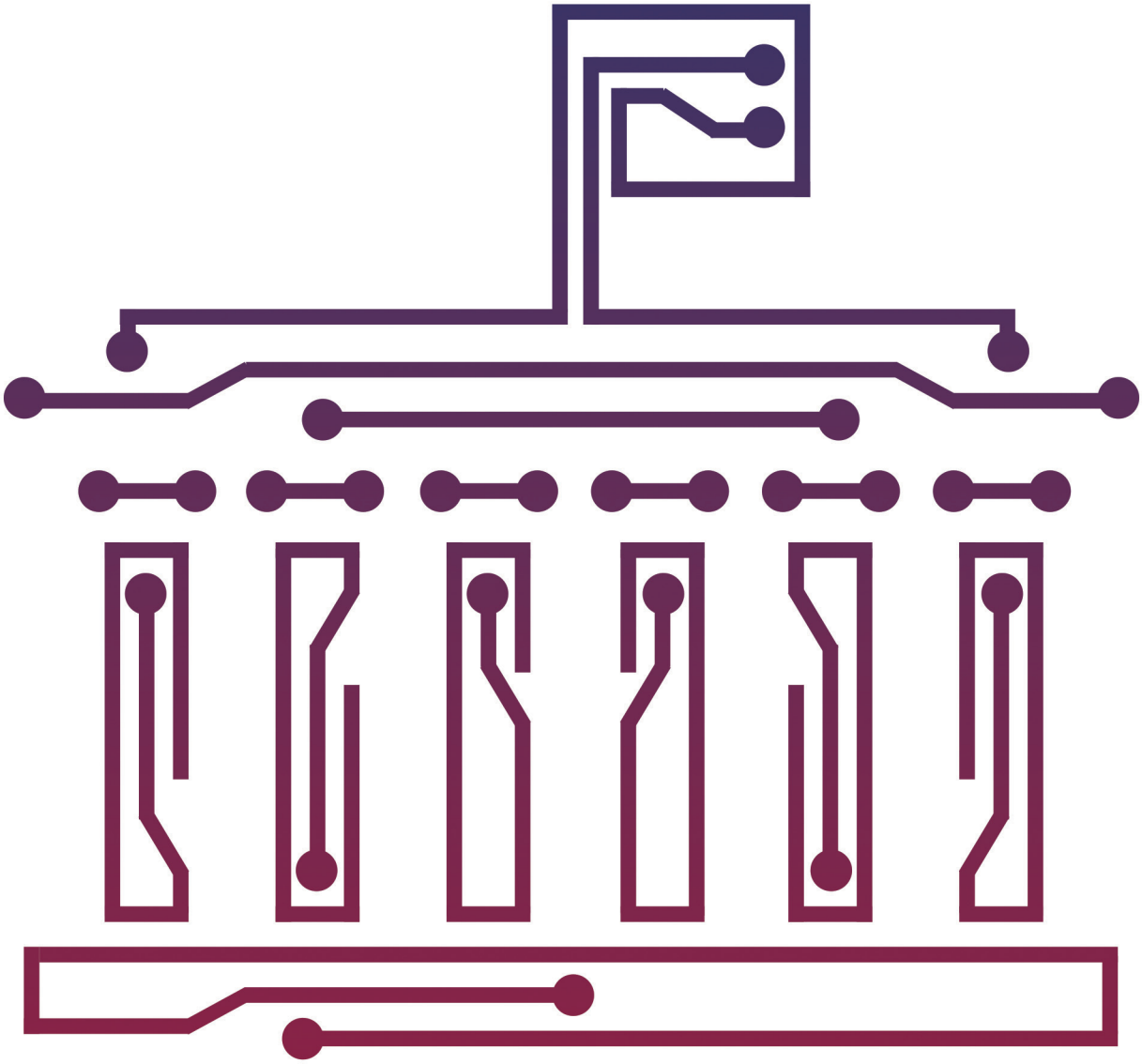
PEMPAL



DIGITAL PLATFORM

FOR PUBLIC INTERNAL CONTROL AND INTERNAL AUDIT MONITORING AND REPORTING

MANUAL

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Abbreviations

CHU	Central Harmonization Unit
IA	Internal Audit
IACOP	Internal Audit Community of Practice
IC	Internal Control
PEMPAL	Public Expenditure Management Peer Assisted Learning network
PIC	Public Sector Internal Control

Acknowledgements

The Internal Audit Community of Practice (IACOP) would like to thank members and global experts for their contributions to the development of the Digital Platform for Public Internal Control and Internal Audit Monitoring and Reporting. Special thanks for their input to this User Manual and the Digital Platform are extended to:[1] Ruslana Rudnitska, Maxym Tymohin, PIFC Experts, Ukraine; Arman Vatyan, PEMPAL Program Leader, World Bank; Petru Babuci, IACOP Deputy Chair, Republic of Moldova; Albana Gjinopulli, Central Harmonization Unit Challenges Working Group Leader, Albania; Nuriia Mursalieva, IACOP Member, Kyrgyz Republic; Diana Grosu-Axenti and Lusine Grigoryan, IACOP Resource Team, World Bank.

1 In the order of contribution

What are PEMPAL and IACOP?

PEMPAL is a network to facilitate exchange of professional experience and knowledge transfer among public financial management practitioners in countries across the Europe and Central Asia Region. The network, launched in 2006, aims to contribute to strengthening public financial management practices in member countries through developing and disseminating information on good practices and their application.

PEMPAL organizes around three thematic communities of practice:

- Budget Community of Practice,
- Treasury Community of Practice, and
- Internal Audit Community of Practice (IACOP).

The main overall objective of the IACOP is to support its member countries in establishing modern and effective internal audit systems that meet international standards and good practices, important for good governance and accountability in the public sector.

The key donors and development partners to the program are the Swiss State Secretariat for Economic Affairs, the World Bank, and the European Commission. The Dutch National Academy for Finance and Economics and other partners provides non-financial support.

This document is one in a series of IACOP knowledge products. Others, all available from www.pempal.org, include:

- Good Practice Internal Audit Manual Template
- Good Practice Continuing Professional Development Manual Template
- Internal Audit Body of Knowledge
- Risk Assessment in Audit Planning
- Cooperation Among Public Sector Audit and Financial Inspection Entities
- Quality Assessment and Improvement Guide
- PEMPAL Guidance on Internal Audit: Demonstrating and Measuring Added Value
- Key Performance Indicators for Internal Audit Function
- Impact of COVID-19 on the Role and Activities of Internal Audit
- Assessing the Effectiveness of Internal Control: PEMPAL Guidance for Public Sector Internal Auditors
- Guidance on Monitoring of the Internal Audit Function by the Central Harmonization Unit
- IT Audit. Practical Guidance for Internal Auditors in the Public Sector

Preface

PEMPAL IACOP member countries are very interested in digitalization of reporting and monitoring of internal audit and internal control activities. To meet this strong demand, the IACOP community and the resource team have developed an IT tool – the Digital Platform for Public Internal Control and Internal Audit Monitoring and Reporting.

The Digital Platform supports online collection, consolidation, monitoring, and analysis of the internal control (IC) and internal audit (IA) status in the public sector at country level or in organizations. It is designed to be used in central government, for example by a central harmonization unit (CHU) within the ministry of finance which is responsible for overseeing an effective public internal control (PIC) system and providing assurance to the government, parliament, and wider public.

Main CHU roles are to develop and oversee policies on IC and IA and to establish the necessary legal and methodological frameworks and monitor their implementation, updating as necessary. The CHU should provide regular reporting presenting key PIC data and identifying any areas of concern and undertake monitoring of compliance with standards/ regulations/methodology and quality/added value. Monitoring provides the basis for determining how well IA is functioning in the public sector and the results should be reported annually to the government.

The Digital Platform for Public Internal Control and Internal Audit Monitoring and Reporting supports PEMPAL IACOP member countries to improve efficiency of IC and IA consolidated reporting by allowing CHUs to digitalize several important tasks:

- Generate public sector organizations' IC and IA status reports (including vertical and horizontal consolidation of reported data within public sector organizations);
- Verify IC and IA status report data (through arithmetic, logical, and other types of verification);
- Check for completeness and timeliness of IC and IA status reporting as per established regulations;
- Produce consolidated managerial reporting, statistical and analytical data, and graphic representation of the status of public sector IC and IA.

The Digital Platform has been developed as a flexible tool that can easily be adapted to the country circumstances, legal and regulatory requirements, and practices. It is free of charge and open source. [DG1]

This User Manual aims to support implementation of the Platform by illustrating, describing, and explaining the Platform's functionality and how to use its practical features, including setup; types of user and process of registration; IC and IA reporting template and operational specifics, ways to consolidate reports, analytical possibilities for comparison and visualization, and using the activity log. The User Manual can be used by different stakeholders such as CHU, IT and IC managers, and specialists or internal auditors.

Any PEMPAL country that is interested in using the Digital Platform is asked to please contact the PEMPAL Secretariat for more information and access.

1. IT platform setup

1.1. Super admin role

Default condition of the IT platform is without any set up. Entering for the first time as super admin to country default IT platform setting page will appear. In settings, page system requests to fill down the relevant information about two main sections.

1.1.1. System general settings setup

Where super admin should fill the information

- System Name
- Country – IT platform operation country.
- Time zone – IT platform time zone for correct notification system.
- System start year – IT platform establishment year, for better reporting and data collection experience.

1.1.2. System Mail Settings setup

Where super admin should fill the data for setting up email SMTP server.

- Mail driver
- Mail host
- Mail port
- Mail username
- Mail password
- Mail encryption
- Mail form address
- Mail form name

Super admin should request this data from governmental IT department. Regularly this data is not available for public use.

