

# **RAL-Portal**

## **Requirements specification**

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# 1 General

## 1.1 Introduction

Our customer RAL, who is a registered association, provides a website, which has so far mainly been set up as an information platform. In future, members should have the opportunity to send their reports to RAL via this website and the auditors to post their test reports on the same page.

For this purpose, an access-secured area is integrated. After registering, members, examiners and RAL employees receive functional areas, the scope of which depends on their tasks. This range of functions is described in the following specification.

## 1.2 Advantages

The main advantages of the new portal are:

- Synchronization with the member data in the business manager
- Easier notification for members
- Overview for auditors
- Overview for RAL employees
- Member availability: certificates

## 1.3 Transfer of legacy data

There is no provision for the transfer of legacy data, especially legacy messages. The data of the members, their employees, their certificates, auditors and RAL employees are imported for the first time from the business manager. This presupposes that this data must be entered in the business manager by then.

## 1.4 Prototype

We are providing a prototype using this URL: <https://dirkmiller624237.invisionapp.com/overview/RAL2-ck5r0gzt003t016c9ar6s7my/screens?v=yd8c7wVT5uSkgRxIh%2Bly0g%3D%3D&linkshare=urlcopied>

Note that this prototype is only a sequence of mockups without any data and functionality. Clicking on any position of a mockup you will find blue marked the links where you can click on in order to open next mockup. Clicking on RAL logo in upper left corner you will reach the starting page, in which you will find the link to all menu items.

## 1.5 Naming

In order to make things more clear we introduce some terms. We add the German translation, because these terms are used in the mockups.

English	German	Description
Audit	Prüfung	Audit in order to provide a certificate
Auditor	Prüfer	Person, who is doing the tests commissioned by RAL
Collective	Sammelmeldung	A notification of a producer, who produces floor

notification		materials
Constructor	Anwender	Constructor company using these high end materials
(Member) Employee	(Mitglied) Mitarbeiter	Employees of a member
External audits	Fremdüberwachung	Audits done by auditors (and not by one self)
Member	Mitglied	Member of RAL association. It is in most cases the owner or managing director of the company, who is defined as the user of the RAL portal.
Notification	Meldung	If a producer has produced an amount of the floor materials or a constructor wants to use this material on a construction site, they are notifying this to RAL, so that RAL knows this has to be tested and certified. This notification will be done using this portal.
Null notification	Nullmeldung	A notification, reporting that this member has not used any floor materials for the corresponding month
Producer	Hersteller	Producer of these high end materials for building floors.
RAL	RAL	<p>RAL is a registered association, who has members. These members are mostly either companies, who produce special high end materials for constructing floors, or constructor companies, who are using these materials.</p> <p>RAL is doing tests of these materials and provides certificates, in case these tests have been successfully. These certificates are used for marketing purposes. In some cases constructor companies are getting an order only in case they can show such a certificate.</p>
RAL employee	RAL Mitarbeiter	Is an employee of RAL association.
Self-audit	Eigenüberwachung	A kind of notification, sending labor protocols
Single notification	Einzelmeldung	A notification of a constructor used on construction side

## 2 Technical implementation

### 2.1 General

The RAL portal become a web application and can be used with the popular browsers (Firefox, Chrome, Internet Explorer / Edge, Safari). It will be hosted on an Apache server from an external provider. MySQL / Maria-DB will be used as the database.

Programming is done in PHP.

The issues are created as PDF and can therefore be downloaded as PDF files and printed out from a PDF reader.

Although currently it is planned to use only German, resource files should be used in order to prepare using other languages in the future.

### 2.2 Rules for development

Of course there are rules, which must usually not be defined, because they are self-evident, e.g.

- Numbers are shown right aligned
- Numbers must be shown in German format (“,” as decimal divider, “.” as thousand separator)
- Texts are usually shown left-aligned
- Dates must be shown in German format (“DD.MM.YYYY”). For date there must be a possibility to use a calendar in order to select a date. Here it must be easy to select another year or another month. Nevertheless it must be possible for the user to type the date directly into date field using the German format.
- It should not be possible to anything else as numbers into number fields
- It should not be possible to enter more chars into a text field as can be saved in the database
- Using all over the same font, font-size and font weight except it is mentioned differently
- Labels and input fields should be aligned
- The gap between rows should be always the same
- Labels and messages should be put into a resource file
- Using English for naming variables, etc. and comments
- If an alphanumeric column has a limited size (e.g. varchar(10)) the user should not be able to put more chars into this fields
- If fields are mandatory we must show this to the user and he should not be able to do saving
- The layout must be designed responsive
- Items inside list boxes/ combo boxes, etc. must be sorted
- It must be possible to handle list boxes using only the key board (without using the mouse)
- If anything is not clear, don't do an assumption but ask

### 3 Synchronisation with business manager

The business manager is a CRM system provided by pirAMide. RAL is using this product since many years. An important advantage of this portal is the synchronization of the portal with the member data from the business manager (bm). The business manager is the leading system. Changes to this data are only made in bm.

Note: all the features of the synchronisation process will be done by pirAMide.

#### 3.1 Adjustments in business manager

The following adjustments are made in business manager:

- Features on the "Sales Info"
  - State, simple selection based on predefined values
  - Member since
  - Member until
  - User quality label: No., type, date
  - Manufacturer's quality mark: No., type, date
- Characteristics on the "contact person" card
  - Portal user, multiple selection from "Member, external auditor, RAL employee"
- Features on product card
  - Certificate no.
  - Certificate type
  - Valid until
  - Document (PDF)
  -

Some of these are new features to be set up.

Since access is via the email address, it is important that each member (main contact), auditor and RAL employee is assigned a unique email address at the contact person level.

#### 3.2 Data to be synchronised

In order to identify the contact data to be taken over from the business manager, a new feature "portal user" is introduced in the bm at the contact person level. This characteristic can have the values "Main contact", "Techn. Employees ", "Auditors" and "RAL employees", whereby multiple selections are also possible. A contact can therefore be a third-party monitor as well as a main contact or technical employee of a member.

##### 3.2.1 Member data

Only data from members from the construction company branch are transferred, i.e. The following criteria must be met at bm:

1. It is an organization in the bm.
2. "Member" appears on the "Sales info" card in the "Address type" field.



3. On the "Sales info" card, the field "Construction companies" and "Engineering firms" appears.
4. On the "General" card, the Status indicator was set to "active".
5. The current date lies between the dates of the fields "Member from" and "Member to"

The following data should be synchronized:

- Internal unique ID of the contact for unique identification
- Name of the member (max. Three lines)
- Email address of the contact person for user registration
- Address (country, zip code, city, street)
- Name of the contact person (characteristic "portal user" for contact person is "main contact")
- Communication numbers (in each case those entered as standard numbers in the bm)
  - Telephone number the organization
  - Internet of the organization
- State (sales info, state)
- Member no. (Sales info, customer no.)
- Member since (sales info, member since)
- Member until (sales info, member until)
- User quality label
  - No. (sales info / quality mark A No.)
  - Type of GZ (sales info / quality mark A)
  - Date (sales info / valid since)
- Manufacturer's quality label
  - No. (sales info / quality mark H No.)
  - Type of GZ (sales info / quality mark H)
  - Date (sales info / valid since)

For the fields of the quality marks, new characteristic fields are created in the bm at the sales information level. The information in the fields previously used as "Quality label number", "Quality label" and "Valid since" are adopted (as far as possible) and then removed.

The member's internal address ID is used for synchronization as a crucial feature for synchronization, not the name or email address.

### 3.2.2 Employee data

The stored and active contact persons are transferred as employees by a member. The following contact persons of the member are taken over as employees:

- The "active" indicator must be set on the contact person.
- Characteristic "portal user" for contact person is "Techn. Employee"

The following data should be synchronized:

- Internal unique ID of the contact for unique identification
- First and Last Name
- Salutation (Mr., Mrs)
- Title

- Communication numbers (in each case those entered as standard numbers in the bm)
  - Telephone number
  - Mobile number
  - email address

### 3.2.3 Qualifications of employees

The bm stores the qualifications as an order item for the product "GSB certification according to RAL GZ 507".

The certificates acquired by an employee are stored in the bm as an order item (assignment between customer and product). Products - e.g. "Certification GSB according to RAL GZ 507" - created with the product type "certificate". When transferring the information about the acquired certificates, it is necessary that the contact person of the member who acquired the certificate is entered in the bm of these products and that there is always one order position per employee. All order items are therefore taken over for an employee whose product has the product type "Certificates".

The following data should be synchronized:

- Certificate no.
- Certificate type
- Acquired on (= delivery date in bm)
- Date of expiry
- Document (PDF)

For all fields except "Acquired on" / "Delivery date", new characteristics are created in the bm. It is important here that

- these new fields are filled with data for all acquired certificates already acquired,
- the already acquired certificates are checked,
- missing certificates can be recorded.

### 3.2.4 Auditors

In addition to the members, the auditors are also imported from the bm. At bm, auditors are characterized by:

- On the "General" card, the Status indicator was set to "active".
- Characteristic "portal user" for contact person is "external auditor"

The following information is adopted:

- Internal unique ID of the contact for unique identification
- Name of the member (max. Three lines)
- Address (country, zip code, city, street)
- Communication numbers (in each case those entered as standard numbers in the bm)
  - Telephone number
  - email address
  - Internet

### 3.2.5 RAL employees

In addition to the members, the RAL employees are also imported from the bm. RAL employees at bm are characterized by:

- Active contacts of the RAL contact
- "Portal user" characteristic for contact person is "RAL employee"

The following information is adopted:

- Internal unique ID of the contact for unique identification
- Name of the RAL employee
- Address (country, zip code, city, street)
- Communication numbers (in each case those entered as standard numbers in the bm)
  - Telephone number
  - email address
  - Internet

### 3.3 Synchronisation – the process

The synchronization of member and employee data is carried out once a day through an automated process. The business manager is the leading system for the data listed above, i.e. Changes to this data can only be made in bm.

If a new member is registered in bm, access to the portal must be created for this member. This is done automatically the first time you transfer from bm to the portal. The new member is automatically sent an email containing a password to be generated. In addition, a RAL employee to be determined will also be sent an email informing them that access to the portal has been created for this new member. The synchronization process therefore includes the following steps:

- Export the data from the business manager according to the criteria already described
  - Member data (one line per member)
  - Auditors
  - RAL employees
  - Employee data (one line per employee)
  - Certificates (one line per certificate)
- Import the data into the RAL portal
  - All members, employees, certificates, auditors, RAL employees in the portal are set to "inactive"
  - For all member records:
    - There is already a corresponding data record in the portal:
      - Update and activate member data if necessary
      - Create or update employee data, set it active
      - Create or update certificates, set them active
    - There is no corresponding data record in the portal:
      - Create a new data record in the portal, set it actively
      - Determine and save access data (user number, password). The "Customer No." (sales info) stored in the bm is used as the access number.
      - Send mail to new user with access data
      - Create or update employee data, set it active
      - Create or update certificates, set them active

## 4 Roles and access rights

The following roles are planned:

- Members
- Auditors
- RAL employees

The table contains an overview of which functions a user of a certain role can perform and which access rights he has.

Module	Functions	Members	Auditors	RAL employees
Members (Mitglied)	Basic data	A (own company)	A (1)	A (all companies)
	Employees	A (own company)	A (1)	A (all companies)
	Technical equipment	A, E, B, L (own company)	A (1)	A (all companies)
	Notifications	A (own company)	A (1)	A (all companies)
	External audits	A (own company)	A (1)	A (all companies)
	Trainings	A (own company)	A (1)	A (all companies)
Notifications (Gütesicherung)	Single / collective / null notification (Einzel- / Sammel- / Nullmeldungen / Eigenüberwachung): Overviews	A (own company)	-	A (all companies)
	Single / collective notification (Einzel- / Sammel-meldungen): Details (cards 1-3)	A, E, B (own company)	A	A (all companies)
	Single / collective notification (Einzel-/Sammel-meldungen): Evaluations	A (own company)	A	A (all companies)
	Null notification (Nullmeldungen): Neu	A, E (own company)	-	-
	Self notification (Eigenüberwachung): Formulars	A (own company)	-	-
	Self notification (Eigenüberwachung): Protocols	A, E (own company)	A	A (all companies)

Module	Functions	Members	Auditors	RAL employees
External audits (Fremdüberwachung)		A (own company)	A, E, B (2)	A (all companies)
Training (Schulungen)	Overview	A	-	A
	Booking	E	-	-
	Details	-	-	A, E, B, L
Evaluations (Auswertungen)	(all evaluations)	-	-	A
Administration	Assign auditors (Prüfer zuordnen)	-	-	A, B
	Equipment types (Gerätetypen)	-	-	A, B
	Self audit (Eigenüberwachung) Formulars	-	-	A, B
	System settings (Systemeinstellungen)	-	-	A, B
User settings (Benutzereinstellungen)	Change password (Kennwort ändern)	A, B	A, B	A, B

Access rights: A = view, E = insert, B = edit, L = delete

(1) An auditor only has access to members to whom he has been assigned for the audit and for up to 3 months after completion of this audit.

(2) An auditor has access to his current audits (reading, writing) and the last two audits previously carried out (read only).

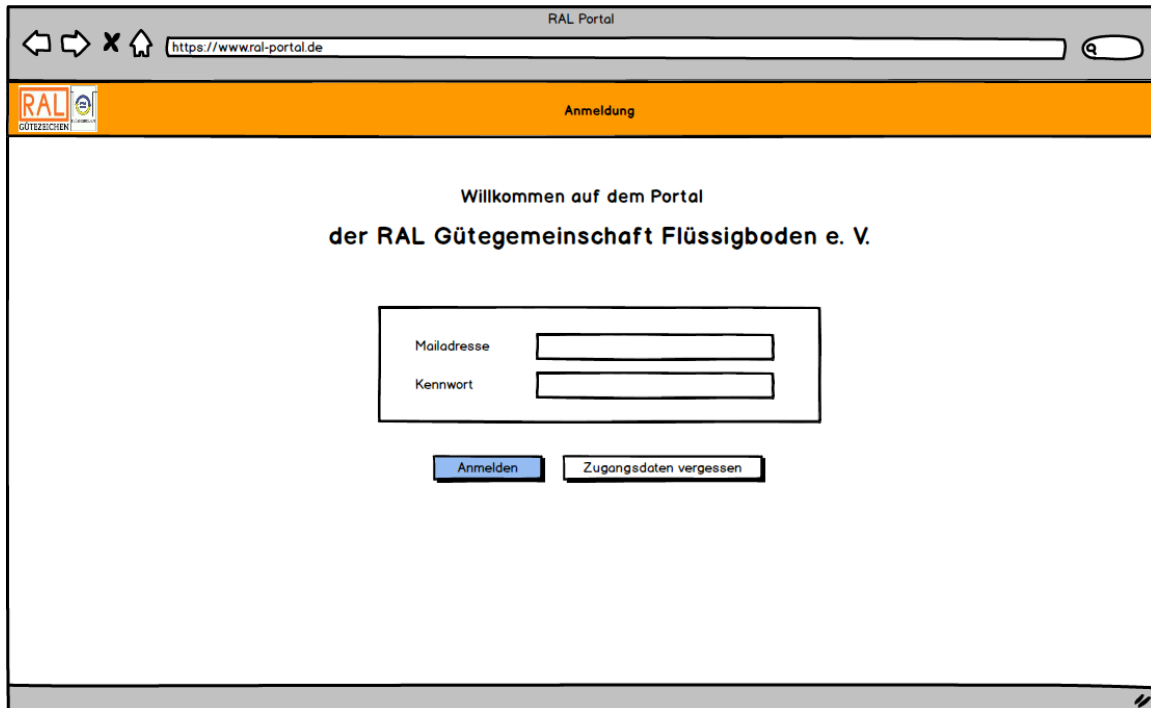
A user can have multiple roles, e.g. auditor and member at the same time. In these cases, the access rights complement each other, i.e. in the example above, the user has both the rights of the auditor and the member.

