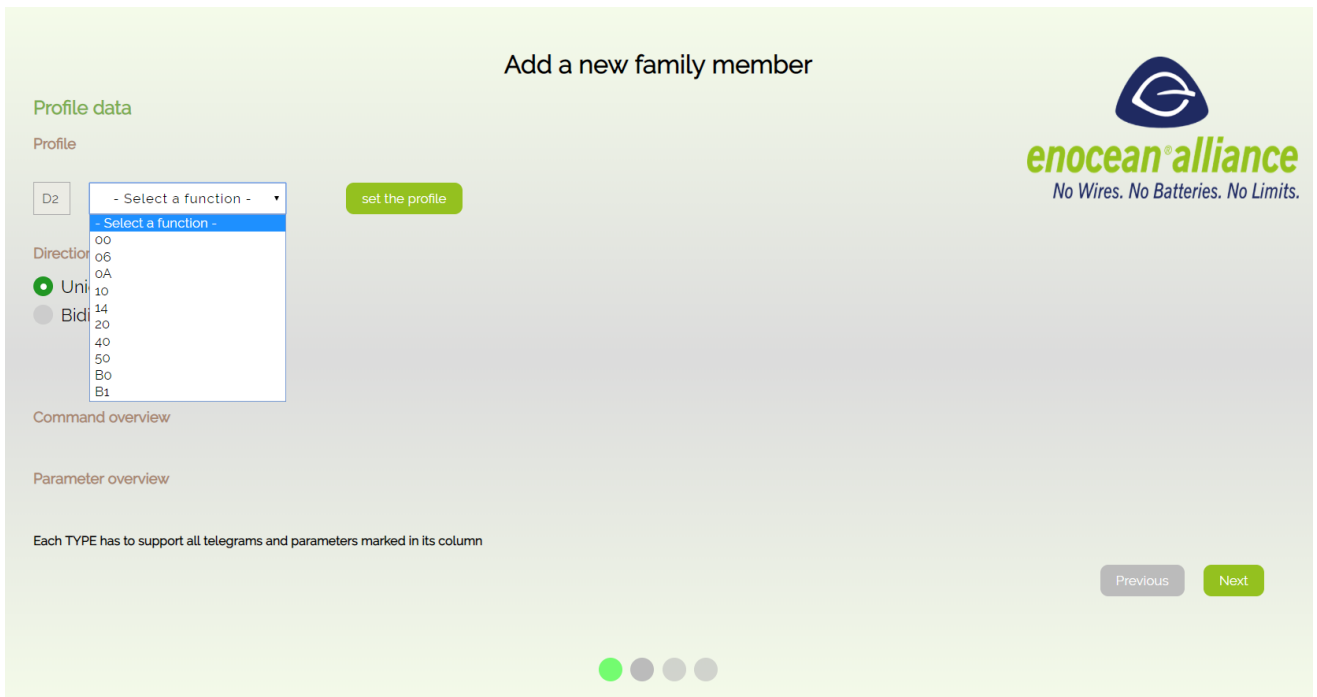
When this is done, the summary will be shown and all necessary files for the submission can be created. See chapters 3.5. and 3.6. how to submit the designed EEP proposal.

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5. Add a new family member

This chapter describes all screens for adding a new family member to an existing VLD family. After filling in the submitter data (see chapter 3.2.), the profile data has to be defined.

5.1. Profile data



Add a new family member

Profile data

Profile

D2 - Select a function - set the profile

Direction

Uni

Bid

00
06
0A
10
14
20
40
50
B0
B1

Command overview

Parameter overview

Each TYPE has to support all telegrams and parameters marked in its column

Previous
Next

In this screen the user defines the **profile data**.

- **Select a function:** The user has to select the function number of the existing VLD profile family she/he wants to add a new type. Not all existing families are currently in the data base – refer to EEP-Specification, V2.6.8, please. If the family does not appear, return to the home screen and chose “create a new family” to perform the submission process with this action.
- **Direction:** either unidirectional or bidirectional for the new type to add.
- **Set the profile:** After setting the profile by pressing the button *set the profile*, the profile data of the family will be shown. The commands and parameters of the existing data will be listed.