Setting page is available only for super admin role user. Development team does not recommend update data about general settings after the set up (mainly the operation year). However, for mail settings no regulations.

2. User manual

2.1. Terminology used in current document

Organizations – represents the government bodies with or without their own vertical structural hierarchy, such as:

- ministry
- agency
- state public sector organization
- other type
- municipalities
- organization of local self-government.

Users of the IT platform are employees of the structural divisions of the Organization.

User type – represents the types of the user based on the types of control.

- Internal control (IC)
- Internal Audit (IA)
- Internal Audit + internal control (IA+IC)
- Central Harmonization unit (CHU)

User role – represents the user accesses in accordance with the functional authority and the vertical structural hierarchy adopted in the organization:

- **Moderator.** So called manager of the organization, exercising control within the framework of his authority over the operations carried out by users of the IT platform of the corresponding organizational hierarchy.
- **Operator.** So called worker of the organization, responsible for the formation and timely provision of data in the IT platform

This document contains information about user manual. Below is described functions

- User types and user roles information
- Organization structures and types
- Registration to Pempal.codeman.am
- Authorization to pempal.codeman.am

2.2. User types and user roles information

IT platform created to help CHU data collection and analysis processes. For making the full product work we need to create all corresponding organizations in selected country, assign users with corresponding user types and roles for management and data collection.

CHU moderator who is going to have the most possible permissions in the system will log in first to the system to create the first direct reportive organizational lines to CHU. After which Moderators of all created organizations should register to IT platform. All registration require moderation and submission by the first moderator from management. For example, see **Figure 1**.

MUST REMEMBER ! **User's registration permission granted by corresponding user type moderator. IA moderator submits the registration request of IA operator.**

NOTE: CHU moderator will see all requests for registration as a matter of control, but is not must to approve.

Every action by any user in the system will be logged for a matter of control. User's activity like filling the form with indicators. Or publishing new reports with indicators will create call-to-action notifications visible in Dashboards of corresponding user.

MUST REMEMBER ! **Within one organization, only one moderator of one user type can be created.**

Figure 1. Example of registration and moderation flow

2.3. Organization structures and types

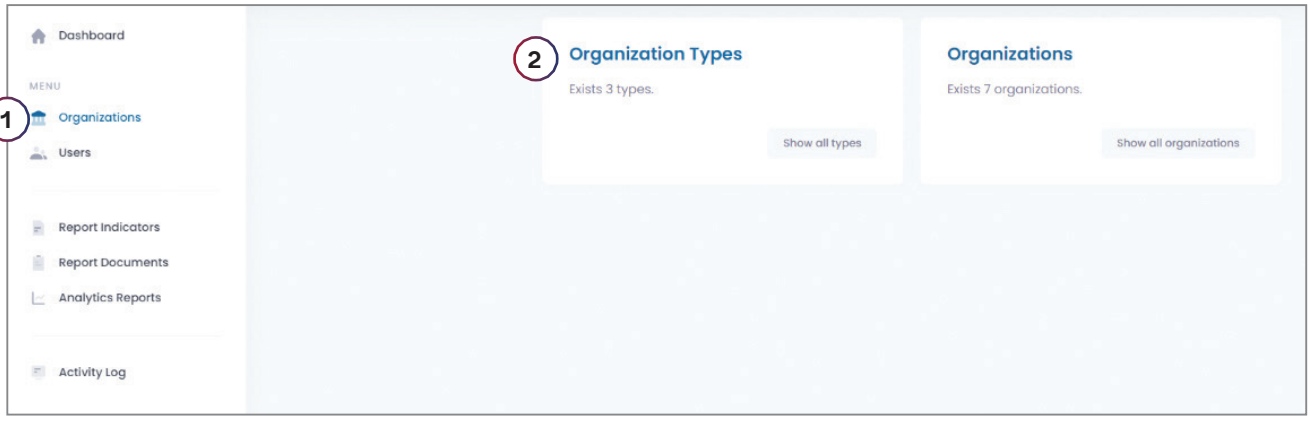
CHU moderator creates organization types dynamically based on corresponding country needs. Organizational types exist to separate organizations in Country Hierarchy. Only CHU moderator account has permission to edit organizational types.

By default, there are three types of organization in first set up IT platform.

- Ministry
- Agency
- Public Sector Organization

Organizational types are available from this link {PEMPAL-DOMAIN}/dashboard/department_type or from menu bar in the screen in **Figure 2**.

Figure 2. Organization types



2.3.1. Information required creating new organization type.

- Type name
- Status
  - **Active** –Visible in system while creating organizations
  - **Passible** – Hidden in system while creating organizations.

After all relevant organizational types are created CHU can move on filling the list of first reportive line governmental organizations creation.

Organizations are available from this link {PEMPAL-DOMAIN}dashboard/departments/tree/view or from menu bar in the screen in **Figure 3**.

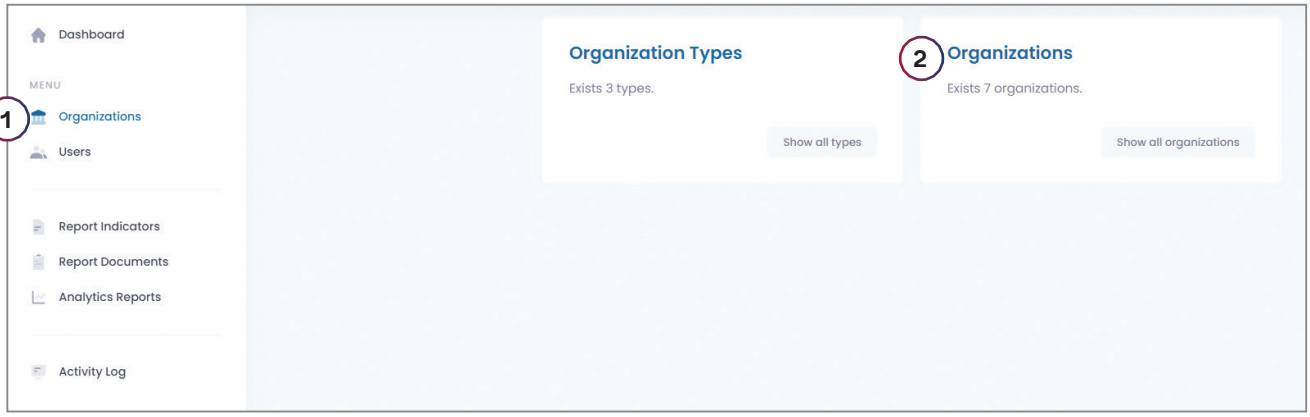
Organizations represented by hierarchy tree. Users positioned in higher hierarchy organization can see below organizational structure. Users positioned Lower hierarchy organization will see only the tree line information where he is located. For example. User from Ministry of Finance will not see the structure information from Ministry of Health.

Organizations reportive to CHU (2nd line in Hierarchy) will see the CHU organization only. Organization lower than 2nd line will not see CHU as a matter of control.

2.3.2. Possible actions on organization tree view.

- **Create Sub organization** – function to create new organization under selected organization.
- **Edit organization** – function to edit information related to selected organization
- **Add member** – Function to add a user to selected organization for already registered users
- **Invite member** – function to invite user to selected organization from outside of platform
- **View all members** – function to see the list of users available in selected organization.

Figure 3. Organizations



2.3.3. Required fields to fill while creating new sub organization.

- Name
- Parent organization – fixed by system, non-editable
- Type – should be fixed from already created organization types
- Has unite separation – tooltip available. Function to separate organization who has central/sub unit's separation.
- Address – organization legal address
- Email – organization contact email address
- Phone – organization contact phone number with a country code.
- Status – function to identify organization is active or passive.
- Additional notes – Additional information related to organization.

2.3.4 Required fields to fill while editing new sub organization.

- Name
- Parent organization – fixed by system, non-editable
- Type – should be fixed from already created organization types
- Has unite separation – tooltip available. Function to separate organization who has central/sub unit's separation.
- Address – organization legal address
- Email – organization contact email address
- Phone – organization contact phone number with a country code.
- Status – function to identify organization is active or passive.
- Additional notes – Additional information related to organization.

2.3.5 Required actions to add new member

- Search for the user by email address or name
- Select the checkbox from the left side of user name
- Select user type from right side of the user name
- Select user role from right side of the user name

2.3.6 Required fields to fill while editing new sub organization.

- Email address of user
- User type by what user will authorize to PEMPAL portal
- User role by what user will authorize to PEMPAL portal
- Organization – non-editable, fixed based on the selected organization.

2.3.7. Organization profile page

Several details are presented on the organizations page, which can help to find desired information about the selected organization. See **Figure 4** for an example.

2.4. Registration to Pempal.codeman.am

For registering, a new user there is two function. Function of invite presented above already. Below you will find the logic of direct registration, by using the direct link to the portal.