If a user should not have access to a certain function, this option is not shown to him at all (buttons, menu entries).

## 5 General structure

### 5.1 Login mal address and password

The registration window must be integrated into the RAL homepage. Each member has only one account. Registration takes place via the email address and a password.

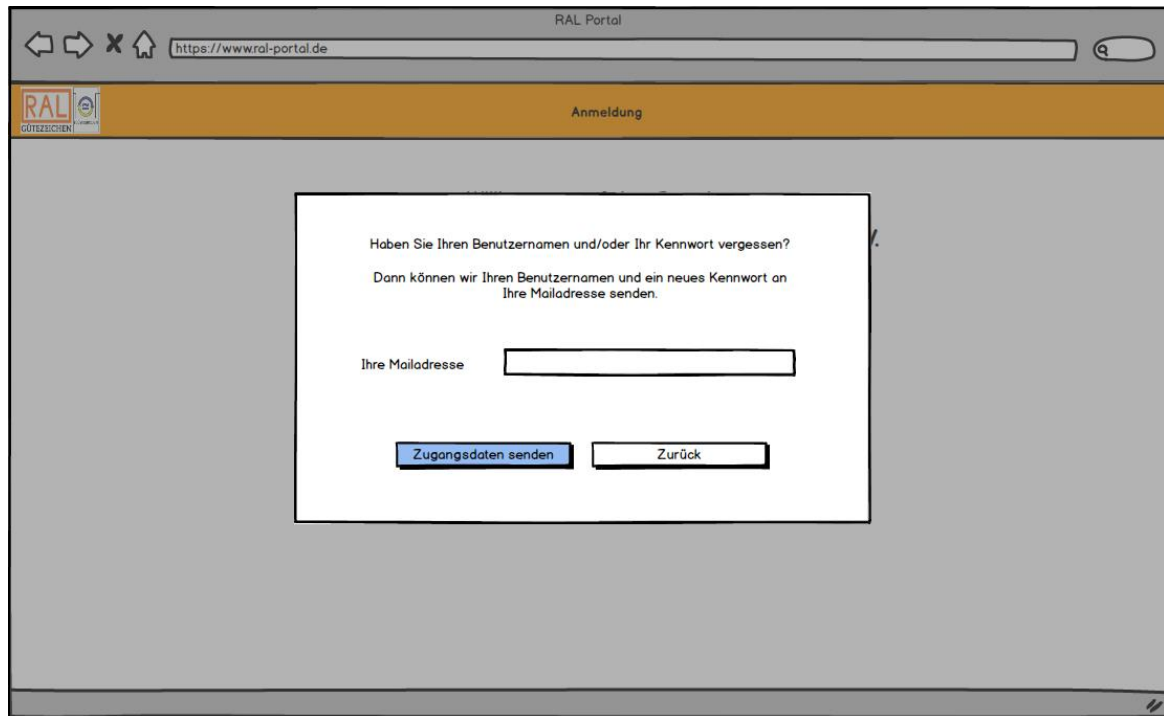


The screenshot shows a web browser window titled "RAL Portal" with the address bar displaying "https://www.ral-portal.de". The page has an orange header bar with the text "Anmeldung" and a logo on the left. The main content area is white and contains the following text: "Willkommen auf dem Portal" and "der RAL Gütegemeinschaft Flüssigboden e. V.". Below this is a login form with two input fields: "Mailadresse" and "Kennwort". At the bottom of the form are two buttons: "Anmelden" (highlighted in blue) and "Zugangsdaten vergessen".

*Login*

### 5.2 Forgotten acces data

If a user has forgotten their password, they have the option on the login page to have an email sent to the system's stored email address with a new password generated by the system. If the user clicks on the "Forgot login information" button on the login page, a system message appears in which the user enters his email address and sends his request. The system then checks whether there is an entry in the member master data for this email address and sends an email to this email address in the positive case.



*Zugangsdaten vergessen*

### 5.3 Logging out

The link "Abmelden" (logout) is available to the user at the top right of every page. If it clicks on this link, it will be automatically logged out of the system and the login page of the portal will appear.

### 5.4 General layout after logging in

The different sides of the system have the following structure:

1. Head area: in the head area with the RAL color (orange) there is the logo on the left and information on the member number and name of the registered member on the right. For an examiner or RAL employee as a user, only the name of the user is shown here. On the right edge there is a link to log out.
2. The menu is on the left. By clicking on an upper point, the associated sub-points appear or disappear. Clicking on a menu entry that is not a main item (function) opens the relevant information in the right data area.
3. Data area: the data area is on the right side. This is structured differently depending on the selected function. After registration, this data area is empty. Here is a note such as "Welcome to the portal of the RAL"

Note: in a future version, the empty data area could be used by sponsors for advertising purposes after logging in.



## 5.5 Menu

The menu on the left of the page has the following structure:

- Member(s) (Mitglieder)
- Notifications (Gütesicherung)
  - Single notification (Einzelmeldung)
  - Collective notification (Sammelmeldung)
  - Null notification (Nullmeldung)
  - Self audit (Eigenüberwachung)
- External audits (Fremdüberwachung)
- Trainings (Schulungen)
- Evaluations (Auswertungen)
  - New members
  - Members by years
  - Members by state
  - Reports by years
  - Quantities by years
  - Quantities by groups
- Administration
  - Assign auditors
  - Device types
  - System settings
- User account (Benutzereinstellungen)

Users only see the items in the menu for which they also have the appropriate access rights.

## 5.6 Tables

On some pages, tables (overviews) are used, in which similar data records (e.g. employees, certificates) are displayed. If there are more data records than can be displayed on the page, a scroll bar appears on the right-hand side, which can be used to display the previous and subsequent data records. There is also the option of changing the sorting of the data records. To do this, click once (sorted upwards) or twice (sorted downwards) on the corresponding column heading.

## 5.7 Supported languages

All system displays and messages are shown in German. However, all texts of the system are already stored in the system in such a way that further user languages can be integrated in the future if required.

## 6 Basic data

### 6.1 Member data (only view)

If you select the "Member" menu item in the "Master data" area, you get the view of member data. This function is designed differently depending on the role of the user.

- Members: Members generally only see their own member data. So for them it is not the selection page that appears, but the detailed view of their own data.
- Auditors: Auditors receive a view of all members for whom the auditor is responsible. For this reason, the option to search for members using selection criteria appears here. Based on the selection criteria, a corresponding hit list appears from which the user can then select a member.
- RAL employees: RAL employees receive the view of all members. For this reason, the option to search for members using selection criteria appears here. Based on the selection criteria, a corresponding hit list appears from which the user can then select a member.

The screenshot shows the RAL Portal interface. At the top, there is a navigation bar with the RAL logo and the text "GÜTEZEICHEN". To the right of the logo, it says "Mitglied 2865 Meine Firma GmbH" and "Abmelden". Below the navigation bar, there is a sidebar on the left with the menu "Mitglied(er)" and sub-items: "Gütesicherung", "IFremdüberwachung", "Schulungen", "Administration", and "Benutzerkonto ändern". The main content area has a search section with the text "Suchen nach" and two input fields: "Name oder Nummer" and "PLZ oder Ort". A "Suchen" button is next to the second input field. Below the search section, there is a table with the following columns: "Name", "PLZ", and "Ort". The table contains 10 rows, each with a small icon in the first column and empty cells in the other two columns.

	Name	PLZ	Ort

*Hit list for auditors / RAL employees*

The screenshot shows a web browser window titled "RAL Portal" with the URL "https://www.ral-portal.de". The page has a navigation bar with the RAL logo and the text "Mitglied 2865: Meine Firma GmbH" and "Abmelden". A left sidebar contains a menu with "Mitglied(er)" selected, and sub-items: "Gütesicherung", "IFremdüberwachung", "Schulungen", "Administration", and "Benutzerkonto ändern". The main content area has a tabbed interface with tabs: "Mitglied", "Mitarbeiter", "Geräteausstattung", "Gütesicherung", "Fremdüberwachungen", and "Schulungen". The "Mitglied" tab is active, showing a form with the following fields: "Firma" (three stacked text boxes), "Straße" (text box), "PLZ / Ort" (two stacked text boxes), "Land" (text box), "Postfach" (text box), "Postfach PLZ/Ort" (two stacked text boxes), "Bundesland" (text box), "Mitglied-Nr." (text box), "Mitglied seit" (text box), "Nachname" (text box), "Vorname" (text box), "Telefon" (text box), "eMail" (text box), "Internet" (text box), "Anwender-GZ" (text box), "Hersteller-GZ" (text box), and "gültig seit" (text box). At the bottom of the form are three buttons: "RAL über Änderungen informieren", "PDF erstellen", and "Mengen".

*Basic data of a member*

As already mentioned, the information is only displayed on this page. They cannot be changed here. If data are to be changed, the RAL member must send a corresponding message. The button "Änderungsinformationen an RAL senden" (send change information to RAL) is available for this (only for members!). If he clicks on this button, the following page opens:

The screenshot shows the same RAL Portal interface as the previous one, but with a modal dialog box open. The dialog has a title bar "Änderungsinformationen an RAL senden" and a main area with the text "Was hat sich geändert?". Below this text is a large empty text box for input. At the bottom of the dialog are two buttons: "Senden" and "Abbrechen". The background form is partially visible and dimmed.

The user enters his changes in the text field and clicks "Send". An email will then be sent to the email address specified in the system settings. The subject is: "Change information member <member number>". The message contains the user-entered information about the changes. Two reports can also be output as PDF documents. On the one hand, a PDF file is created that contains the most important master data of the member: name, address, contact numbers, employees, equipment. The second contains an overview of the quantities. The information to be output and the layout are still to be determined.

## 6.2 Employees (only view)

The data of the employees cannot be changed here either. The data are also taken over by the bm.

First, an overview of the member's employees appears. If a (partial) name is entered in the search field and the search is clicked, only those employees whose last name or first name contains the text from the search field are displayed in the list.

The screenshot shows a web browser window titled 'RAL Portal' with the URL 'https://www.ral-portal.de'. The page has an orange header bar with the RAL logo on the left and the text 'Mitglied 2865: Meine Firma GmbH' and 'Abmelden' on the right. A left sidebar contains a menu with 'Mitglied(er)' selected, showing sub-items: 'Gütesicherung', 'IFremdüberwachung', 'Schulungen', 'Administration', and 'Benutzerkonto ändern'. The main content area has a 'Mitglied' search bar at the top. Below it are tabs: 'Mitglied', 'Mitarbeiter', 'Geräteausstattung', 'Gütesicherung', 'Fremdüberwachungen', and 'Schulungen'. The 'Mitarbeiter' tab is active. Under the tabs is a search section with 'Suchen nach' and a text input field labeled 'Name', followed by a 'Suchen' button. Below the search is a table with the following columns: 'Nachname', 'Vorname', 'Position', 'Telefon', and 'Zertifikate'. The table has 8 rows, each with an 'Edit' icon in the first column. At the bottom of the page are three buttons: 'RAL über Änderungen informieren', 'PDF erstellen', and 'Mengen'.

*Member: Overview employees*

If the user clicks on the last name of an employee in the list or on the associated "Edit" symbol, a page opens with the detailed view of this employee.

The screenshot shows a web browser window titled 'RAL Portal' with the URL 'https://www.ral-portal.de'. The page is titled 'Mitarbeiter' (Employee). On the left, there is a sidebar with a 'RAL GÜTEZEICHEN' logo and a menu with items: 'Mitglied(er)', 'Gütesicherung', 'IFremdüberwa', 'Schulungen', 'Administration', and 'Benutzerkonto'. The main content area contains a form for employee details with the following fields:

- Anrede (Salutation)
- Nachname (Surname)
- Vorname (First Name)
- Position
- Telefon (Phone)
- Mobil (Mobile)
- eMail

Below the form, there are two tables:

	Zertifikat-Nr.	am	bis
Download			
Download			
Download			
Download			

Schulung	Ort	von	bis	Steckbrief
				Document
				Document
				Document
				Document

At the bottom of the form, there is a 'Zurück' (Back) button.

*Member: Detail page of employee*

The salutation, name, position and contact details of the employee can be seen on this detailed view. The data of the employees cannot be changed here either. The data are also taken over by the bm.

In addition, the employee's certificates stored in the bm are displayed. The certificates stored as PDF files can be downloaded using the "Download" symbol and (depending on the browser settings) opened in the browser or opened as a downloaded PDF file in a PDF reader.

In addition, all employee training courses stored in the portal are displayed. The training profiles saved as a PDF file can be downloaded using the "Document" symbol and (depending on the browser settings) opened in the browser or as a downloaded PDF file in a PDF reader.

The system will send an email with a note to all employees whose email address is stored three months before the certificate expires. The exact text of the mail has yet to be defined.

### 6.3 Technical equipment

In contrast to the other member master data, the data of the equipment is only maintained by the members themselves via this portal. This data is not stored in the business manager.

The screenshot shows the 'RAL Portal' web interface. The browser address bar displays 'https://www.ral-portal.de'. The page header includes the RAL logo and the text 'Mitglied 2865: Meine Firma GmbH' with a 'Abmelden' link. The left sidebar contains a navigation menu with 'Mitglied(er)' selected, showing sub-items: 'Gütesicherung', 'IFremdüberwachung', 'Schulungen', 'Administration', and 'Benutzerkonto ändern'. The main content area has a 'Mitglied' dropdown and tabs for 'Mitglied', 'Mitarbeiter', 'Geräteausstattung', 'Gütesicherung', 'Fremdüberwachungen', and 'Schulungen'. The 'Geräteausstattung' tab is active, displaying a table with columns 'Gerät' and 'Anzahl'. The table lists 'Gerätetyp 1' through 'Gerätetyp 5'. Below the table is a text input field labeled 'weitere Geräte'. At the bottom of the form are buttons for 'Speichern', 'Abbrechen', 'PDF erstellen', and 'Mengen'.