Note: when selecting an extensive family of profiles it might take a few seconds until all data are loaded by the EEP-Tool. You might be required to scroll down.

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| | |
|-------------------|--|
| Titel | Room Control Panel |
| Description | The Communication is based on the Smart Ack concept. Some basics related convenience but for details please consult the Smart Ack specification. |
| Direction | unidirection |
| Teach in method | UTE |
| Security enhanced | no |
| Security level | - |

Example for a description of a family

Next step is to add a new type to the family by pressing the “Add type” button.

Add a new type

Command overview

| commands/types | 00 | 01 | 02 |
|------------------------------------|----|----|--------------------------|
| Status of monocolor LED controller | X | - | <input type="checkbox"/> |
| Status of RGB LED controller | - | X | <input type="checkbox"/> |

Add a new command

The type number can be edited. As default, the next available type number will be set.

Command overview

| commands/types | 00 | 01 | 02 |
|--------------------------------------|----|----|-------------------------------------|
| Status of monocolor LED controller | X | - | <input type="checkbox"/> |
| Status of RGB LED controller | - | X | <input type="checkbox"/> |
| Status of black color LED controller | - | - | <input checked="" type="checkbox"/> |

Add a new command

Delete the last command

Now it is possible to add a new command to the new type by pressing the “Add a new command” button.

Edit the new command name and set the check boxes of the new type column for that command, which the new type will support. It is possible to delete the last command by pressing the “Delete the last command” button.

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Parameter overview

| parameters..types of | 00 | 01 | 02 |
|----------------------|----|----|-------------------------------------|
| DemandResponse | X | X | <input checked="" type="checkbox"/> |
| DaylightHarvesting | X | X | <input checked="" type="checkbox"/> |
| Occupancy | X | X | <input type="checkbox"/> |
| StatusReason | X | X | <input type="checkbox"/> |
| MsgId | X | X | <input type="checkbox"/> |
| dimValue | X | - | <input checked="" type="checkbox"/> |
| dimValueRed | - | X | <input type="checkbox"/> |
| dimValueGreen | - | X | <input type="checkbox"/> |
| dimValueBlue | - | X | <input type="checkbox"/> |
| dimValueBlack | - | - | <input checked="" type="checkbox"/> |

-Select a key- ▾ Add a new key

Delete the last key


Now it is possible to add a new parameter to the new type by selecting an existing key. If there is no existing key possible you can add a new key by pressing the “Add a new key” button.

Edit the new key name and then set the check boxes of the new type column for those parameters, which the new type will support. It is possible to delete the last parameter by pressing the “Delete the last key” button.

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5.2. Functionality definition

Add a new family member



enocean[®]alliance
No Wires. No Batteries. No Limits.

Functionality definition

Type title

Type Description

Command: Status of black LED controller
 type: 02

Direction
 From
 To

Addressing
 Unicast
 Broadcast

Communication trigger
 Event trigger
 Time trigger
 Event and time trigger
 Response to cmd trigger

trigger event description

The next step is **functionality definition**, where the submitter defines the telegram characteristic and array structure for each defined command for the new type.

- **Direction:** If it is a bidirectional type, the direction “from” or “to” can be specified. Always select “from” if it is a unidirectional type.
- **Addressing:** Specify if the type requests communication addressed (unicast, **Addressed Data Telegram**) or broadcast.
- **Communication trigger:** Definition of when this command will be sent. Could be an event (i.e. temperature change or pressing a key, a time (heartbeat timeout), a combination of both, or a response to a previously sent CMD request.
- **Trigger communication description:** Detailed description of under which conditions this command will be sent.

If the user selects a time trigger communication, a new field appears:

- **Timing description:** Detailed description about the timing of the command. The timing is to be defined in [ms].