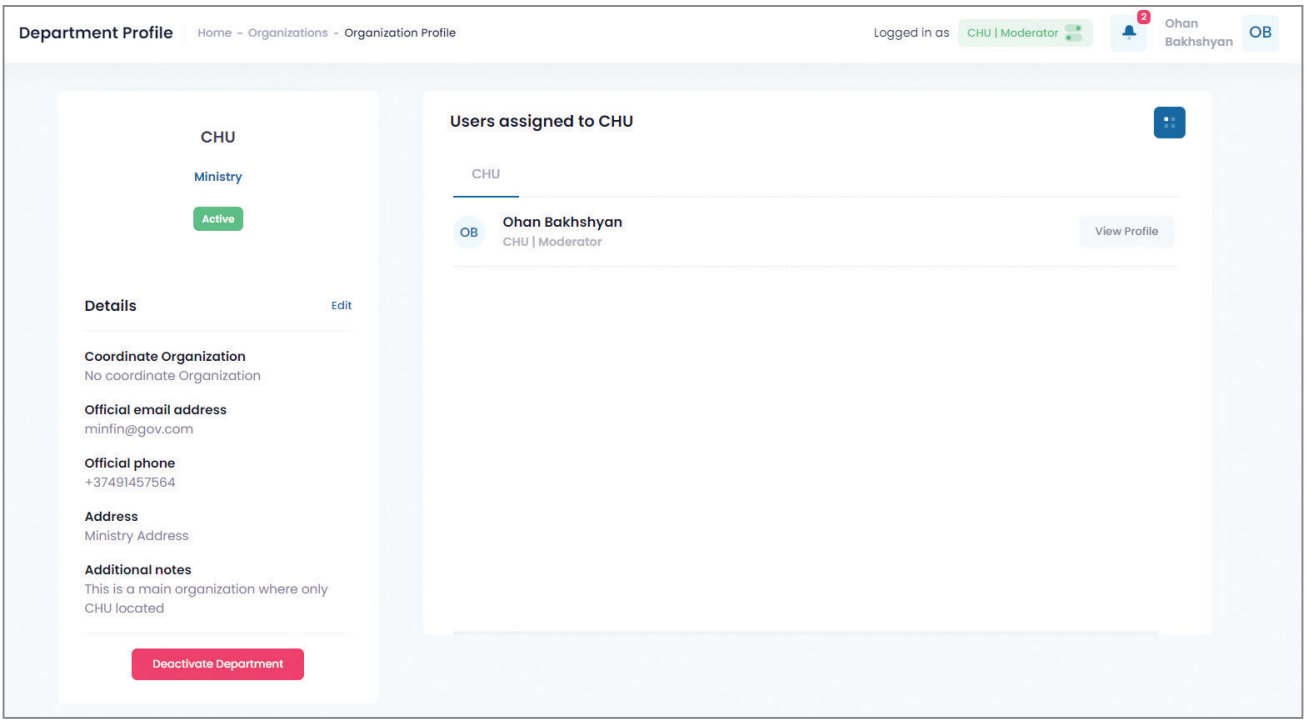
Difference between invitation and direct registration. During invitation user is not filling the information about organization or position. This information is already defined when moderator invites a user. Invitation link is active for 48 hours after being sent. If employee is not registered within 48 hours, inviter should resend the invitation link.

For registering a new account throw public registration link, user must enter to register now from login page.

2.4.1 Steps to complete registration.

- General information
- Organization

Figure 4. Organization profile page



- Account password
- Email verification
- Finalization

2.4.2 Required fields to fill in registration

General information

- First name
- Middle name
- Last name
- Email address (email format validation is active)
- Personal or working number (Phone number country validation is active)

Organization

- Select organization type
- Select organization – if picked organization has a lower level of organizations new input will open to select lower level, if needed.
- Unit – Free input without select to write down the unit user is assigned
- Your position in your unit – what is user position in selected unit
- Select type – user should pick from types list which type of user s/he registers for
- Select role – user should pick from roles list which role user should have
- Add and authorization document – User should upload document of appointment.

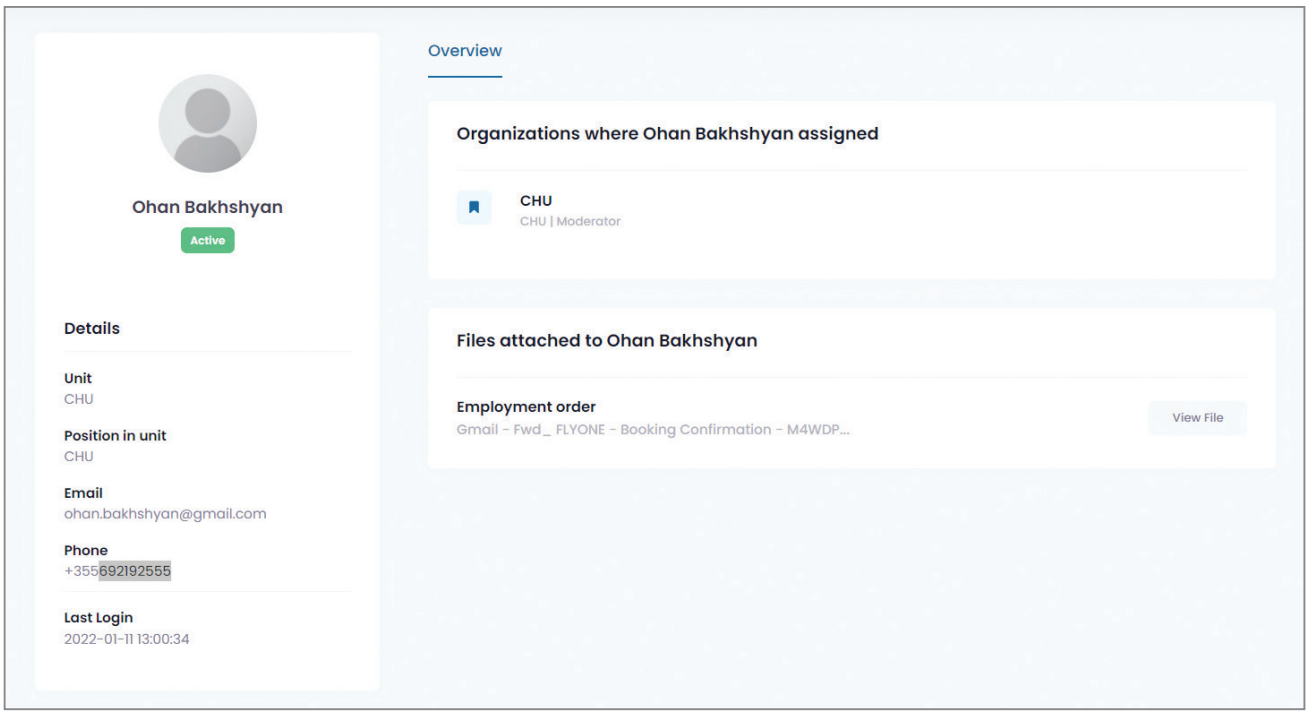
Account password

- Password – password should be strong one, and indicator below will show when password is strong. It is not a must, but recommended to have
- Confirm password – re-enter prewritten password.

Email verification

On given email in general information user will receive verification email. After verification of the email, user's account will be created with a pending status. Further higher-level manager should approve the request of registration.

Figure 5. Data review example



User registration approval

After higher-level moderator receives a request for registration, s/he has possibility to accept, reject or review the profile.

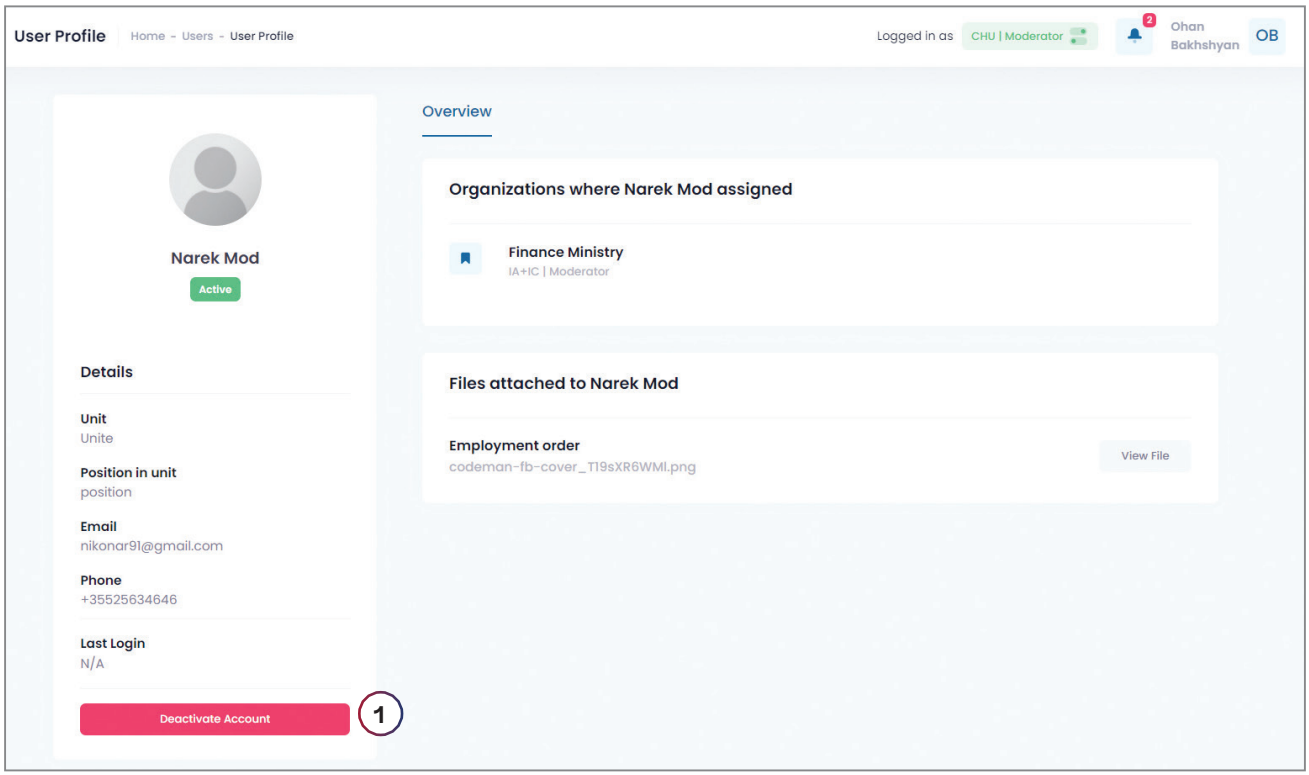
Figure 5 presents what kind of data is available for review by higher-level moderator:

- Name
- Status
- Details like
  - Unit
  - Position in unit
  - Email
  - Phone
  - Last login
  - Approve or reject registration request (not visible as example user is approved)
- Organization where user is assigned
- Scanned copy of the appointment document

After registration request approval, user can log in to PEMPAL portal with {PEMPAL-DOMAIN}/login link.