*Member: technical equipment*

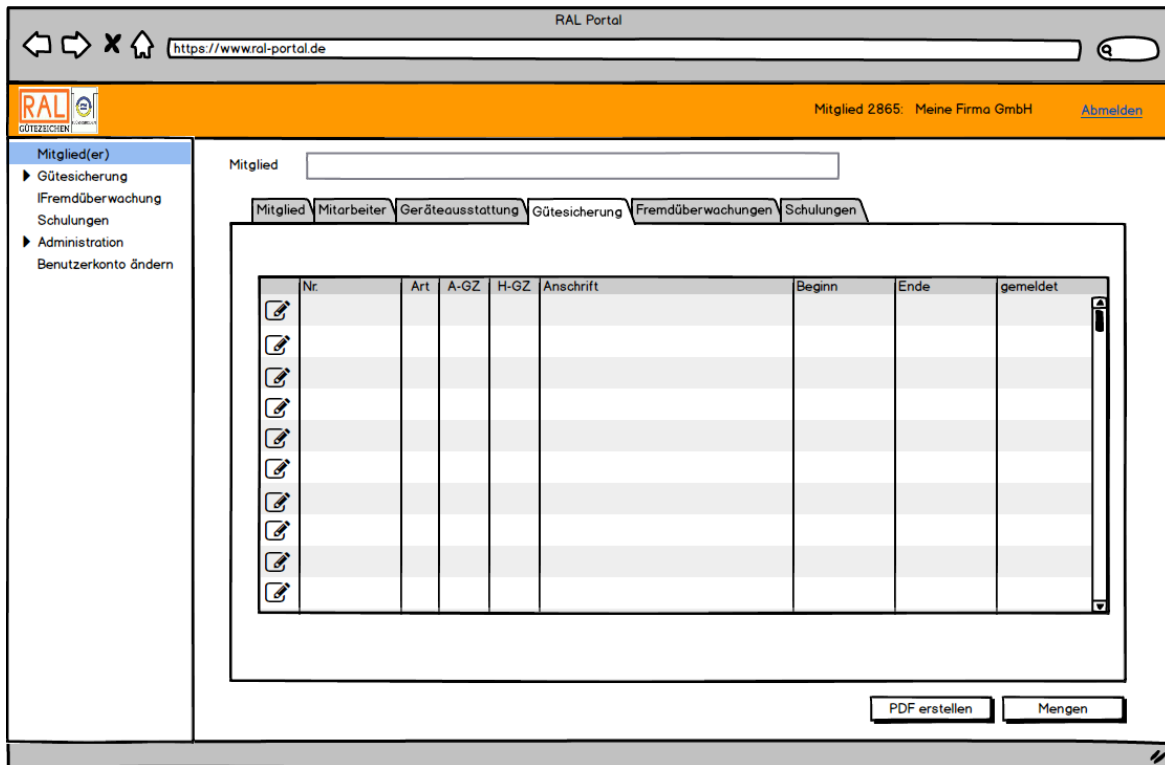
The device types listed can be changed in the administration by authorized users (RAL employees). On this page, the user only enters the quantity and saves. In addition to the devices listed, the user can enter additional devices as text under "Additional devices".

If the user presses the "PDF erstellen" (create PDF ) button, a PDF file is generated that contains the following information:

- General heading "RAL ..."
- Name and member number of the member
- Headline "Geräteausstattung" (technical equipment)
- List of device types including the number, provided that at least one piece has been entered
- Text under "other devices"
- Footer with the name, address and contact details of the RAL

## 6.4 Notifications („Gütesicherung“)

Only the notifications / self audit of the selected member are listed on this card. This means that auditors can also call up the legacy messages of a member whose audit he was commissioned to do. If the user clicks on the "Open" symbol, he will get to the detail pages of the message, depending on whether it is a single notification, collective notification, null notification or self audit. This type of notification is displayed in the "Type" column (B = single notification, S = collective notification, N = null notification, E = self audit).



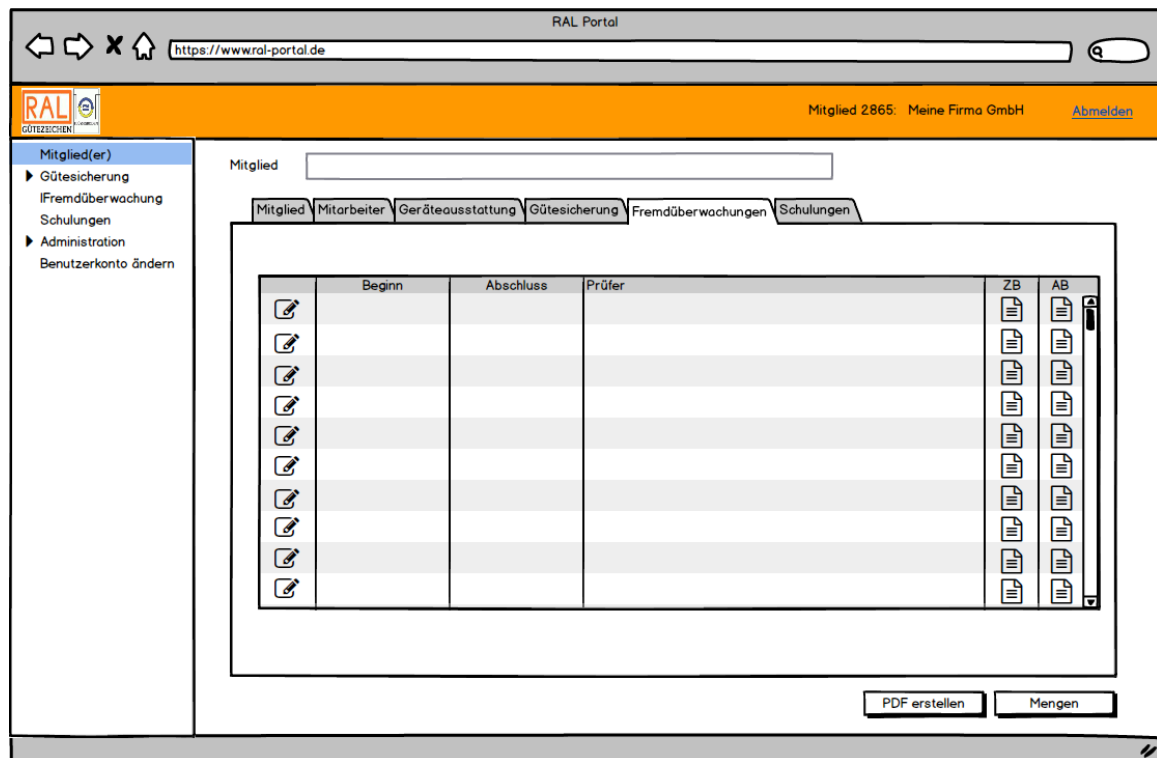
*Mitglied: Gütesicherung*

## 6.5 External audit

This card shows the external auditing that has already been carried out and any current auditing. The latest interim and final report can be downloaded.

While members can view all of their third-party surveillance, auditors only have access to their own current audits (up to 3 months after the audit is completed) and the two most recent third-party audits.

RAL employees receive an additional symbol with which they can access the archive and download all versions of the uploaded interim and final reports (according to the chapter on external auditing).



*Member: external audits*

## 6.6 Trainings („Schulungen“)

This card shows the training courses booked for all members of staff in this portal. The user can download the relevant profile of the training. Changes are not possible at this point.



[illegible]

*Member: trainings*

## 7 Notifications („Gütesicherung“)

A general distinction is made between single notifications (construction projects), collective notifications (producers) and null notifications and self audits.

### 7.1 Single notification („Einzelmeldungen“)

When this function is called, an overview of all notifications is displayed first.

Nr.	A-GZ	H-GZ	Mitglied	Anschrift	Beginn	Ende	gemeldet

*Overview single notifications*

The selection of the single notifications displayed can be restricted by entering search terms. This list is also limited by the role of the user.

- A member can only view their own single notifications
- A RAL employee can view all single notifications

Since only members can create a new single notification, the other users will not see the "Neue Einzelmeldung" (new single notification) button. The user can select a message by clicking on the message no. or click the "Edit" icon.

After selecting one of the single notifications from the list, the detailed view of the notification appears. Only the corresponding member can change this message. Other users do not receive a "Speichern" (save) button and cannot move the cursor into the individual fields (the fields are disabled).

*Detail view of single notification: Maßnahme / Auftraggeber (view for members)*

The detailed view of a single notification initially consists of four cards: “Maßnahme/Auftraggeber” (Measure / Client), “Art der Anwendung” (type of application), “Technische Daten” (technical data) and “Personal” (personnel). Members can save their changes at any time, but receive a warning if not all mandatory fields have been filled out. If the member clicks the “Abbrechen” (cancel) button, the changes made are not saved and the user is returned to the single notification overview. If the member has made changes to a single notification and calls up another menu item in the left menu, the user is asked whether he wants to save the changes or discard them.

The “Maßnahme/Auftraggeber” (measure / client) card contains general information about the single notification: name, address, start, end and name and address of the client. The system issues the message notification when a new notification is saved for the first time. The rule for assigning the number is: year-month-consecutive number (example: 2020-02-123). The year and month depend on the date of the notification. The user can click on the open symbol behind the member name, then the detailed view of the member opens.

If the user presses the "Create PDF" button, a PDF document is generated which outputs the data on the four cards of the message.

The second card “Art der Anwendung” (type of application) contains a list of the different assessment groups for the user measures and the manufacturer measures. The user can only select one group from each of the two lists, whereby “none” can also be selected. However, at least one of the groups A1, ..., A5 or H1, ..., H4 must be selected.

The screenshot shows the 'RAL Portal' interface. The browser address bar displays 'https://www.ral-portal.de'. The top navigation bar is orange and contains the RAL logo, the text 'Mitglied 2865 Meine Firma GmbH', and a link 'Abmelden'. On the left, a sidebar menu lists options: 'Mitglied(er)', 'Gütesicherung', 'Einzelmeldungen' (highlighted), 'Sammelmeldungen', 'Nullmeldungen', 'Eigenüberwachung', 'IFremdüberwachung', 'Schulungen', 'Administration', and 'Benutzerkonto'. The main content area is titled 'Mitglied' and has a search bar. Below this, there are four tabs: 'Maßnahme/ Auftraggeber', 'Art der Anwendung' (selected), 'Technische Daten', and 'Personal'. The 'Art der Anwendung' tab contains two sections: 'Anwendermaßnahmen' and 'Herstellermaßnahmen'. Each section has a list of radio buttons for selection. In 'Anwendermaßnahmen', the first option 'keine' is selected, followed by 'Gruppe A1: Einbau von Flüssigboden beliebiger Materialien mit spez. anwendungsbez. Anforderungen nach Kapitel 2.3.2', 'Gruppe A2: Einbau von Flüssigboden beliebiger Materialien mit Grundanforderungen nach Kapitel 2.3.1', 'Gruppe A3: ...', 'Gruppe A4: ...', and 'Gruppe A5: ...'. In 'Herstellermaßnahmen', the first option 'keine' is selected, followed by 'Gruppe H1: alle Bodenarten - spezifische, anwendungsbezogene Anforderungen nach Kapitel 2.3.2', 'Gruppe H2: natürl. Gesteinskörnung bzw. Gesteinskörnungsgemische und güteüberwachten Recyclingmaterialien - spezifische, anwendungsbezogene Anforderungen nach Kapitel 2.3.2', 'Gruppe H3: alle Bodenarten - Grundanforderungen an die Herstellungsart der Produkte nach Kapitel 2.3.1', and 'Gruppe H4: natürliche Gesteinskörnungen bzw. Gesteinsgemische und güteüberwachten Recyclingmaterialien - Grundanforderungen an die Herstellungsart der Produkte nach Kapitel 2.3.1'. At the bottom right of the form are three buttons: 'Speichern', 'Abbrechen', and 'PDF erstellen'.

*Detail view single notification: Art der Anwendung (view for members)*

The third card "Technische Daten" (technical data) contains information about the technical data. The following technical information is stored on this card: Quantity in cubic meters and the list of machines and devices used. With this selection, the user clicks on the selection symbol ("v") and the user can then select and save one or more from the list of device types entered for this member. This list is shown on the map as a comma-separated list.

The screenshot shows a web browser window titled 'RAL Portal' with the URL 'https://www.ral-portal.de'. The page has an orange header bar with the RAL logo on the left and the text 'Mitglied 2865: Meine Firma GmbH' and 'Abmelden' on the right. A left sidebar menu lists various options under 'Mitglied(er)', with 'Gütesicherung' expanded to show 'Einzelmeldungen', 'Sammelmeldungen', 'Nullmeldungen', 'Eigenüberwachung', 'IFremdüberwachung', 'Schulungen', 'Administration', and 'Benutzerkonto'. The main content area has four tabs: 'Maßnahme/ Auftraggeber', 'Art der Anwendung', 'Technische Daten' (selected), and 'Personal'. The 'Technische Daten' tab contains a form with two fields: 'Menge' with a text input box followed by 'm3', and 'Eingesetzte Maschinen und Geräte' with a larger text area and a checkbox to its right. At the bottom of the form are three buttons: 'Speichern', 'Abbrechen', and 'PDF erstellen'.

*Detailansicht Einzelmeldung: Technische Daten*

The fourth card "Personal" contains staff information. One of the persons registered as employees can be selected as GSB ("Gütesicherungsbeauftragter" / quality assurance officer). The user then specifies the number of people trained. Depending on the number, a corresponding number of lines then open, where he selects the trained person from the list of people entered as employees and enters the date of the in-house training.

The user can also upload the logs of instructions that have been carried out. For new protocols, the user clicks the "Neues Protokoll" (new protocol) button. In the window that then opens, the user enters the date, a name and selects the corresponding PDF file from his hard drive and then clicks on "Speichern" (save).

RAL Portal

https://www.ral-portal.de

Mitglied 2865: Meine Firma GmbH [Abmelden](#)

Mitglied(er)

- ← Gütesicherung
- Einzelmeldungen
- Sammelmeldungen
- Nullmeldungen
- Eigenüberwachung
- IFremdüberwachung
- Schulungen
- Administration
- Benutzerkonto

Mitglied

Maßnahme/ Auftraggeber Art der Anwendung Technische Daten Personal

Personal

Gütesicherheitsbeauftragter Mustermann, Malte

Geschultes Personal 2

Name / Datum innerbetriebl. Prüfung Musterfrau, Heike

Name / Datum innerbetriebl. Prüfung

interne Unterweisungsprotokolle

Neues Protokoll

	Datum	Bezeichnung	hochgeladen
↓	10.01.2019	1. Unterweisung	10.01.2010
↓	12.04.2019	2. Unterweisung	12.04.2019
↓	14.04.2019	3. Unterweisung	17.04.2019

Speichern Abbrechen PDF erstellen

Detail view single notification: staff

RAL Portal

https://www.ral-portal.de

Mitglied 2865: Meine Firma GmbH [Abmelden](#)

Mitglied(er)

- ← Gütesicherung
- Einzelmeldungen
- Sammelmeldungen
- Nullmeldungen
- Eigenüberwachung
- IFremdüberwachung
- Schulungen
- Administration
- Benutzerkonto