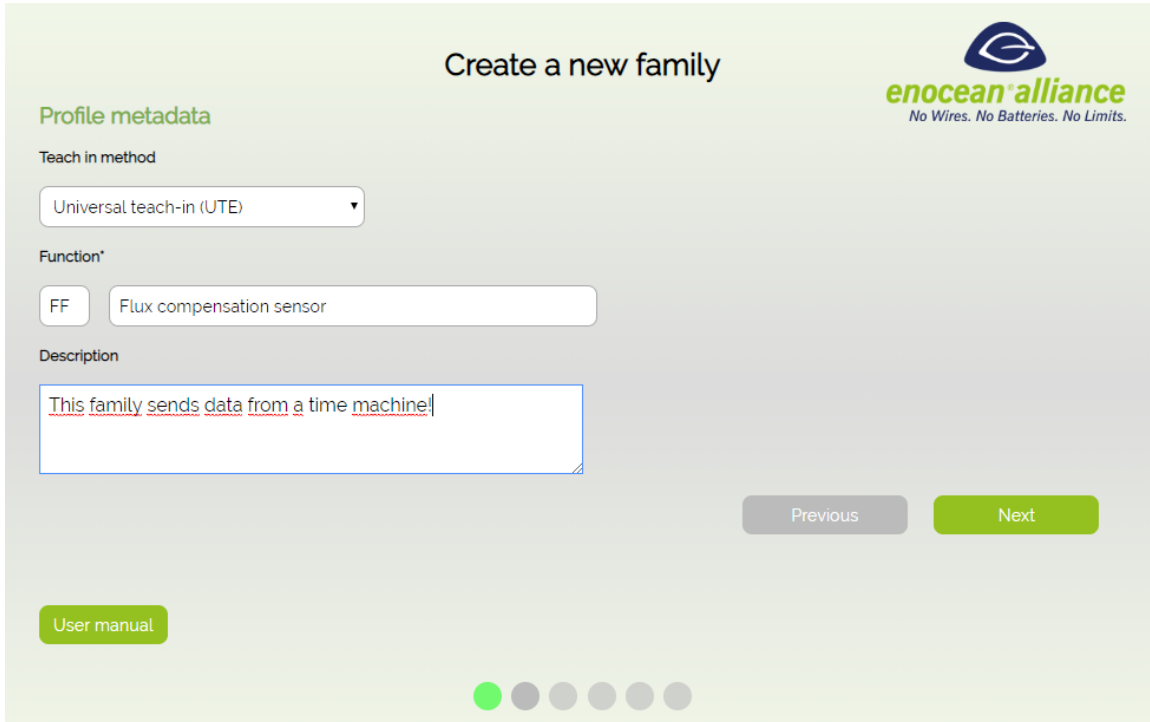
Then the submitter defines the array structure for each command. See chapter 3.3.

When this is done, the summary will be shown and all necessary files for the submission can be created. See chapters 3.5. and 3.6. how to submit the designed EEP proposal.

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6. Create a new VLD family

6.1. Profile metadata



Create a new family

Profile metadata

Teach in method

Universal teach-in (UTE)

Function*

FF Flux compensation sensor

Description

This family sends data from a time machine!