All emails sent to accounts have a default expiration time 72 hours. If user did not react to already sent email. Moderator should send new email.

Figure 6. Deactivating account example



2.5. Manage account details

This page is for users to review or edit their information provided while registration. User can edit avatar of the profile, data presented in registration. It is not possible to change email address after registration.

User can activate two factor authorization powered by google for security reasons. Every time, as user wants to log in or submit data, they will be requested to enter the code from Google. If two-factor authorization is disabled, user will enter password. This action is close to be e-signature.

2.5.1. User deletion

Every moderator registered in system, have access to deactivation of the users from his organization level to lower levels. For deactivating the user moderator should open user profile page. Users can be found from users section in navigation panel, or through organizations section.

In user profile there is deactivate account button (see **Figure 6**). Hitting it and providing moderators account password, user will be deleted. Deleting user process initiator should provide a reason, why they did so.

3. Indicators creation and reporting

In this section, you can find information about indicators creation and Report publishing. CHU moderator is the only user who has permission to create edit or publish the indicators for further use by other users.

CHU moderator creates indicators based on the defined types units.

- Internal control type
- Internal audit type
- CHU type

3.1. Indicator template creation

To create indicators CHU moderator should enter the "Report indicators" tab from left menu (see **Figure 7**). After which CHU moderator will see the blocks, which separates the types by units (IA, IC and CHU). There are two main actions

1. **View indicators forms** - this will direct CHU moderator to the lists of indicators in table view
2. **Edit name** – this allows CHU moderator to change the block name

When CHU moderator enters to view the indicators form, a table with already created indicators will show. It is possible to create new template of indicators. See **Figure 8**.

Figure 7. Report indicators tab example

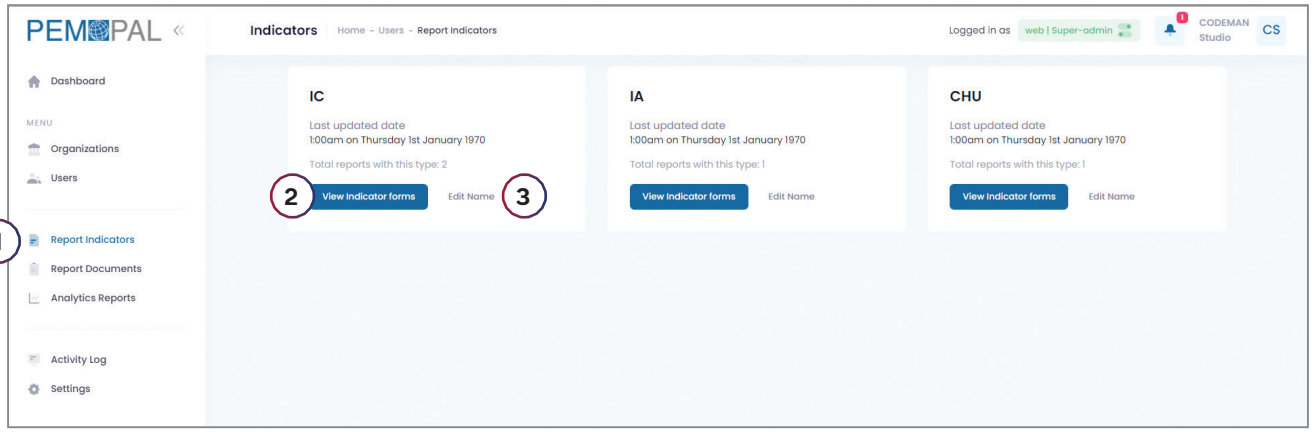
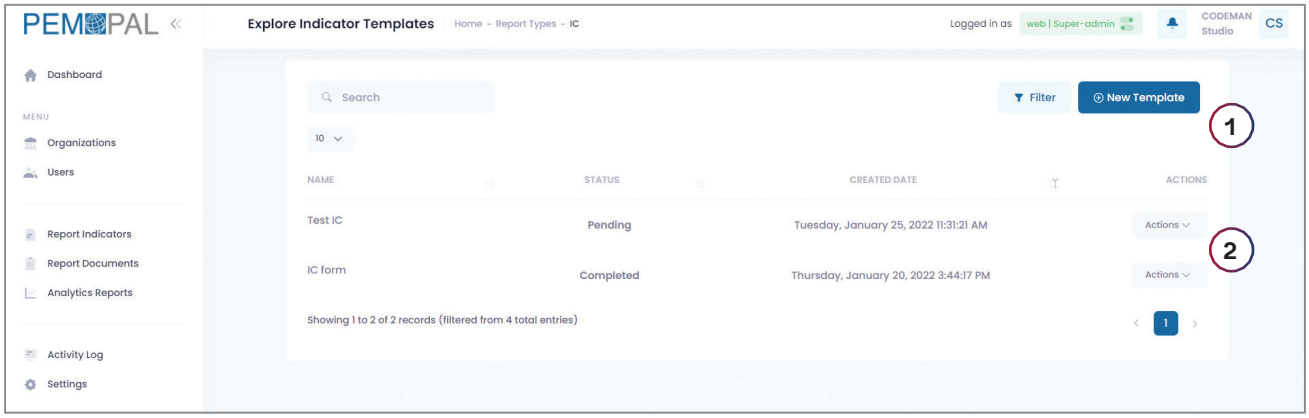


Figure 8. Created indicators table example



For the template, it is possible to do three actions.

- **Edit details** – represents the field where CHU moderator establish the parameters of report publish
- **Edit indicators** – opens the page where CHU moderator can create or edit already created indicators.
- **Preview form** – opens a preview form for already created indicators.

3.1.1. Full indicator list examples

CHU moderator can create, delete, edit and deactivate indicators in selected template. As presented in previous section every template has possibility to edit indicators.

As you can see from **Figure 9**, there is a gradation of the levels. With question sections and sub-sections, which raw is question, required answer from operator, which section is just informative.

MUST REMEMBER ! **Only indicators starting from third level can be answer type.**