Mitglied

Maßnahme/ Auftraggeber Art der Anwendung Technische Daten Personal

Personal

Gütesicherheitsbeauftragter Mustermann, Malte

Geschultes Personal 2

Name / Datum innerbetriebl. Prüfung Musterfrau, Heike

Name / Datum innerbetriebl. Prüfung

interne Unterweisungsprotokolle

Protokoll hochladen

Datum

Datei

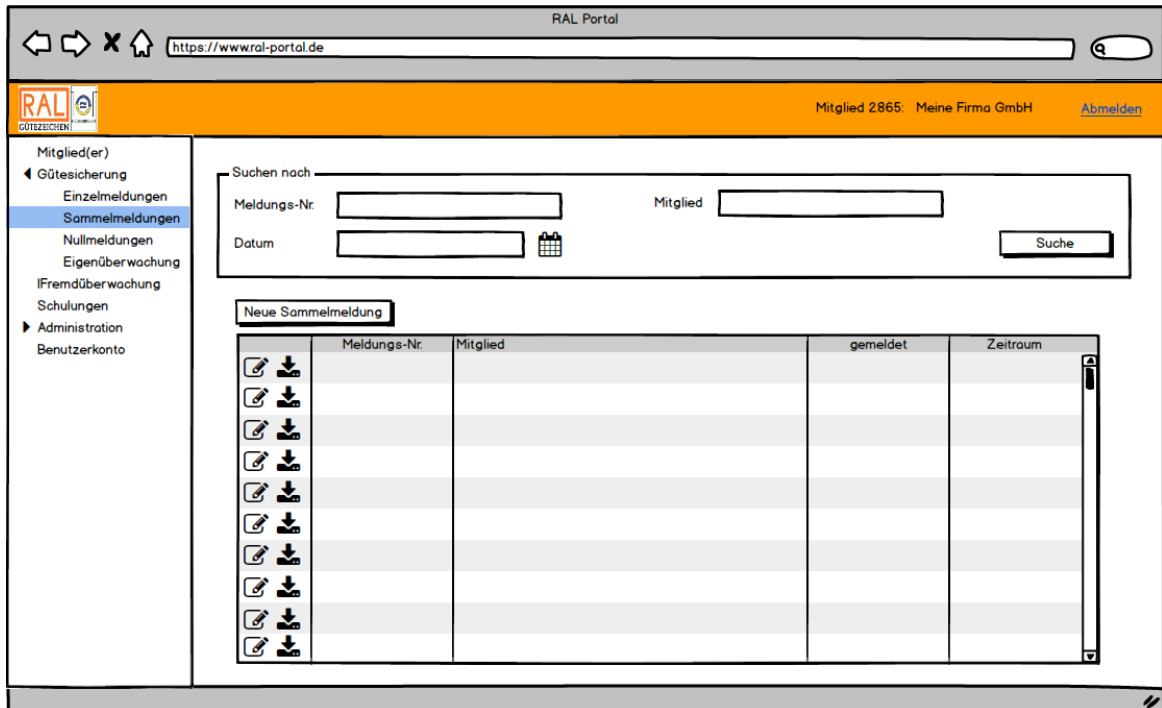
Speichern Abbrechen

Speichern Abbrechen PDF erstellen

Detail view single notification upload protocol

## 7.2 Collective notification

When this function is called, an overview of all collective notifications is displayed first.



*Overview: collective notifications*

The selection of the group messages displayed can be restricted by entering search terms. This list is also limited by the role of the user.

- A member can only view his own notifications
- A RAL employee can view all notifications

Since only members can create a new collective notification, the other users will not see the "Neue Sammelmeldung" (new collective notification) button.

After selecting one of the notifications from the list, the detailed view of the collective notification appears.

RAL Portal

https://www.ral-portal.de

RAL GÜTEZEICHEN

Mitglied 2865: Meine Firma GmbH [Abmelden](#)

Mitglied(er)

- ◀ Gütesicherung
- ◀ Einzelmeldungen
- Sammelmeldungen**
- Nullmeldungen
- Eigenüberwachung
- IFremdüberwachung
- Schulungen
- ▶ Administration
- Benutzerkonto

Mitglied

Sammelmeldung

Art: Hersteller

Meldungs-Nr.:

Mitglied:

Datum:

Menge:

H1		m3
H2		m3
H3		m3
H4		m3

PDF:

Speichern Abbrechen

*Detail view collective notification (e.g.: producer)*

Only the corresponding member can create or change this notification. Other users do not get a "Speichern" (save) button, cannot move the cursor into the individual fields (the fields are disabled) and the date selection and upload icons are not visible. All users can download and open the attached PDF document.

When creating a new collective notification, the user must first choose whether it is a constructor or a producer. If you select "Anwender" (constructor) the quantity fields for A1 to A5 are visible, if you select "Hersteller" (producer) the quantity fields H1 to H4.



Title	Mandatory	Description
Art (type)	yes	„Anwender“ or „Hersteller“
Meldungs-Nr. (notification number)	system	The notification number will be generated by the system when a new notification is saved the first time. The rule for generating the number is: year-month-sequential number (e.g. 2020-02-124). Year and month will be token from date of notification.
Datum (date)	yes	Date of notification
Menge H1, ..., H4 or Menge A1, ..., A5	yes	Quantity in cubic meters depending on the assessment group
PDF		The user has the option of uploading an additional document. To do this, he must press the upload icon, select a PDF file from his hard drive and press "Speichern" (save). Only files in the "pdf" format can be uploaded. This field contains the name of the uploaded file.

Members can save their changes at any time, but receive a warning if not all mandatory fields have been filled out. If the member clicks the "Abbrechen" (cancel) button, the changes made are not saved and the user returns to the summary report overview. If the member has made changes to a collective notification and calls up another menu item in the left menu, the user is asked whether he wants to save the changes or discard them.

### 7.3 Null notification

When this function is called, an overview of all null messages is displayed first.

The screenshot shows the RAL Portal interface. The top navigation bar is orange and contains the RAL logo, the text 'Mitglied 2865: Meine Firma GmbH', and a link 'Abmelden'. The left sidebar lists various menu items, with 'Nullmeldungen' highlighted. The main content area features a search section with the label 'Suchen nach' and input fields for 'BM-Nr.', 'Datum', and 'Mitglied', along with a 'Suche' button. Below the search section is a button labeled 'Neue Nullmeldung' and a table with three columns: 'Meldungs-Nr.', 'Monat', and 'gemeldet'. The table is currently empty.

*Overview null notifications*

The selection of the displayed zero messages can be restricted by entering search terms. This list is also limited by the role of the user.

- A member can only view their own notification.
- A RAL employee can view all null notification.

Since only members can create a new notification, the other users will not see the “Neue Nullmeldung” (new null notification) button.

Since all information of a null message (message number, month and year) is displayed in the overview, a detailed view is not provided. Null notifications cannot be deleted either.

The screenshot shows a web browser window titled 'RAL Portal' with the URL 'https://www.ral-portal.de'. The page has a header bar with the RAL logo, the text 'Mitglied 2865: Meine Firma GmbH', and a 'Abmelden' button. A left sidebar contains a menu with 'Mitglied(er)' expanded, showing options like 'Gütesicherung', 'Einzelmeldungen', 'Sammelmeldungen', 'Nullmeldungen' (highlighted), 'Eigenüberwachung', 'IFremdüberwachung', 'Schulungen', 'Administration', and 'Benutzerkonto'. The main content area has a search bar with fields for 'Suchen nach', 'BM-Nr.', 'Datum', and 'Mitglied', and a 'Suche' button. A modal window titled 'Neue Nullmeldung' is open, containing a 'Meldungs-Nr.' field, a 'Monat' dropdown menu set to 'Januar', a year field set to '2019', and 'Speichern' and 'Abbrechen' buttons.

*New null notification*

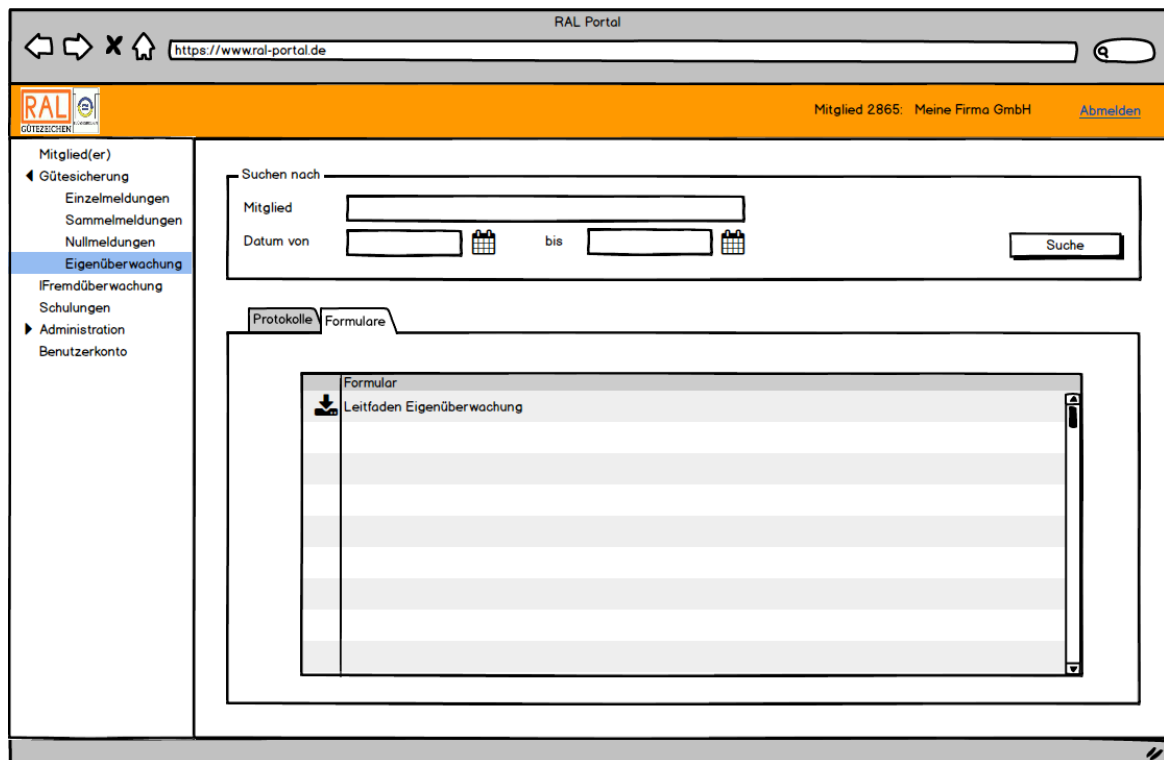
When calling up "Neue Nullmeldung", the above page appears. The user selects the month and year. The current year is preset.

## 7.4 Self-auditing

Self-auditing consists of two areas. For one, members can download forms uploaded by RAL employees. On the other hand, members can upload completed forms and protocols as PDF files and reviewers can view them.

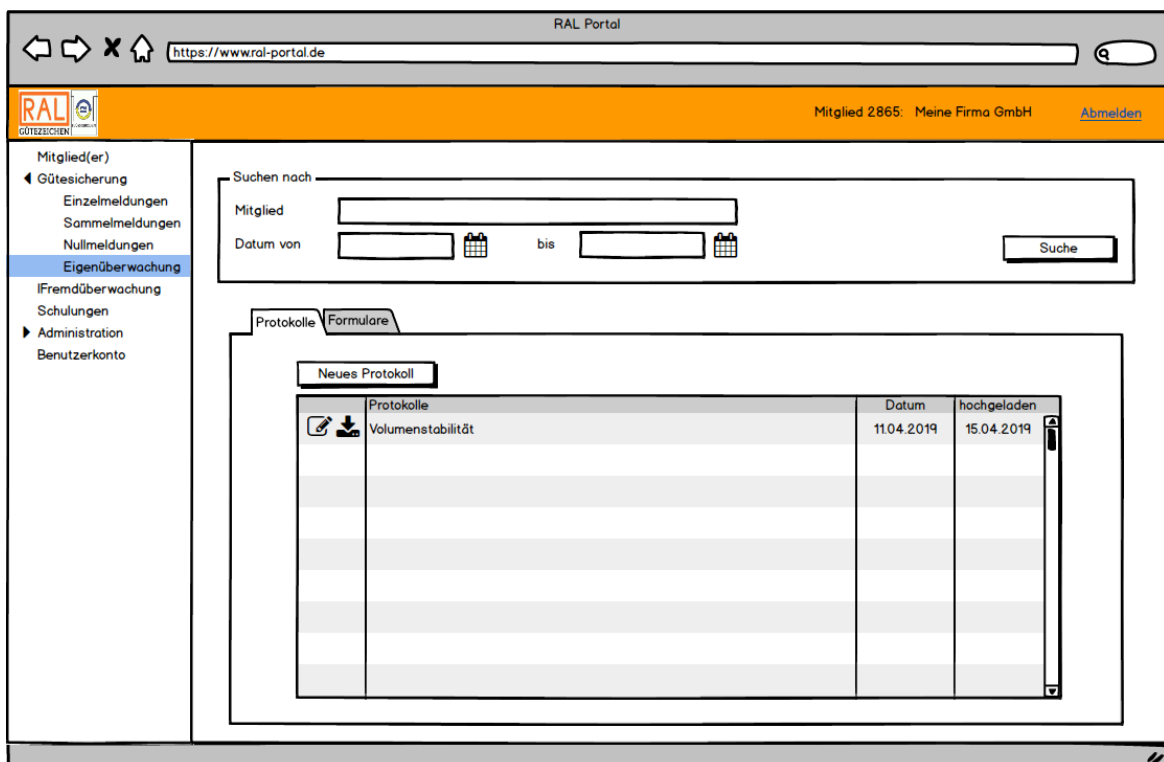
A number of forms and documents are available to members for self-auditing. These are uploaded by RAL employees (administration). The possibilities are therefore different for the user groups.

- Members, on the other hand, can only download the documents.



*Self-auditing: formulars*

As already described, members can upload completed and scanned forms and protocols, making them available for download by the auditors with the appropriate authorization. The function for creating a new protocol is only available to members. Auditors can only use the "Download" button.



If a member creates a new protocol, the following page appears. He selects the type of protocol. Laboratory protocol, volume stability, slump, intrinsic moisture and other are available. If the member selects one of these protocol types, the "Bezeichnung" (name) field is pre-assigned accordingly, but can still be changed by the member. The member also enters the date of the log and clicks the "Save" button.

The screenshot displays the RAL Portal web interface. The browser address bar shows <https://www.ral-portal.de>. The page header includes the RAL logo and the text "Mitglied 2865 Meine Firma GmbH" with a link to "Abmelden". A left sidebar contains a navigation menu with the following items: Mitglied(er), Gütesicherung, Einzelmeldungen, Sammelmeldungen, Nullmeldungen, **Eigenüberwachung**, IFremdüberwachung, Schulungen, Administration, and Benutzerkonto. The main content area features a search section with "Suchen nach" and fields for "Mitglied" and "Datum von" to "bis", followed by a "Suche" button. A modal window titled "Protokoll hochladen / bearbeiten" is centered on the screen. This window contains three input fields: "Art" (a dropdown menu), "Bezeichnung" (a text field), and "Datei" (a text field with a file upload icon). At the bottom of the modal are three buttons: "Speichern", "Löschen", and "Abbrechen".

## 8 External auditing

Already performed or current external auditing is displayed here.

The selection of the displayed monitors varies depending on the user groups.

- RAL employees can have all external auditing displayed.
- Members, on the other hand, can view the external surveillance that relates to their own company. The search field "Mitglied" (member) is pre-assigned and blocked.
- Auditors only have access to third-party surveillance for which they have been commissioned and up to three months after the last upload of the final report. The search field "Prüfer" (auditor) is pre-assigned and blocked.