Previous Next

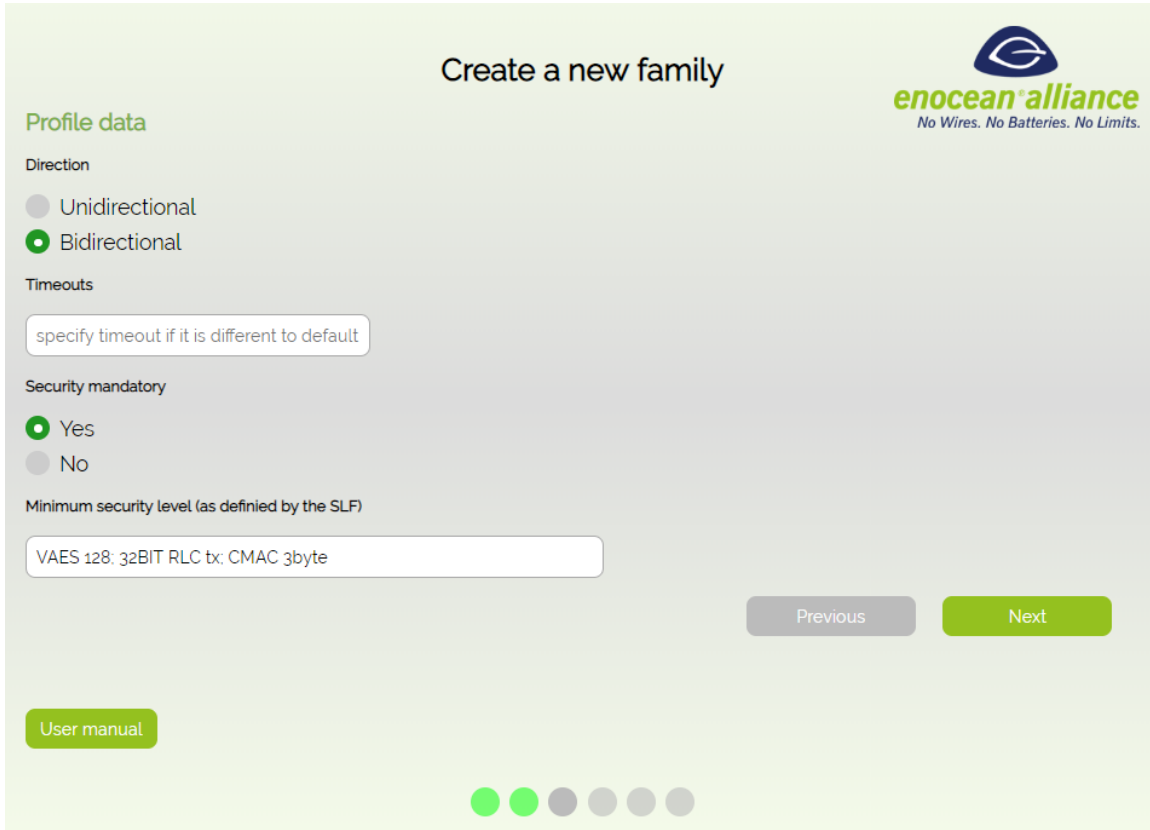
User manual

In this screen the user defines the **profile metadata**.

- Teach-in method: it could be UTE or Smart-Ack teach-in.
- Function number: If the number of the new VLD family is known at the moment of the submission, it shall be entered here. Otherwise keep the default “FF”. The EAC will review and assign the number during the approval process.
- Function title: Find a proper text which summarizes the functionality of the new family
- Description: This is the description of the profile family.