Figure 9. Already created indicators view example

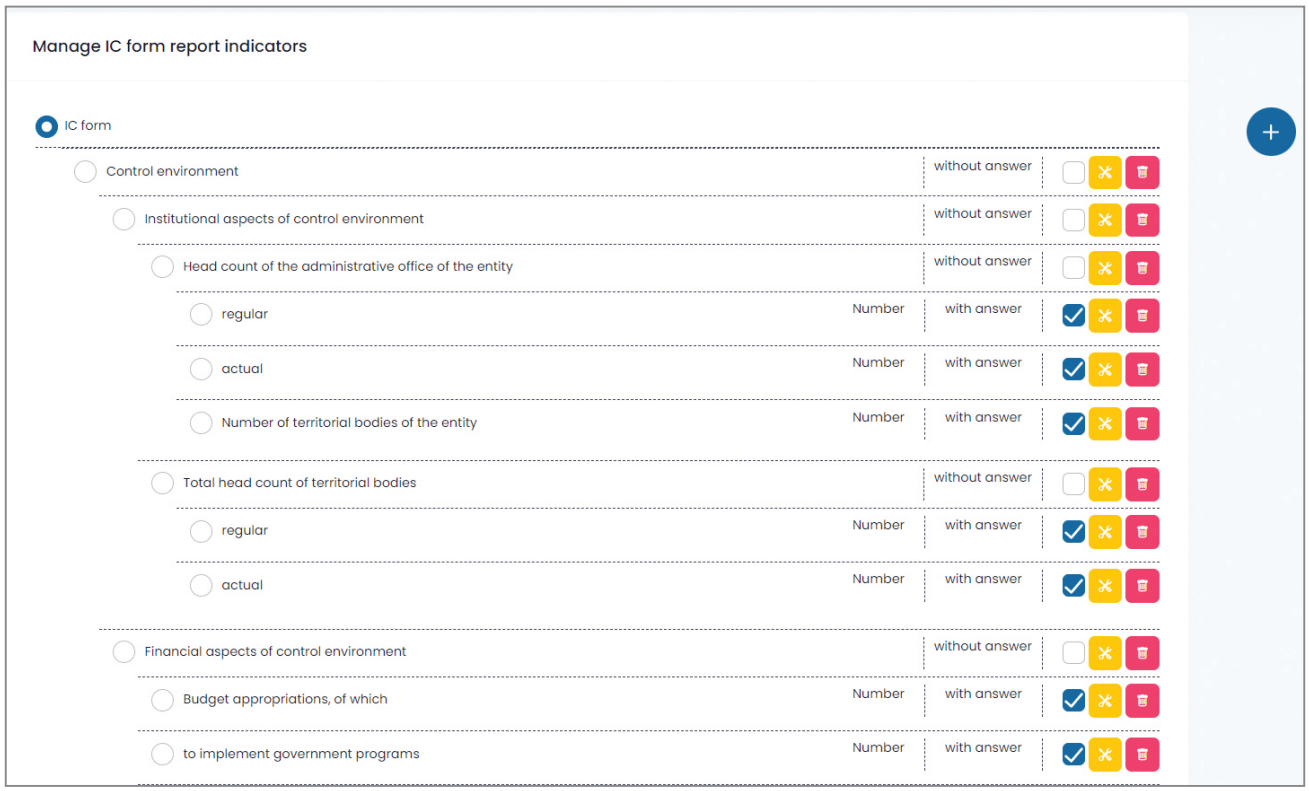


Figure 10. Filled preview example

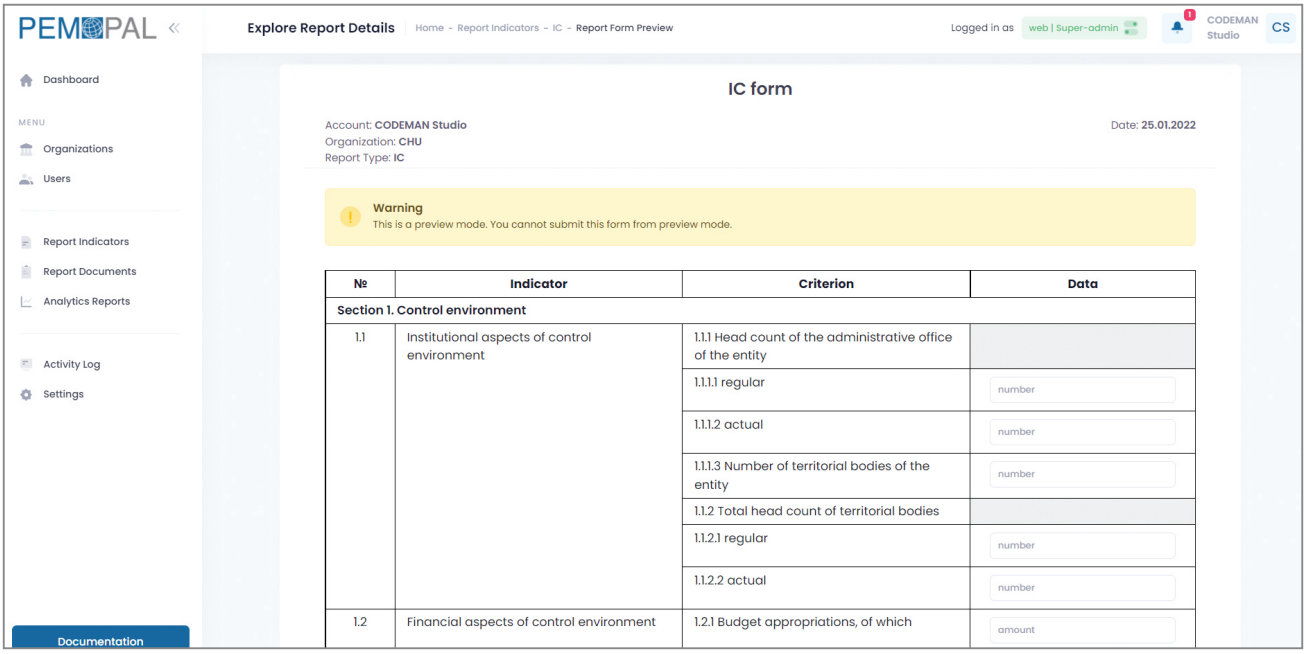


Figure 11. "Starting from zero" view example

Filled preview example in **Figure 10** will make it easy to understand. The screen of preview is the same indicators.

As you can see from **Figure 11** we have only one action to take here "+". This is a logic of creating a gradation. Filled example is above I will go with possibilities.

NOTE: If you click the circle, "+" button will add new line, which is a hierarch sequence to lower level.

3.1.2. Adding new indicator.

Initially as mentioned in note to remember CHU moderator should pick the line under what s/he wants to add a new raw.

Required fields to fill while creating new line:

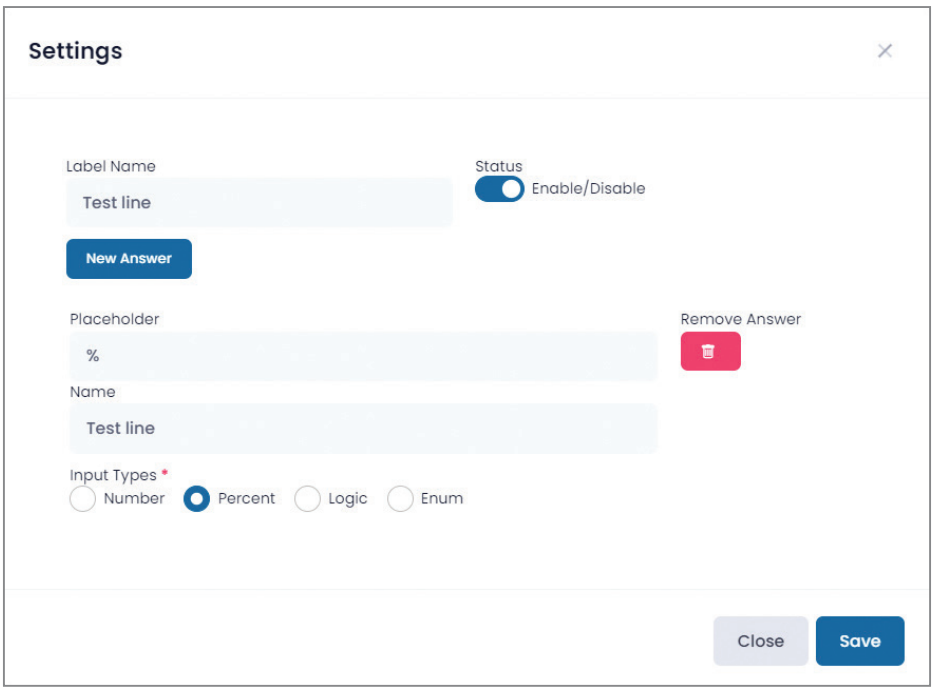
- Section name – this is the only parameter, this represents the name of the representing indicator and criteria name.

After row creation, in **Figure 12** example "test line", it is possible to do: by picking, the checkbox to the right of "without answer" CHU moderator will state that this line is question, and operators should fill it when providing the analytical data. If checkbox is not filled data will not be required and as shown in preview that field will be in Gray. You can see the Name of the line and status. Status provides opportunity to activate or deactivate Indicator.

New answer button will open next required data to fill, to finalize indicator. See **Figure 13**.

Figure 12. After row creation example

Figure 13. New answer example



- Placeholder – this information will display, in the input box to operator, who will understand what kind information is required. Example if the type of indicator is percent, placeholder can be "%" or "percent" up to CHU moderator.
- Name – is the name of indicator within double use. In case, CHU wants to create a logic out of already created indicators. It would be easier to find indicators if you give a proper internal name for search.
- Input types – system identifies 4 times of indicators
  - Number – numerical value
  - Percent – value in percentages
  - Logic – logical connection between two already created indicators (see **Figure 14**). Generally calculates the percent.
  - Enum – this type is for picking yes or no answers (see **Figure 15**). However, the answers not limited to yes or no. It is possible to create new types of answers while creating the indicator