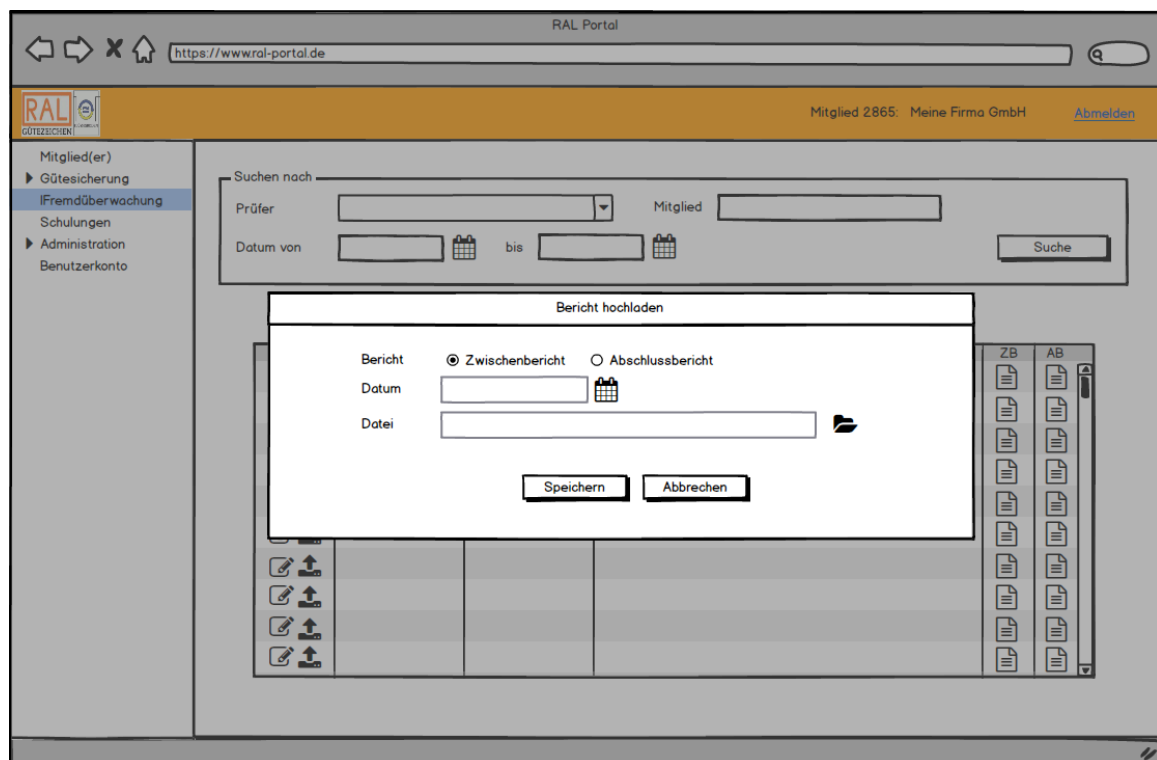
The member's data (master data, messages, equipment, etc.) can be accessed via the "Edit" symbol. Only the auditor has the option of using the "Upload" symbol to go to a new page, where he can upload an interim report or a final report.

As the "ZB" interim report or "AB" final report, only the latest version of the respective report can be downloaded.

[illegible]

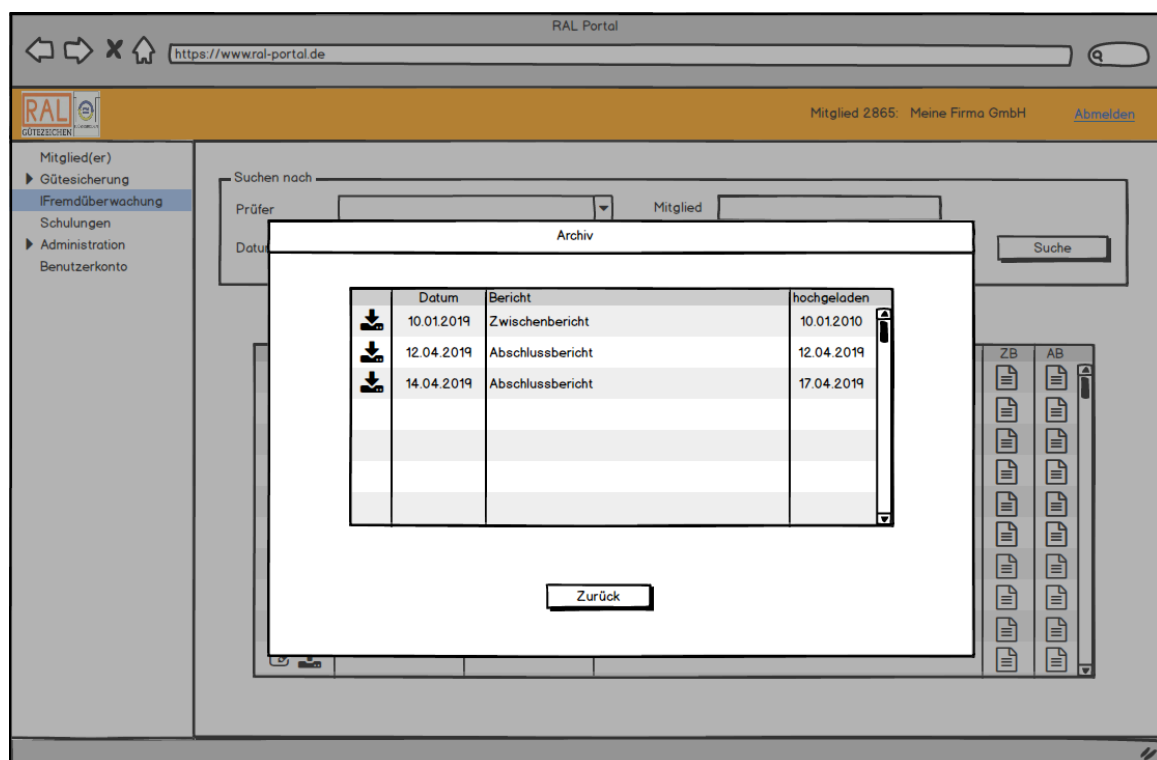
### External auditing

If the auditor wants to upload a new interim or final report, he clicks on the "Upload" symbol. The following page will appear. Here he first decides whether it is an interim or a final report. If a final report has already been uploaded, you cannot select an interim report here. The auditor then selects a PDF document from his hard drive, which is uploaded when the "Save" button is pressed with the specified date.



*External auditing, upload*

If, on the other hand, RAL employees click on the "Upload" symbol, they go to the archive. Here you can download all versions of the interim and final reports.



*External auditing, archive*

## 9 Trainings

The area of training includes both the recording and administration of training by RAL employees as well as the possibility for members to register there. First, an overview is displayed. The view differs depending on the type of user:

- Members don't see the "Neue Schulung" (new training) button. If he moves the mouse over the "Edit" symbol, the tool tip "Login" appears. Members only see "active" training.
- Auditors do not see the "Schulungen" (training) menu item.
- RAL employees see the "Neue Schulung" (new training) button. If he moves the mouse over the "Edit" symbol, the tool tip "Edit" appears. RAL employees see everyone, i.e. also the inactive training.

The screenshot shows the RAL Portal interface. At the top, the browser address bar displays 'https://www.ral-portal.de'. The portal header includes the RAL logo, the text 'Mitglied 2865: Meine Firma GmbH', and a link to 'Abmelden'. A left sidebar menu contains the following items: 'Mitglied(er)', 'Gütesicherung', 'IFremdüberwachung', 'Schulungen' (highlighted), 'Administration', and 'Benutzerkonto'. The main content area features a search section with the text 'Suchen nach' and two input fields labeled 'Bezeichnung' and 'Ort'. To the right of these fields are two date pickers labeled 'ab Beginn' and 'bis Ende', and a 'Suche' button. Below the search section is a button labeled 'Neue Schulung'. The main part of the page is a table with the following columns: 'Bezeichnung', 'Ort', 'von', 'bis', and 'Steckbrief'. Each row in the table has an 'Edit' icon (a pencil) on the left and a 'Steckbrief' icon (a document) on the right. The table is currently empty.

*Overview trainings*

If a RAL employee clicks on the "Edit" symbol, the following page „Schulung bearbeiten“ (edit training) appears.



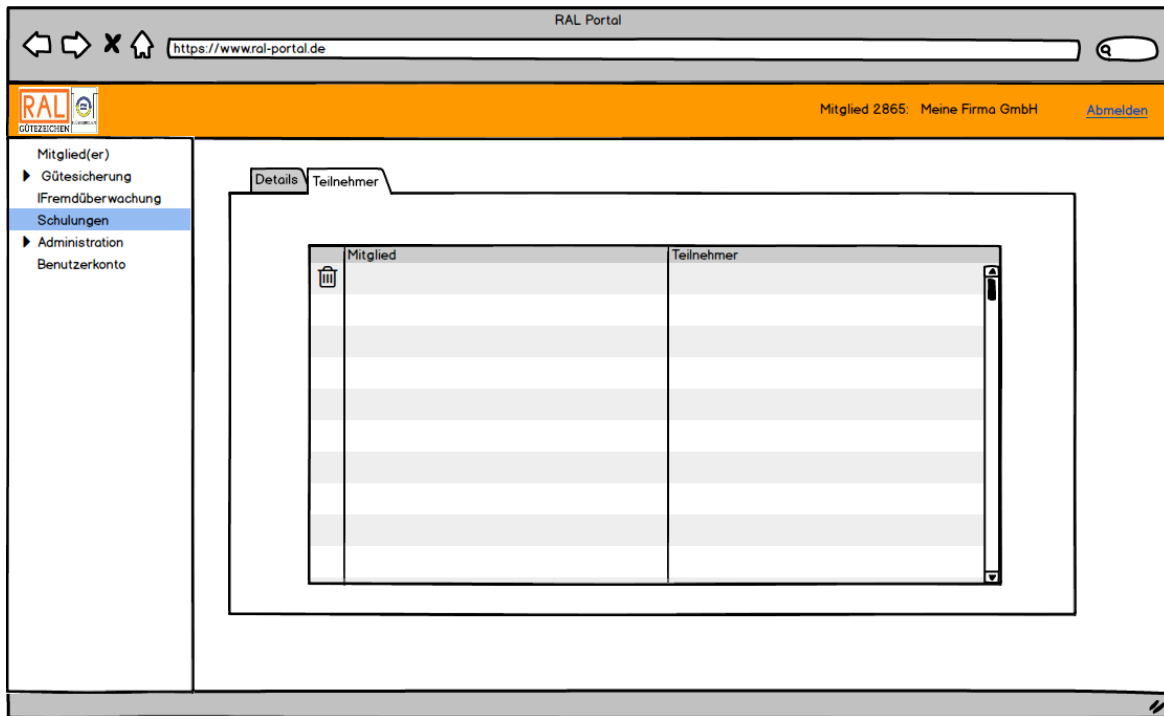
The screenshot shows a web browser window titled 'RAL Portal' with the URL 'https://www.ral-portal.de'. The page has an orange header bar with the RAL logo on the left, the text 'Mitglied 2865: Meine Firma GmbH' in the center, and a link 'Abmelden' on the right. A left sidebar contains a menu with the following items: 'Mitglied(er)', 'Gütesicherung', 'IFremdüberwachung', 'Schulungen' (highlighted in blue), 'Administration', and 'Benutzerkonto'. The main content area has two tabs: 'Details' and 'Teilnehmer', with 'Teilnehmer' being the active tab. The form contains the following fields and controls:

- 'Bezeichnung': A text input field.
- 'Ort': A text input field.
- 'Datum': A date range selector with 'von' and 'bis' labels, each followed by a date input field and a calendar icon.
- 'Steckbrief': A text input field with download and upload icons to its right.
- 'Teilnehmer': A text input field.
- A checkbox labeled 'aktiv' which is checked.
- Three buttons at the bottom: 'Speichern', 'Löschen', and 'Abbrechen'.

### *Edit training*

The information on the training is stored on this page. A profile as a PDF document can be placed using the "Upload" function. A training course can also be deleted here. This will delete all information about the training including the participants. However, if a training session is set to inactive, the information is retained, but is only visible to RAL employees.

The previously registered participants are shown on the second card of the training information. RAL employees can remove a participant by clicking the "Delete" icon.

*Training: participants*

For members, a "registration" symbol must be shown in the overview instead of the "edit" symbol. If a member clicks on the "registration" symbol, the following page appears.

*Training: registration*

The member can download the training profile here and select an employee (from the list of employees of the member) and register for the training. After clicking on "Anmelden" (register) or "Abbrechen" (cancel).

(cancel), he will return to the training overview. If a user has registered, the RAL receives a corresponding email (mail address see system settings).

The entry "Neuer Mitarbeiter" (new employee) is also in the list of employees. If the user selects this entry, the following page appears. There the user enters the data of the new employee and sends it to the RAL. The RAL automatically receives an email with this information. The new employee is not yet registered for training. The member must do this if the employee appears in the portal via data synchronization.

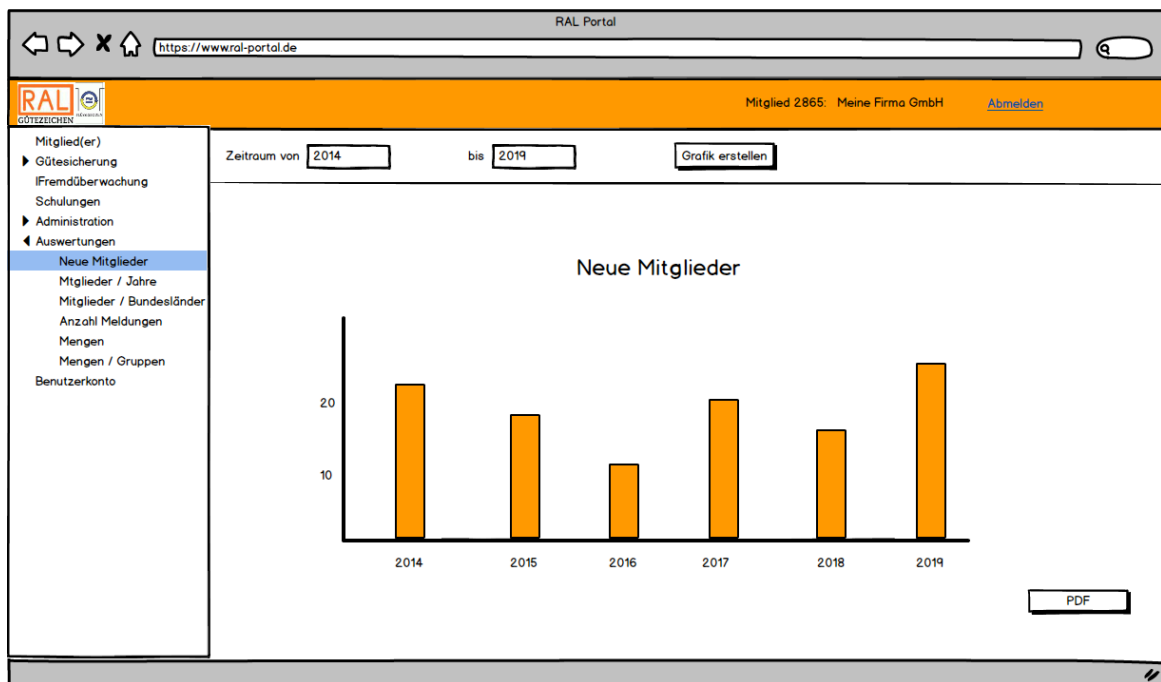
The screenshot shows a web browser window titled "RAL Portal" with the URL "https://www.ral-portal.de". The browser's address bar and search bar are visible. The page has a header bar with the RAL logo on the left, the text "Mitglied 2865: Meine Firma GmbH" in the center, and a link "Abmelden" on the right. A left sidebar contains a menu with the following items: "Mitglied(er)", "Gütesicherung", "IFremdüberwachung", "Schulungen" (highlighted with a blue bar), "Administration", and "Benutzerkonto". The main content area is titled "Neuen Mitarbeiter eintragen" and contains a form with the following fields: "Anrede", "Nachname", "Vorname", "Position", "Telefon", "Mobil", and "eMail". Below the form, there is a paragraph of text: "Bitte beachten Sie: dieser Mitarbeiter ist hiermit noch nicht zu der Schulung angemeldet! Nach Senden dieser Nachricht an die RAL-Gütegemeinschaft wird in den nächsten Tagen dieser neue Mitarbeiter in das Portal eingetragen werden. Bitte melden Sie dann diesen Mitarbeiter zur der gewünschten Schulung an." At the bottom of the form, there are two buttons: "Nachricht an RAL" and "Abbrechen".