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6.2. Profile data

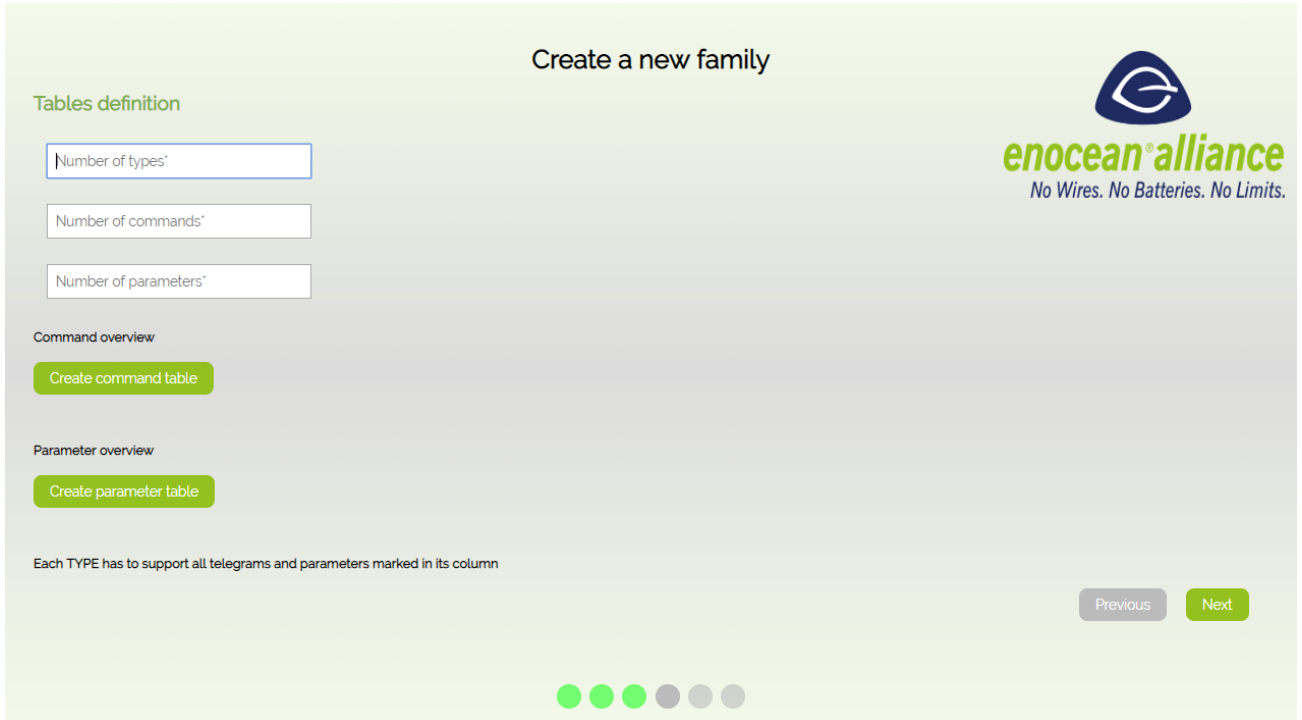


In this screen the user defines the **profile data**.

- **Direction**: either unidirectional or bidirectional.
- **Timeouts** (only if bidirectional): The default is 300 ms. You only need to specify a different value if this profile uses a different timeout. The timeout is to be defined in [ms].
- **Security mandatory**: define if a secure communication is mandatory for this profile. If the user selects “Yes”, then a **minimum security level** field will be shown.
- **Minimum Security level**: define which minimum security level, as defined by the SLF, is required for this profile. It shall be allowed to implement a higher security level as specified here, but not a lower one.

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6.3. Tables definition



Create a new family

Tables definition

Number of types*

Number of commands*

Number of parameters*

Command overview

Create command table

Parameter overview

Create parameter table

Each TYPE has to support all telegrams and parameters marked in its column

Previous Next

In this screen the user defines the **tables** of the new family.

- Number of types: Enter the number of family members.
- Number of commands: Enter the number of commands this family will have. It is allowed that a family or single members of a family have no commands
- Number of parameters: Enter the number of parameters for ALL members. In the next screen these parameters are available for filling in the arrays.

When all the numbers are set, press “Create command table” and “Create parameter table” to create both tables.

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Command overview

Create command table

| commands..types of | 00 | 01 |
|---------------------------|-------------------------------------|-------------------------------------|
| Get current date and time | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Set target date and time | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Parameter overview

Create parameter table

| parameters..types of | 00 | 01 |
|----------------------|-------------------------------------|-------------------------------------|
| MsgId | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| DateDayMonth | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Time24 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Each TYPE has to support all telegrams and parameters marked in its column

Enter all the command and parameter names and adjust the selection of commands and parameters for each type. Use existing keys by selecting and the next empty parameter field will be filled with the key selected. If defining a new key edit it in the table directly.

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6.4. Functionality definition

Functionality definition

Type title

Type Description

Command: Get current date and time
type: 00

Direction

From
 To

Addressing

Unicast
 Broadcast

Communication trigger

Event trigger
 Time trigger
 Event and time trigger
 Response to cmd trigger

trigger event description

Array definition

The next step is **functionality definition**, where the submitter defines the telegram characteristics and array structure for each defined command of all types.