Figure 14. Logical connection between two already created indicators example

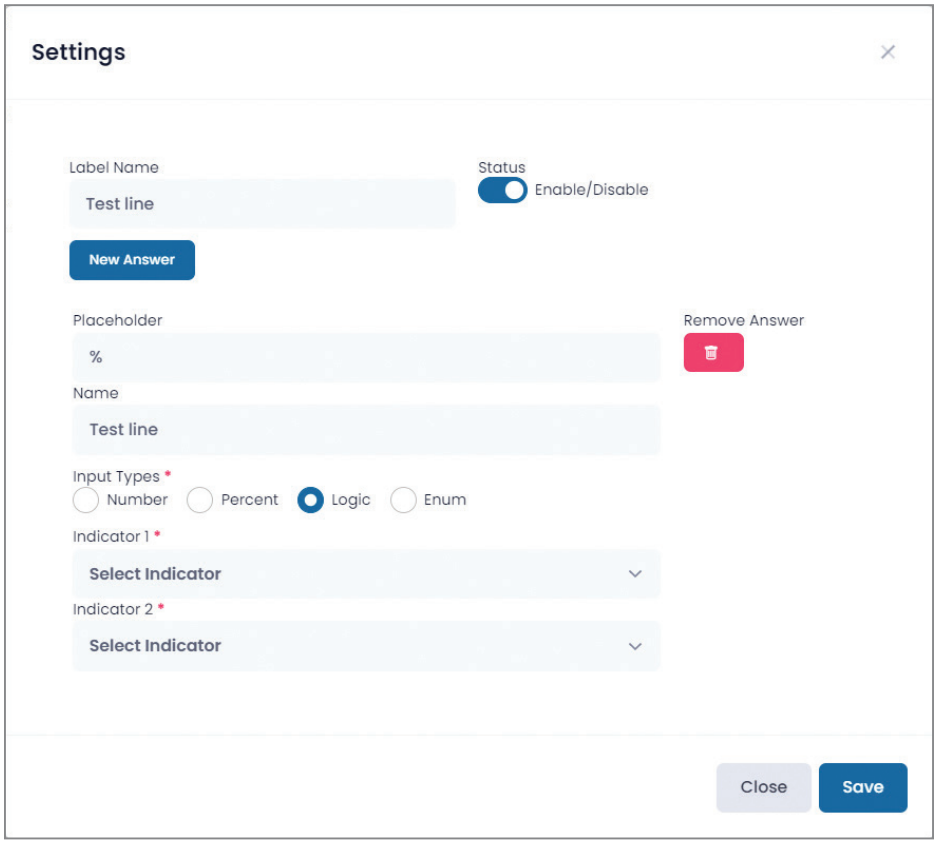


Figure 15. Enum indicator example

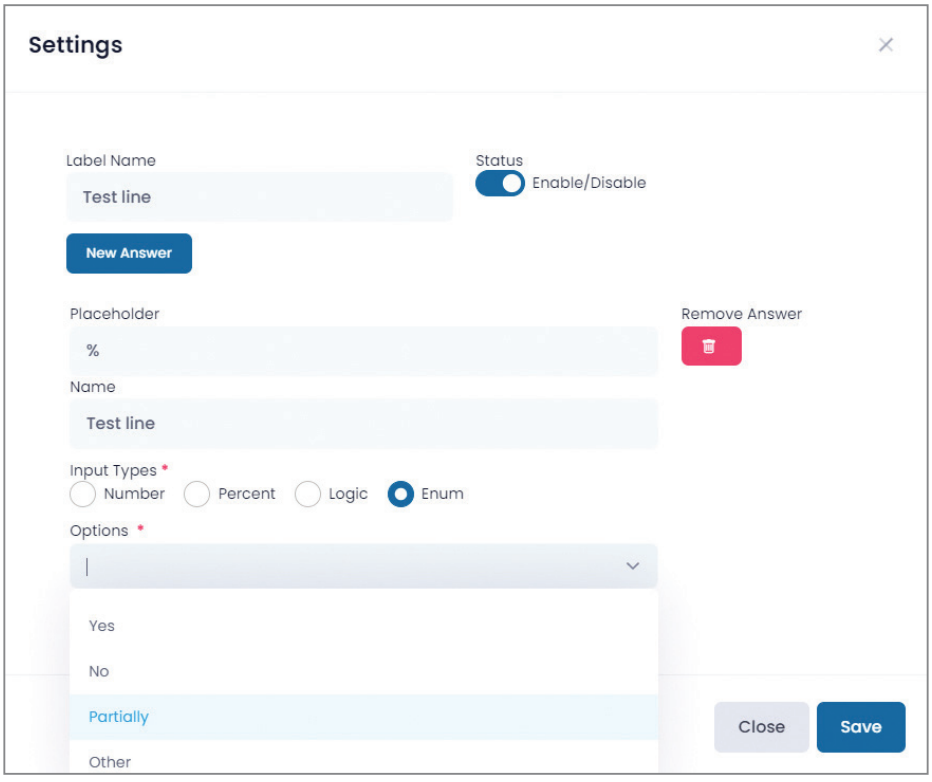


Figure 16. Filled example

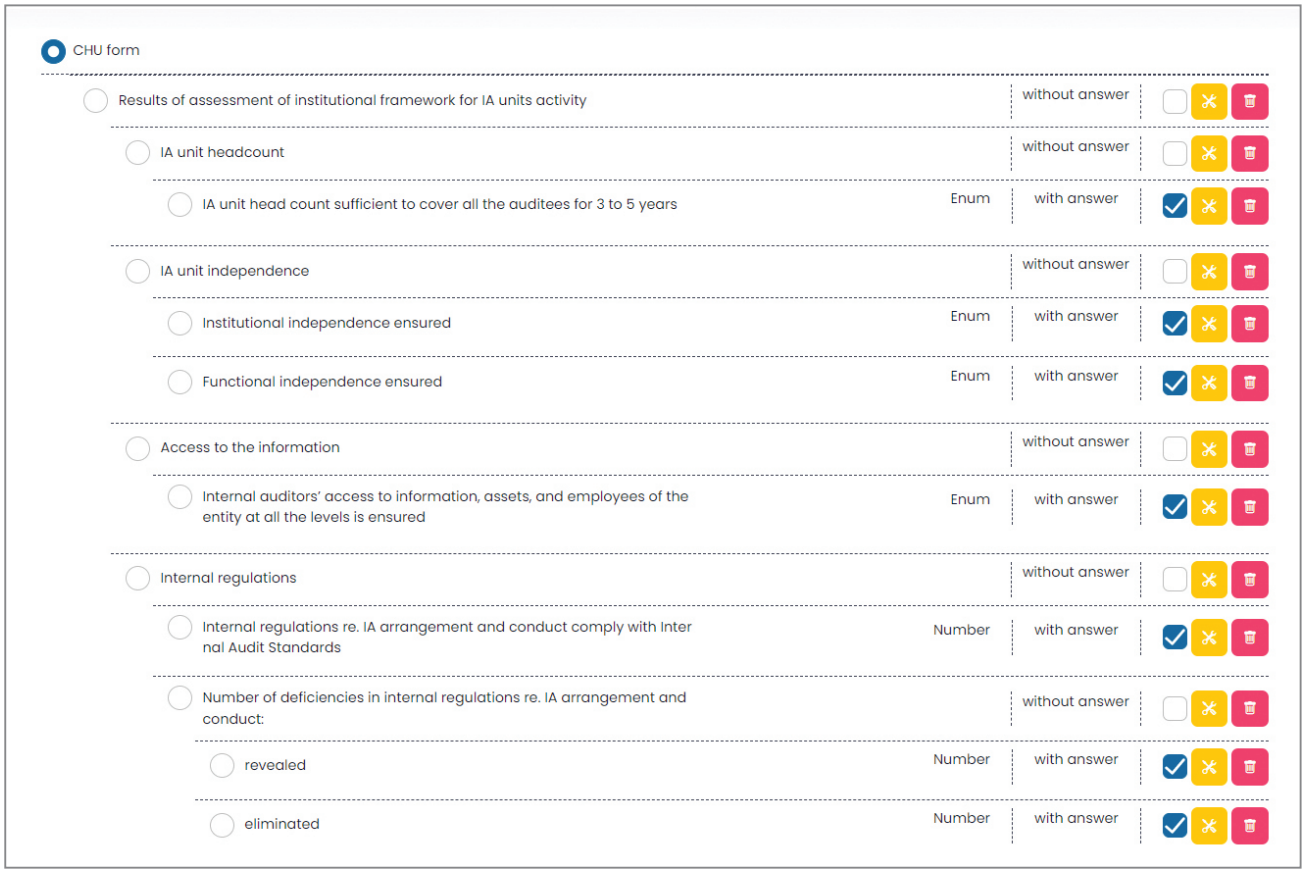
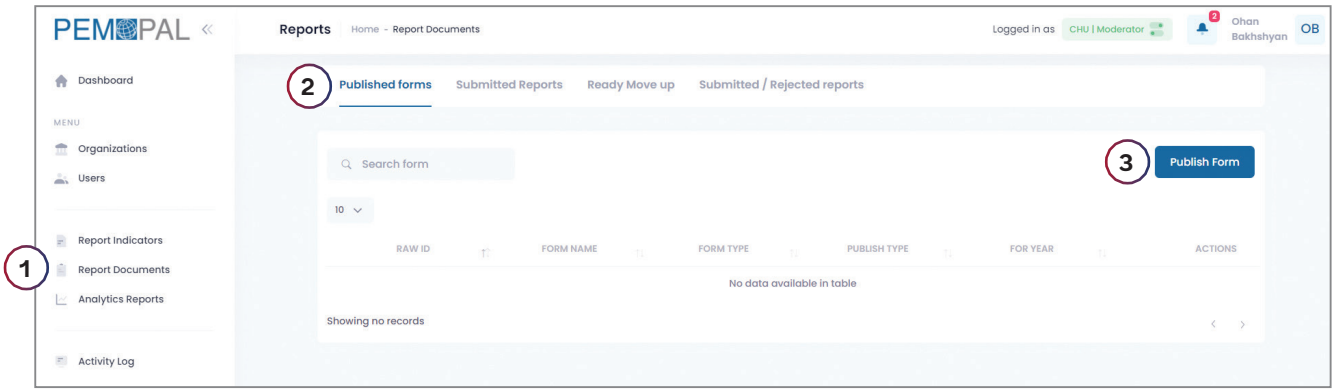


Figure 17. Publish a report operator example



Filled example in **Figure 16** will make things look easier. Example: "IA unit head count sufficient to cover all the auditees for 3 to 5 years" this indicator has answer of a type enum.

If CHU moderator wants to edit already created indicator, Yellow button is the edit.

If CHU moderator wants to delete already created indicator, Red button is the Delete.

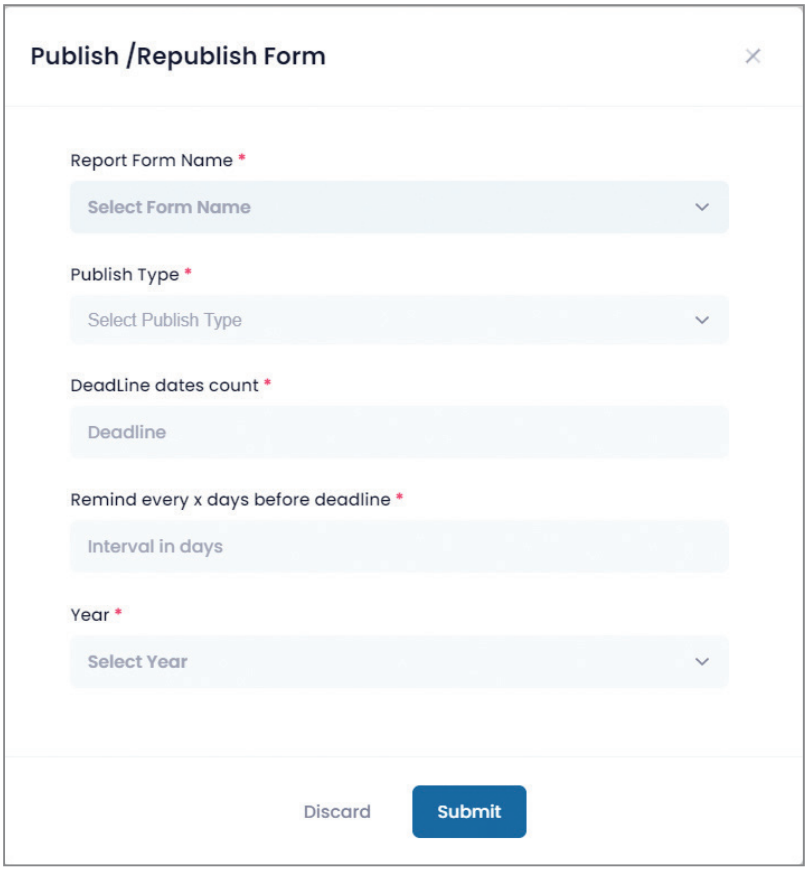
NOTE: Don't rush to delete indicator, keep in mind you can deactivate it.