## 10 Evaluations (Auswertungen)

The following evaluations are planned. All evaluations are output online and can be downloaded as PDF displayed directly in the browser (depending on the browser settings). The graphic can be printed from the PDF reader.

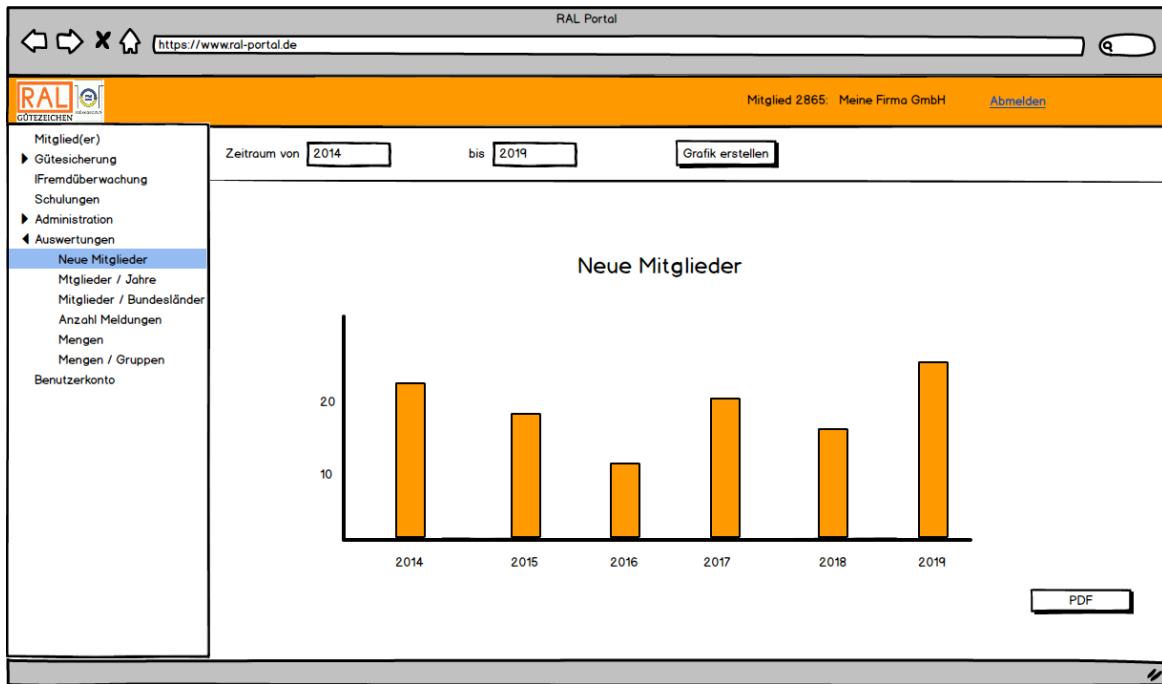
### 10.1 New member (Neue Mitglieder)

In this first evaluation, the number of new members is broken down by year. The desired period can be selected in the top bar. The last 10 years are preset. The date "member since" is used as the criterion.



### 10.2 Members by year (Mitglieder nach Jahren)

The next graphic shows the total number of members broken down by year. The desired period can be selected in the top bar. The last 10 years are preset. The date "member since" and the date "member until" are used as criteria.



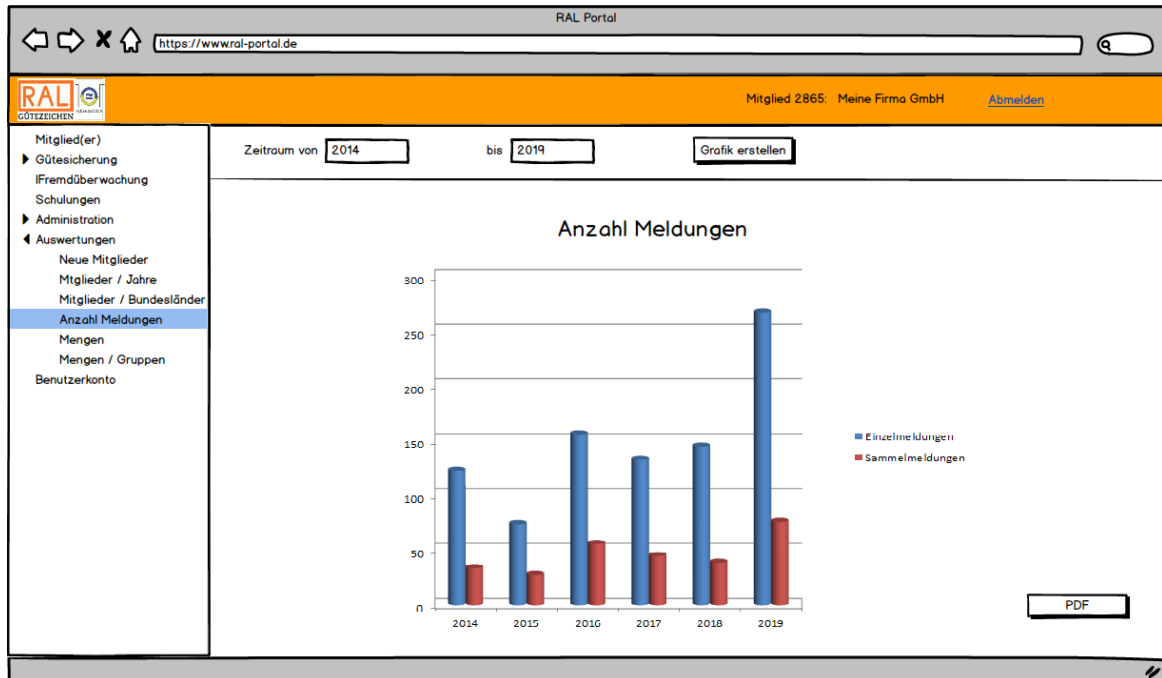
### 10.3 Members by state (Mitglieder nach Bundesländern)

This graphic breaks down the current members by federal states of Germany. The criterion used is the date "Member since" and the date "Member until" (only current members) and the field "State". The pdf document contains the graphic and a table: federal states as rows, number of members as columns.

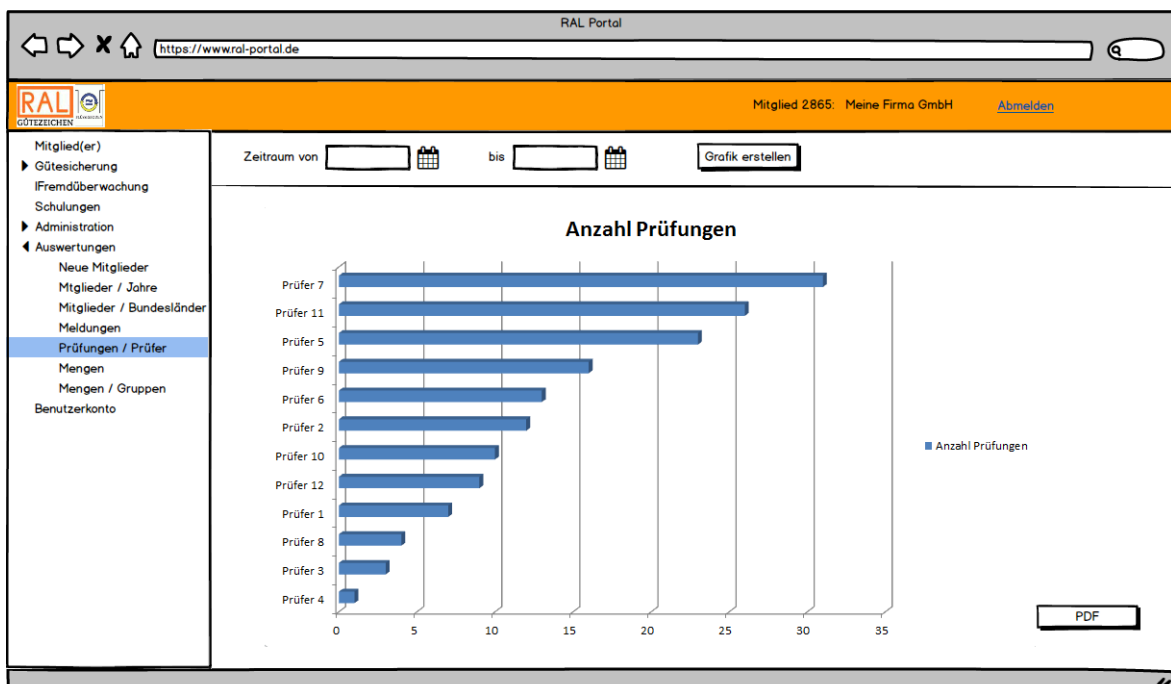


## 10.4 Notifications by years (Meldungen nach Jahren)

This evaluation shows the number of single and collective notifications broken down by year. The last 10 years are preset. The date "reported on" and the total amount are used as criteria. The desired period can be selected in the top bar. The last 10 years are preset. The PDF document contains the above graphic and a table: years as lines, quantity and number of reports per individual and group reports, including total amounts.



## 10.5 Audits by auditors (Prüfungen nach Prüfer)

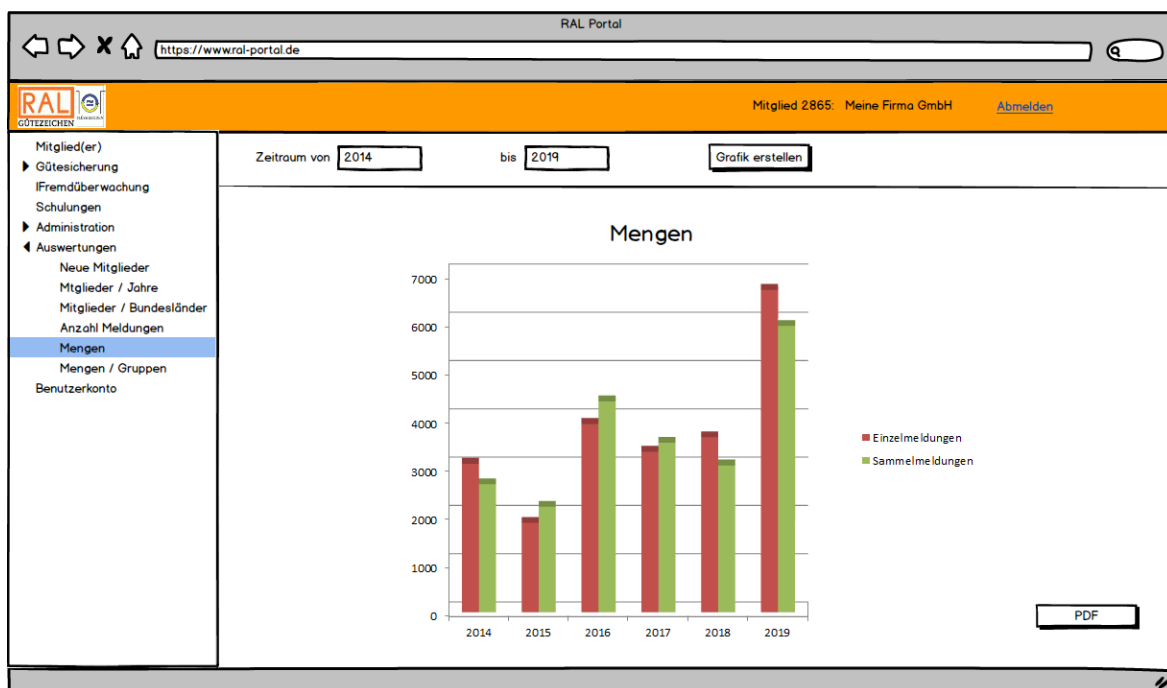


This evaluation compares the number of audits of the individual auditors. The decisive factor is the test date. The date specified in the last final report is used for this. When outputting as a PDF document, in addition to the graphic, a list of the tests is also listed, grouped by auditor and sorted by auditing date. The following data is output:

- Tester
- Date of the audit
- Member (name, place)
- Type of notification (single, collective notification)
- Notification name (for single notification)
- Amount

The current year (January 1 to the current date) is preset as the period.

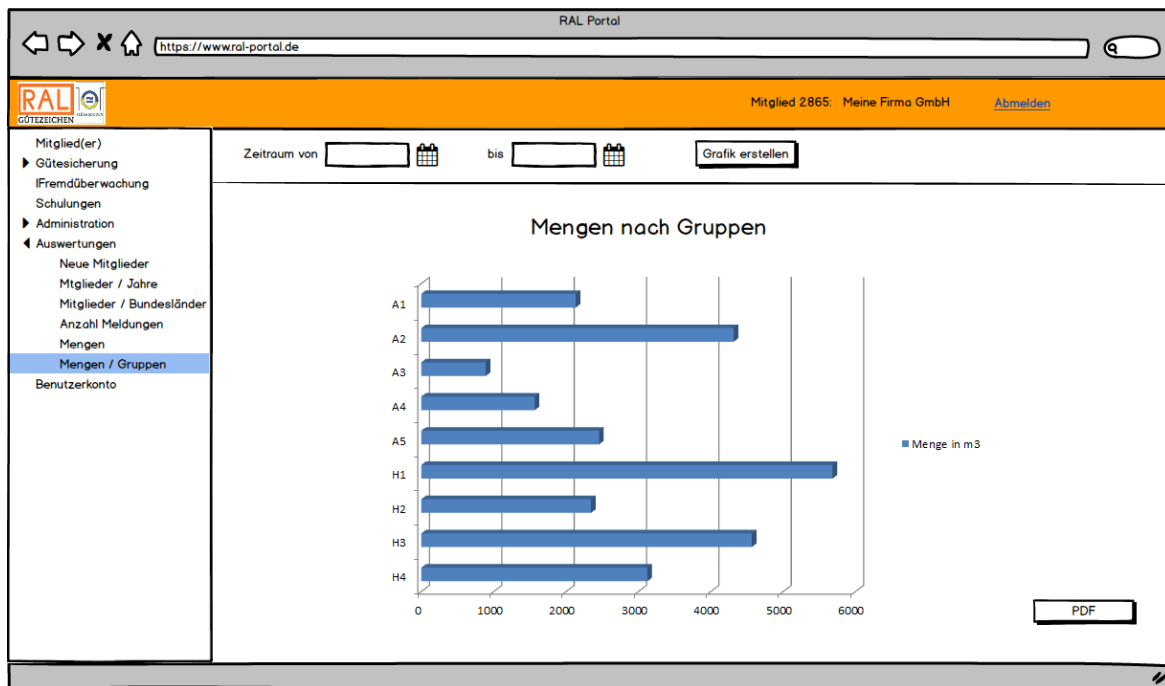
## 10.6 Quantity by years (Mengen nach Jahren)



This graphic compares the corresponding reported quantities broken down by year. The last 10 years are preset. The reported quantities are summed up. The PDF document contains the graphic above and a table: the years as rows, single and collective reports (quantity + number of audits) as columns, plus total amounts.