- **Direction:** If it is a bidirectional type, the direction “from” or “to” can be specified. Always select “from” if it is a unidirectional type.
- **Addressing:** Specify if the type requests communication addressed (unicast, Addressed Data Telegram) or broadcast.
- **Communication trigger:** Definition of when this command will be sent. Could be an event (i.e. temperature change or pressing a key, a time (heartbeat timeout), a combination of both, or a response to a previously sent CMD request.
- **Trigger communication description:** Detailed description of under which conditions this command will be sent.

If the user selects a time trigger communication, a new field appears:

- **Timing description:** Detailed description about the timing of the command. The timing is to be defined in [ms].

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Then the submitter defines the array structure for each command. See chapter 3.3.

Array definition

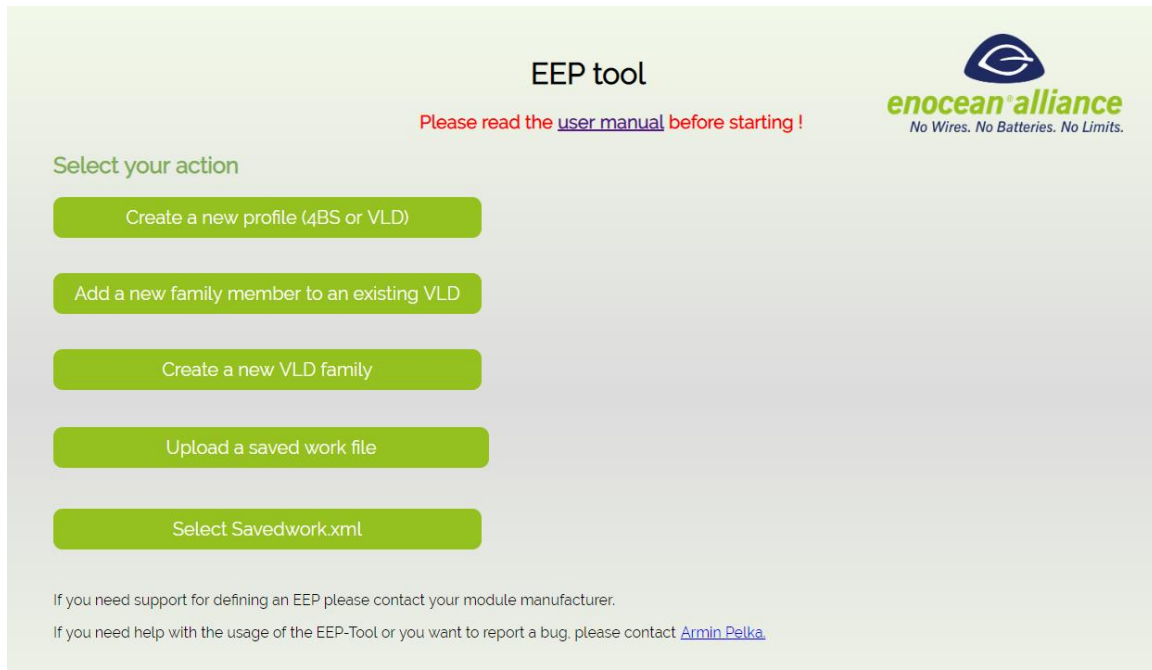
| Offset | Data | Size | Description | Range min | Range max | Scale min | Scale max | Unit | Enum | trigger |
|--------|-------|------|-------------|-----------|-----------|-----------|-----------|------|--|---------|
| 0 | msgId | 8 | msgId key | | | | | | 0: GetCurrent 1: Response Current 2: SetTarget 3: Response Target | |
| 8 | date | 16 | date key | 0 | 65536 | 0 | 65536 | days | | |
| 24 | time | 9 | time key | 0 | 86400 | 0 | 86400 | s | | |

- Select a key - Add new key Delete the last row

When this is done, the summary will be shown and all necessary files for the submission can be created. See chapters 3.5. and 3.6. how to submit the designed EEP proposal.

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7. Upload a saved work file



When pressing “upload a saved work file” the user selects a saved work file in order to return to a previous item of work, so there is no need to repeat the whole process if a change is needed. Then a 5th button appears to select the loaded work file and the user finds all pages filled with his saved values.