3.2. Indicator publish for reporting

When indicator form created, CHU moderator should change the status from **Actions -> Edit details**, from pending to "completed"

After this action CHU moderator can enter to pempal.codeman.am/report-documents#published_forms report documents section and publish a report operators to feel. See **Figure 17**.

Figure 18. Example of information required to publish a form



- **Report form Name** – CHU moderator should pick which form is necessary to publish.
- **Publish type** – CHU moderator picks the publish type out of defined
  - **Every month** – in this case this form will be available every next month to reporting month
  - **Every quarter** – in this case published form will be available to fill every next month to reporting quarter.
  - **Every half year** – in this case published form will be available to fill every next month to reporting half year.
  - **Every year** – in this case published form will be available to fill every next month to reporting year.
- **Deadline dates count** – field CHU moderators fills the days count during which operator should fill the form.
- **Reminder every X days before deadline** – Every mentioned day count system will send reminder notification.
- **Year** – CHU moderator picks the year for with form published.

MUST REMEMBER ! **IT is not allowed to publish different indicator forms with the same publish type.**

You can't have IA indicator form 1 and IA indicator form 2 published by yearly publish type

3.2.1. Notification logic

Every time report published, system creates a sequence of notification, which are sent to operators based on need. If notification is opened by month. Every first day of next month to reporting, system will send notification to point operator attention, that there is report to fill. System will send reminding based on the parameter "**Reminder every X days before deadline**" this will shut down if operator submits the report, or deadline passes.

4. Indicators filling and consolidation

In this section, you will find detailed steps on filling the information.

Must steps to do before reaching here:

- System should have at least two organizations in vertical line
- In organization, at least one moderator or operator should be active with the indicator type. To fill the data after publish.

Below you will find details about one example of how to fill the data as operator and how to process the data as moderators.

In **Figure 19** you will see organizational tree created for demonstration. It also shows that test users are available as well.

Figure 19. Organizational tree created for demonstration

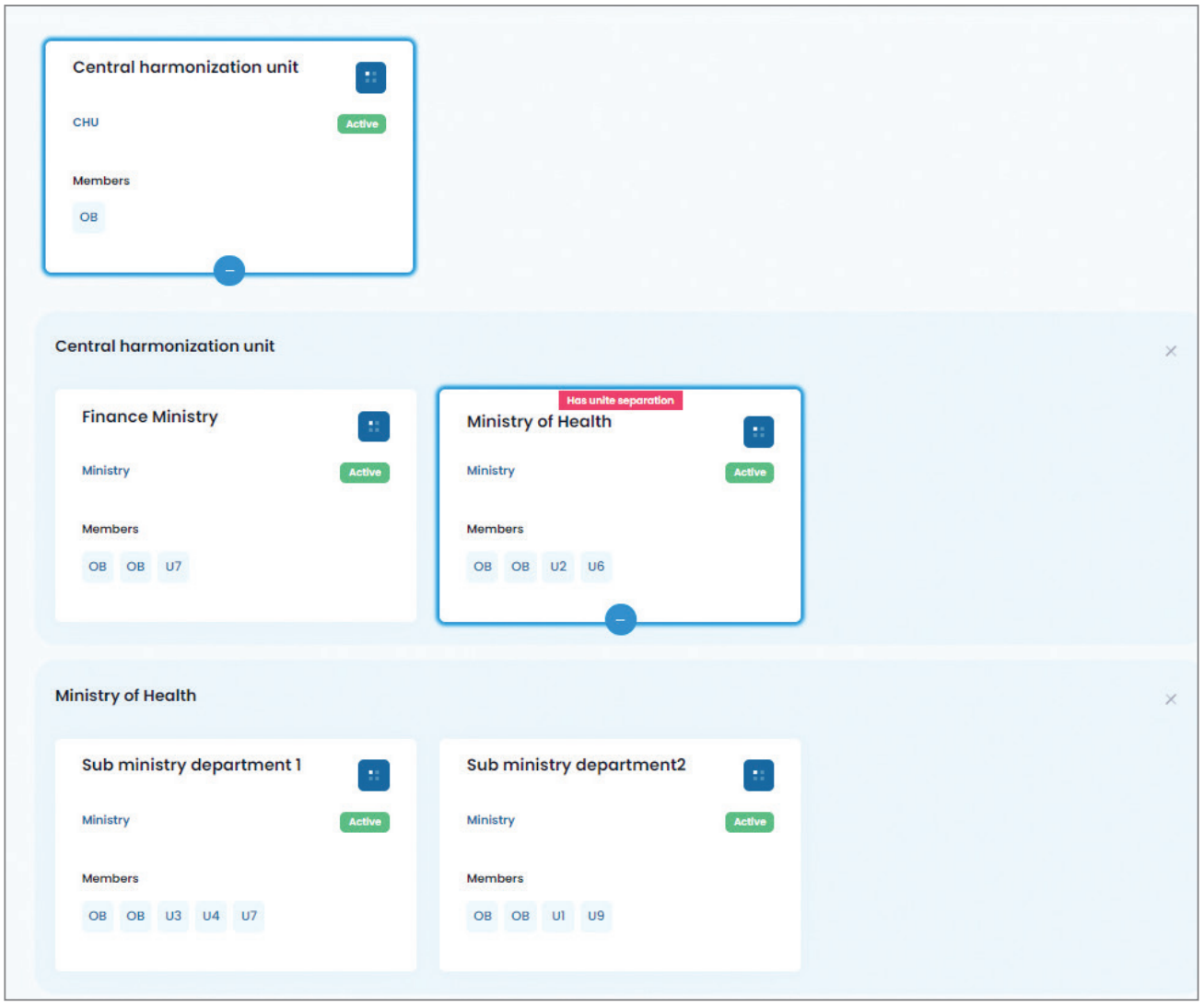


Figure 20. Example of aorm of IC for filling

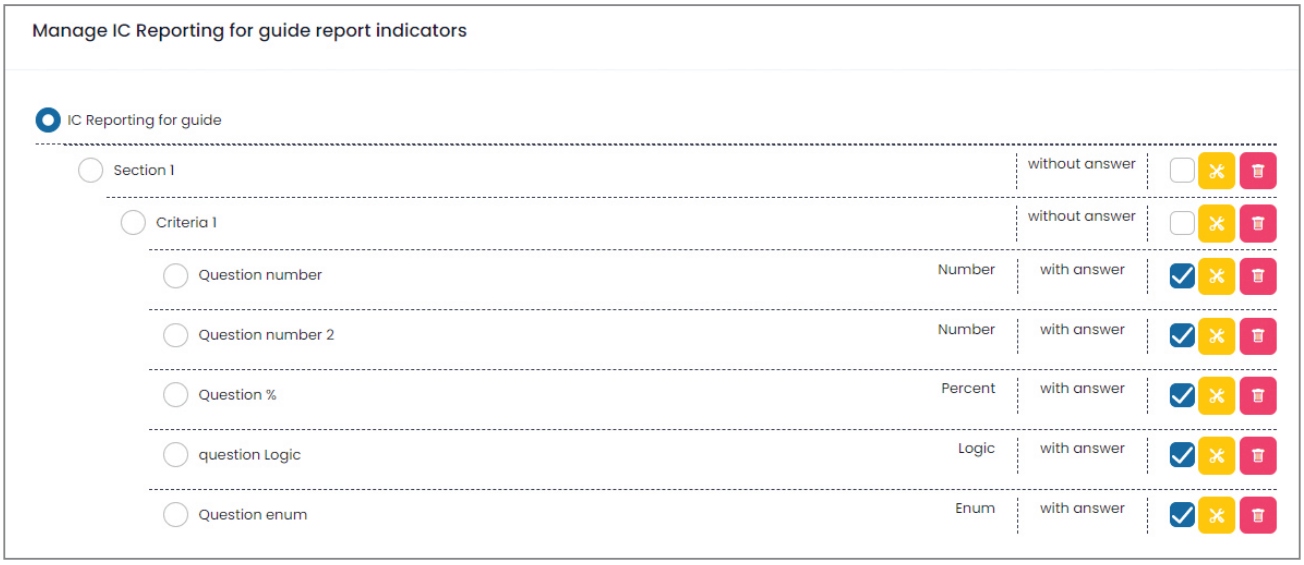
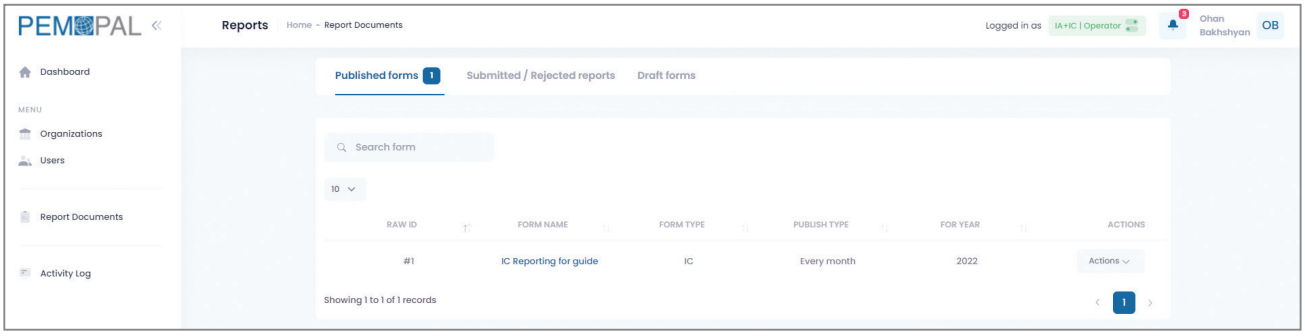


Figure 21. Example of forms available to fill



As you can see from **Figure 20**, there are five indicators, every one of which represents one type of indicator at a time. (See 3.1.2)

Guide will start the processes from the first layer (sub ministry department 1).