## 10.7 Quantity by groups (Mengen nach Gruppen)

The next graphic shows the reported quantities broken down by group. The relevant period is entered at the top. The current year is preset. The PDF document contains the graphic and a table: groups as rows, quantity + number of notifications as columns, including totals.





## 11 Administration

### 11.1 Assignment of auditors (Prüfer zuordnen)

After some criteria are fulfilled (e.g. last audit more than two years ago) ab auditor must be assigned to a member in order to do an audit. This task is carried out by RAL employees. These get the following overview:

The screenshot shows the 'RAL Portal' interface for assigning auditors. The top navigation bar includes the RAL logo and the user's session information: 'Mitglied 2865: Meine Firma GmbH' and a link to 'Abmelden'. The left sidebar contains a menu with options: 'Mitglied(er)', 'Gütesicherung', 'iFremdüberwachung', 'Schulungen', 'Administration' (selected), 'Prüfer zuordnen' (highlighted), 'Gerätetypen', 'Eigenüberwachung', 'Systemeinstellungen', and 'Benutzerkonto'. The main content area features a search form with the following fields: 'Suchen nach' (dropdown), 'Mitglied' (text input), 'Meldungs-Nr.' (text input), 'PLZ / Ort' (text input), 'Prüfer' (text input), 'ab Beginn' (date picker), and 'bis Ende' (date picker). There is a checkbox labeled 'ohne' and a 'Suchen' button. Below the search form is a table with the following columns: 'Mitglied', 'GZ', 'GZ seit', 'letzte Prüfung', and 'Menge'. The table contains 10 rows of data, each with an 'Edit' icon (pencil) and a 'Person' icon.

*Members to be assigned*

The user can restrict the search according to the following criteria:

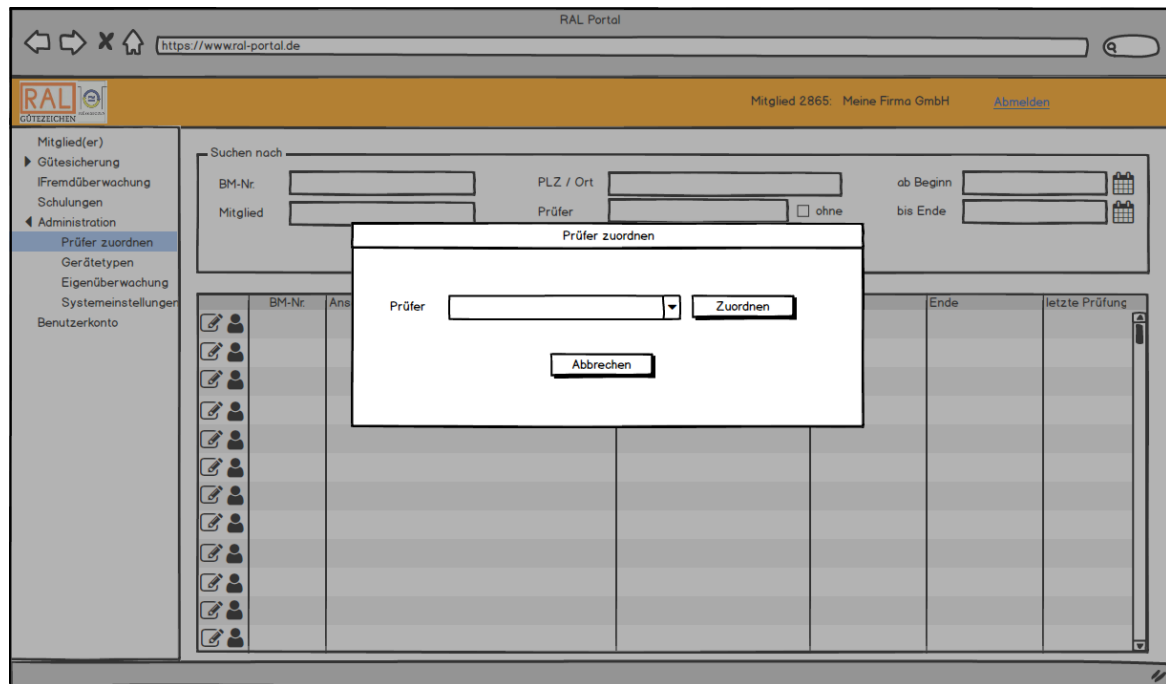
- Member name (only part of the name has to be entered)
- Notification no.
- ZIP code or town (the town name only has to be entered partially)
- Name of the auditor (only part of the name has to be entered)
- Whether to search for members who have not yet been checked already
- From what date of the last audit
- By what date of the last audit

The table shows:

- Name of the member
- Associated quality marks
- Date of the last seal of approval
- Date of the last audit (date of the corresponding final report)
- Quantities reported since the date of the last check (single or, collective notifications)

If a search field is not entered, it will only be used for the search. To view details of a single message, the user clicks on the "Edit" icon. To assign an examiner, the user clicks on the "person" symbol. A new page

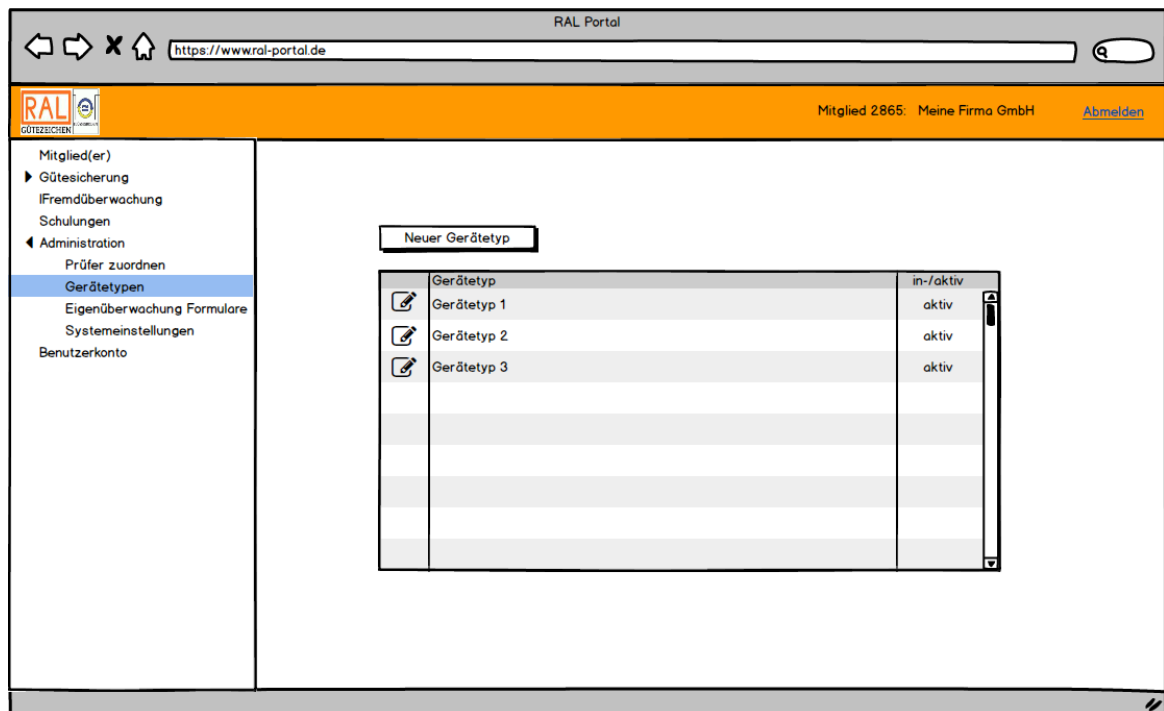
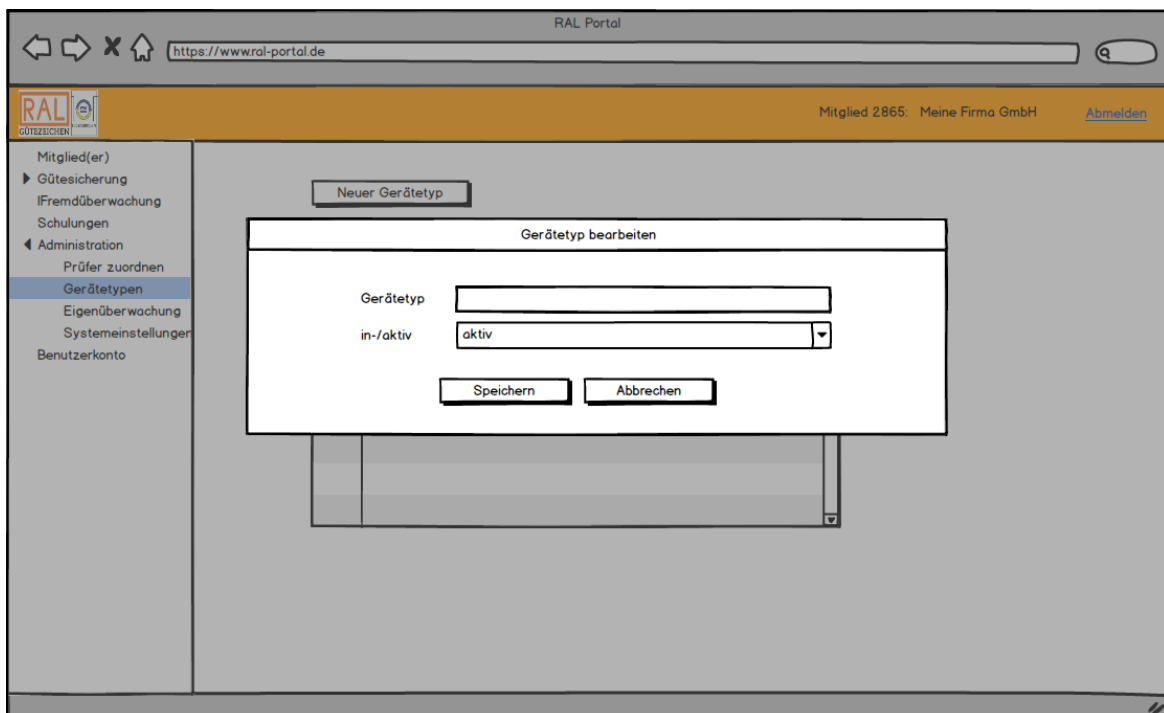
opens where he can select and save the auditor. If an auditor has been assigned to a report, two emails are automatically sent: an email to the auditor informing him of the audit to be carried out and an email to the member to be audited. The texts for these emails are still to be determined. The user can also choose not to run a check. If it has been decided not to carry out a test, the entry "No test" appears in the "Last test" column.



*Assigning auditors*

## 11.2 Device types (Gerätetypen)

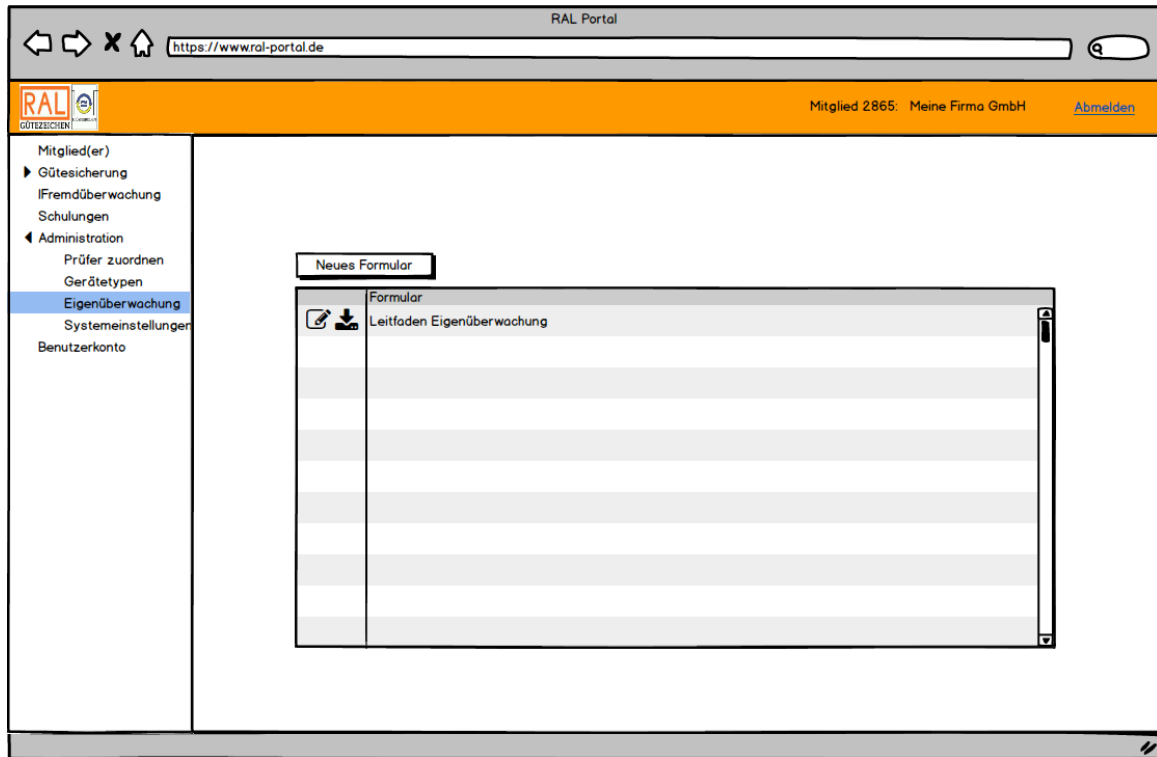
Device types are used when specifying the device equipment. Which devices are listed in the device configuration is managed here. First, the device types created so far are displayed. A new type can be created by clicking on "Neuer Gerätetyp" (new device type). A type can be changed by clicking on the "Edit" symbol or the device type name.

*Device types, overview**Edit device type*

Only active device types are displayed in the device configuration of the members.

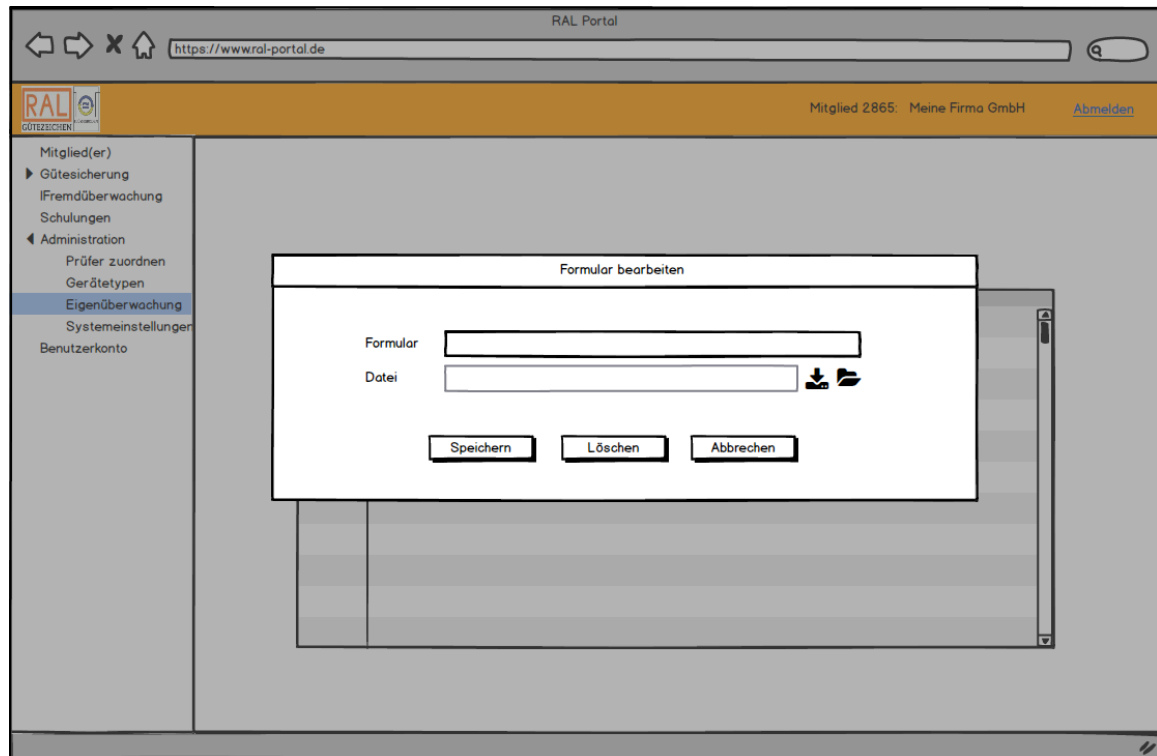
### 11.3 Self auditing formulars (Eigenüberwachung Formulare)

This function is used to upload forms that members can download for self-auditing. Only RAL employees can select this function. You can upload a new form by clicking the "Neues Formular" (new formular) button or edit an existing form (upload new PDF, change name) by clicking the "Edit" icon.



*Formular overview*

If a RAL employee clicks on "Neues Formular" (new formular) or an edit symbol, the following page appears. Here he can change the name of the form, upload a new PDF document or delete the form.



*Administration: neues Formular / Formular bearbeiten*

## 11.4 System settings (Systemeinstellungen)

The system settings contain information that is important for the entire system. This is the following information:

Title	Purpose, notes
Mailadresse (mail address)	Mail address to which all mail sent by the system to RAL is addressed. This affects e.g. the mail when a member sends changes to their member data.
Max. Größe der Prüfberichte (maximum size of audit reports)	Audit reports should not exceed a certain size (in MB). This size can be set here.
letzter Import (last import)	Date and time of the last data import from the business manager. This is information and cannot be changed here.

The screenshot shows a web browser window titled "RAL Portal" with the URL "https://www.ral-portal.de". The page has an orange header bar with the RAL logo on the left and the text "Mitglied 2865: Meine Firma GmbH" and a link "Abmelden" on the right. A left sidebar contains a menu with the following items: "Mitglied(er)", "Gütesicherung", "IFremdüberwachung", "Schulungen", "Administration" (expanded), "Prüfer zuordnen", "Gerätetypen", "Eigenüberwachung", "Systemeinstellungen" (highlighted), and "Benutzerkonto". The main content area displays three settings: "Mailadresse" with a text input field, "max. Größe der Prüfberichte" with a numeric input field set to "15" and the unit "MB", and "letzter Import" with a text input field. At the bottom of the settings are two buttons: "Speichern" and "Abbrechen".

RAL Portal  
https://www.ral-portal.de

Mitglied 2865: Meine Firma GmbH [Abmelden](#)

Mitglied(er)  
▶ Gütesicherung  
IFremdüberwachung  
Schulungen  
◀ Administration  
Prüfer zuordnen  
Gerätetypen  
Eigenüberwachung  
Systemeinstellungen  
Benutzerkonto

Mailadresse

max. Größe der Prüfberichte  MB

letzter Import

## 12 User account (Benutzerkonto)

Every user can change their password. He calls this function "user account". There he enters the desired password and confirms this. If he clicks on "Speichern" (save) and both passwords are identical, the new password is stored encrypted in the database.

The screenshot shows a web browser window titled "RAL Portal" with the URL "https://www.ral-portal.de". The page has an orange header bar with the RAL logo on the left, the text "Mitglied 2865: Meine Firma GmbH" in the center, and a link "Abmelden" on the right. A left sidebar menu contains the following items: "Mitglied(er)", "Gütesicherung", "IFremdüberwachung", "Schulungen", "Administration", "Auswertungen", and "Benutzerkonto" (which is highlighted). The main content area displays a form for changing the password with three input fields labeled "Benutzer", "Kennwort", and "Kennwortbestätigung". Below these fields are two buttons: "Speichern" and "Abbrechen".

## 13 Data base structure

### 13.1 Table: Audit

Column name	Data type	Purpose, notes
Auditid	Integer	Unique identifier. Will be generated by the system.
Assignedby	Integer	→ User User who has done the assignment
Auditorid	Integer	→ User
Dateassigned	Date	Date of assigning
Datefinal	Date	Date of last upload of final audit report
Memberid	Integer	→ Member Id of related member

### 13.2 Table: Auditreport

The reports uploaded by the auditors are created here. The most recently uploaded interim and final report is displayed. The previous reports are only available to RAL employees via the archive.

Column name	Data type	Purpose, notes
Berichtid	Integer	Unique identifier. Will be generated by the system.
Auditid	Integer	→ Audit Id of related audit
Date	Datum	Date of report, entered by auditor
Dateuploaded	Datetime	Date of upload
Type	Smallinteger	Type of report 1 = interim report 2 = final report

### 13.3 Table: Certificate

This table contains the employee certificates.

Column name	Data type	Purpose, notes
Certificateid	Integer	Unique identifier. Will be generated by the system.
Datefrom	Date	The certificate is valid from
Dateinfo	Date	Date when the employee was informed that the validity of this certificate will soon expire.
Dateto	Date	The certificate is valid until
Employeeid	Integer	→ Employee



### 13.4 Table: Collectivenotification

Column name	Data type	Purpose, notes
Notificationid	Integer	Unique identifier. Will be generated by the system.
Auditorid	Integer	→ Auditor Id of related auditor
Datereported	Date	Date when the notification has been reported (created)
Document	Blob	From member uploaded PDF document
Memberid	Integer	→ Member Id of related member
Notificationno	Varchar(20)	Notification number
Quantityh1	Decimal	Quantity H1 in m <sup>3</sup>
Quantityh2	Decimal	Quantity H2 in m <sup>3</sup>
Quantityh3	Decimal	Quantity H3 in m <sup>3</sup>
Quantityh4	Decimal	Quantity H4 in m <sup>3</sup>
Quantitya1	Decimal	Quantity H5 in m <sup>3</sup>
Quantitya2	Decimal	Quantity A1 in m <sup>3</sup>
Quantitya3	Decimal	Quantity A2 in m <sup>3</sup>
Quantitya4	Decimal	Quantity A3 in m <sup>3</sup>
Quantitya5	Decimal	Quantity A4 in m <sup>3</sup>

### 13.5 Table: Country

Column name	Data type	Purpose, notes
Countryid	Integer	Unique identifier (will be fetched from business manager)
Country	Varchar(30)	Country name

### 13.6 Table: Device

Which device types and how many are available to the member.

Column name	Data type	Purpose, notes
Deviceid	Integer	Unique identifier. Will be generated by the system.
Devicetypeid	Integer	→ Devicetype
Memberid	Integer	→ Member
Quantity	Smallinteger	Number of devices o this device type

### 13.7 Table: Devicetype

Column name	Data type	Purpose, notes
Devicetypeid	Integer	Unique identifier. Will be generated by the system.
Devicetype	Varchar(60)	Name of device type

### 13.8 Table: Employee

Column name	Data type	Purpose, notes
Employeeid	Integer	Unique identifier. Will be generated by the system.
Active	Smallinteger	1 = active 2 = inactive
Contactpersonid	Integer	Is taken over by the bm from: internal address ID of the contact person in the bm.
Firstname	Varchar(60)	First name
Lastname	Varchar(60)	Last name
Mailaddress	Varchar(100)	Mail address
Memberid	Integer	→ Member
Mobile	Varchar(100)	Mobile number
Phone	Varchar(100)	Phone number
Position	Varchar(60)	Position of employee in company
Salutation	Smallinteger	Salutation: 1 = Herr / Mr. 2 = Frau / Mrs.
Title	Varchar(20)	Title

### 13.9 Table: Formular

Column name	Data type	Purpose, notes
Formularid	Integer	Unique identifier. Will be generated by the system.
Formular	Blob	The formular as PDF-Datei
Label	Varchar(60)	Name of formular
Name	Date	Date of last upload of file

### 13.10 Table: Member

Column name	Data type	Purpose, notes
Memberid	Integer	Unique identifier. Corresponds to addressid if member in bm.
City	Varchar(40)	City name
Countryid	Integer	→ Country
Internet	Varchar(100)	URL of homepage
Memberno	Varchar(20)	Number of member (customer no in bm)
Name1	Varchar(60)	Name of member (1. line)
Name2	Varchar(60)	Name of member (2. line)
Name3	Varchar(60)	Name of member (3. line)
Otherdevices	Text	List of the other devices of the member in text form
Phone	Varchar(100)	Phone number
State	Varchar(20)	State in Germany
Status	Smallinteger	1 = active 2 = inactive
Street	Varchar(40)	Street and house number
Zipcode	Varchar(10)	Zip code

**13.11 Table: Notificationdevice**

Column name	Data type	Purpose, notes
Notificationdeviceid	Integer	Unique identifier. Will be generated by the system.
Devicetypeid	Integer	→ Devicetype Id of related device type
Notificationid	Integer	→ Singlenote Id of related single notification

**13.12 Table: Notificationemployee**

Column name	Data type	Purpose, notes
Notificationemployeeid	Integer	Unique identifier. Will be generated by the system.
Date	Date	Date of internal test
Employeeid	Integer	→ Employee Id of employee (Personal)
Notificationid	Integer	→ Singlenotification Id of related single notification

**13.13 Table: Notificationprotocol**

Im Rahmen der Einzelmeldung hochgeladene Unterweisungsprotokolle (Karte „Personal“).

Column name	Data type	Purpose, notes
Notificationprotocolid	Integer	Unique identifier. Will be generated by the system.
Dateprotocol	Date	Date of protocol
Dateupload	Date	Date of uploading the protocol
Filename	Varchar(60)	File name of uploaded document
Notificationid	Integer	→ Singlenotification Id of related single notification
Protocol	Blob	Uploaded protocol (PDF)

**13.14 Table: Nullnotification**

Column name	Data type	Purpose, notes
Notificationid	Integer	Unique identifier. Will be generated by the system.
Dateend	Date	End date
Datefrom	Date	Starting date
Datereported	Date	Date of reporting notification
Memberid	Integer	→ Member Id of related member

### 13.15 Table: Participant

Column name	Data type	Purpose, notes
Participantid	Integer	Unique identifier. Will be generated by the system.
Date	Date	Date of registration
Employeeid	Integer	→ Employee
Lendtablet	Smallinteger	0 = no tablet needed for lending 1 = tablet needed for lending
Memberid	Integer	→ Member
Overnightstay	Smallinteger	0 = no overnight stay needed 1 = overnight stay needed
Trainingid	Integer	→ Training

### 13.16 Table: Selfaudit

Protocols uploaded by the member as part of self-auditing.

Column name	Data type	Unique identifier
Protokollid	Integer	Unique identifier
Bezeichnung	Varchar(60)	Name of the protocol. This is automatically adopted by the selected type, but can be overwritten by the member.
Dateuploaded	Date	Date of uploading
Filename	Varchar(60)	Name of uploaded file (PDF), automatically set by system during upload
Memberid	Integer	→ Member Id of related member
Protocol	Blob	Protocol PDF file
Type	Smallinteger	Type of protocol 1 = Laborprotokoll 2 = Volumenstabilität 3 = Ausbreitmaß 4 = Eigenfeuchte 5 = Sonstiges

### 13.17 Table: Singlenotification

This table contains the single notifications.

Column name	Data type	Purpose, notes
Notificationid	Integer	Unique identifier. Will be generated by the system.
Auftraggeber	Varchar(60)	Name of client
Begin	Date	Begin of building project
City	Varchar(40)	City name
Clientcity	Varchar(40)	City name of address if client
Clientphone	Varchar(100)	Phone number of client
Clientstreet	Varchar(40)	Street and house number of address if client
Clientzipcode	Varchar(10)	Zip code of address of client
Country	Integer	→ Country
Datereported	Date	Date of notification
End	Date	Ende of building project
Gsbid	Integer	→ Employee Employeeid of „Gütesicherheitsbeauftragten“
Label	Varchar(100)	Name (B-Plan, Los)
Memberid	Integer	→ Member Id of related member
Notificationno	Varchar(20)	Number of notification
Producermeasure	Char(2)	Producer measure
Quantity	Decimal	Quantity in m <sup>3</sup>
Street	Varchar(40)	Straße und Hausnummer
Usermeasure	Char(2)	User measure
Zipcode	Varchar(10)	Zip code

### 13.18 Table: System

Diese Tabelle beinhaltet die Systemeinstellungen für das RAL-Portal. Diese Tabelle enthält nur einen Datensatz mit systemid=1.

Column name	Data type	Purpose, notes
Systemid	Integer	Unique identifier
Lastimport	Datetime	Date and time of the last import from the business manager
Mailaddress	Varchar(100)	Mail address to which system messages and messages from members are sent.
Maxsizee	Decimal	Maximum size of an interim / final report in MB

**13.19 Table: Training**

Column name	Data type	Purpose, notes
Trainingid	Integer	Unique identifier. Will be generated by the system.
City	Varchar(60)	City name
Dateend	Date	Date of training end
Datestart	Date	Date of training start
Participants	Smallinteger	Number of participants
Profile	Blob	Profile as PDF-Datei
Status	Smallinteger	1 = activc 2 = inactive

**13.20 Table: User**

Column name	Data type	Purpose, notes
Userid	Integer	Unique identifier. Will be generated by the system.
Contactpersonid	Integer	This ID is adopted by the bm and corresponds to the address ID of the person (the user) in the bm.
Firstname	Varchar(60)	First name
Languageode	Char(2)	International code of lanuage used by the user. By now automatically set to „DE“.
Lastname	Varchar(60)	Last name
Mailaddress	Integer	Mail address and login name
Password	Varchar(50)	Enrypted password
Organisationid	Integer	This ID is adopted by the bm and corresponds to the address ID of the organization (e.g. member) of the user in the bm. Only if the user is a primary contact of a member does this ID match the member ID in the member table.
Role	Smallinteger	Role of user: 1 = Member 2 = Auditor 3 = RAL employee
Salutation	Smallinteger	Salutation: 1 = Herr / Mr. 2 = Frau / Mrs.
Status	Smallinteger	1 = aktive 2 = inaktive
Title	Varchar(20)	Title