4.1. First step as operator

As IA+IC operator user can enter to report documents where he can find the published forms (1) tab. This tab is default active.

Operator will see the information about the form which is available to fill. See **Figure 21**.

By clicking on the name of on action button at the right side, operator can enter fill the published form.

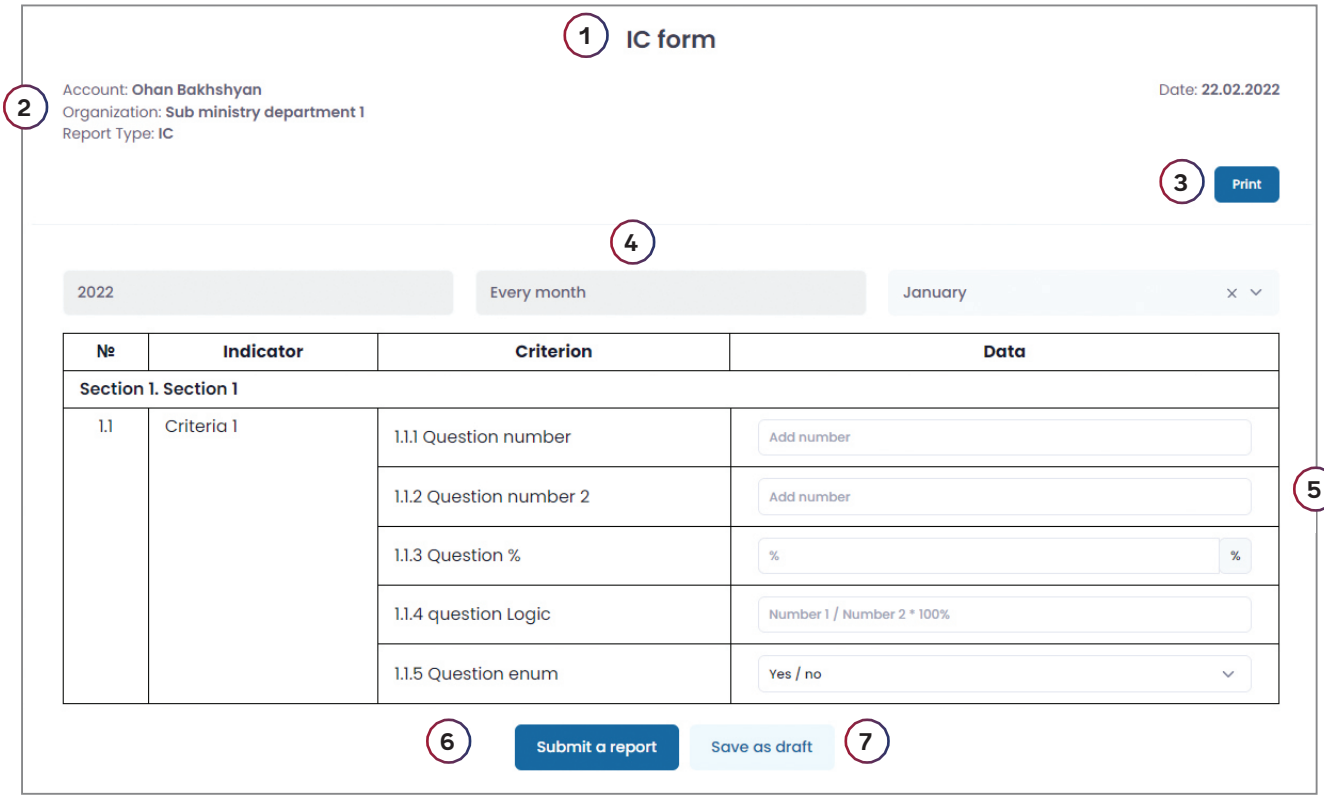
Before starting user can read some information about published form:

- Raw ID
- Form Name
- For type
- Publish type
- For year
- Actions -> open form

After opening the form operator will see following information as shown on **Figure 22**.

1. Name of the form
2. Data about user who will fill the report.
3. Possibility to print.
4. Data period report operator submits data for: user can change month. If data for selected month is filled, month will be not pick able.

Figure 22. Example of form of IC for filling



5. Indicators and fields to fill the data.
6. Submit a report
7. Save as a draft.

NOTE: User can save and edit form as a draft infinite times. Data will be saved in drafts.

MUST REMEMBER

We have 3 type of reporting forms IA, IC and CHU related. And we have operator types IA, IC, IA+IC and CHU. If IA form is available to fill, both operator types IA and IA+IC will see that form to fill.

After filling and saving the data, Data will be saved and sent to nearest mod moderator to review filled information.

NOTE: There are 4 types of data operator can fill.

1. **Number type** – where operator should fill the number value
2. **Percentage type** – where operator should fill the value not more than 100
3. **Logic type** – this field is calculated automatically and is not changeable.
4. **Enum type** – here operator should chose from already defined drop down list.

Figure 23. Example of notifications

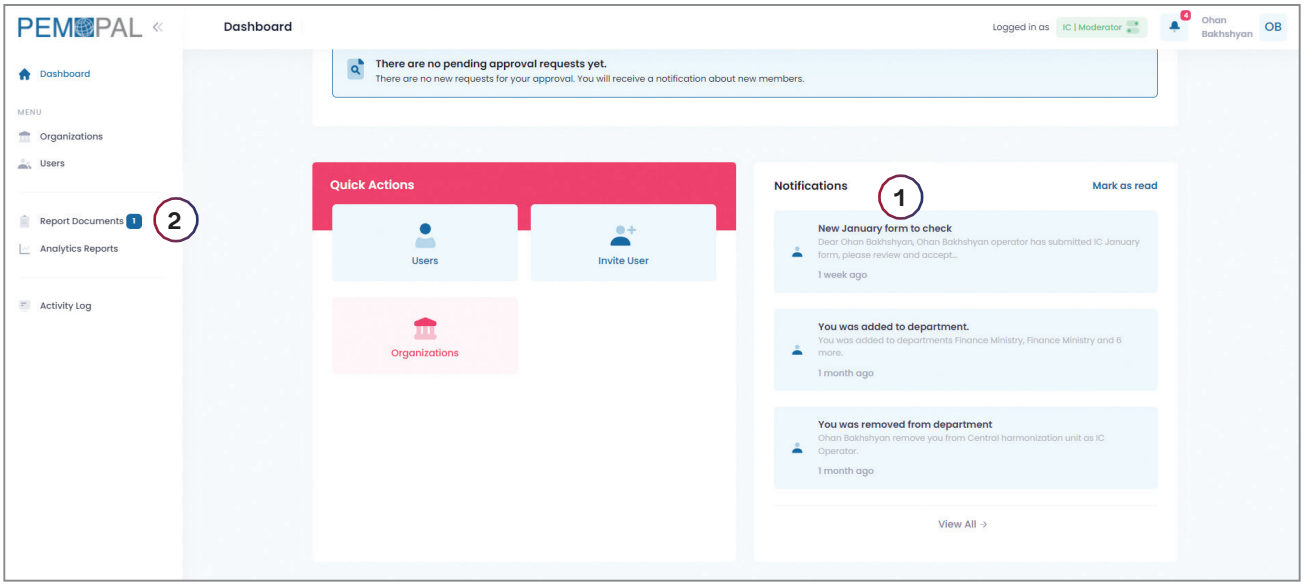
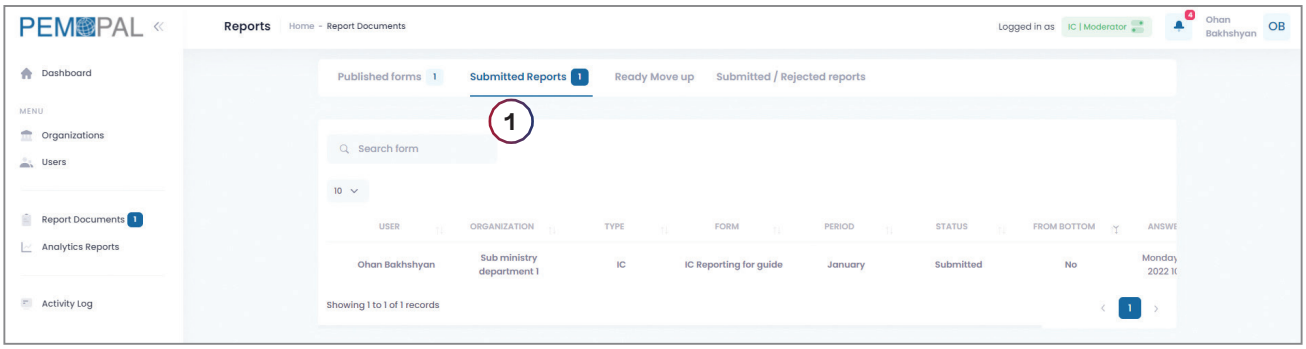


Figure 24. Example of submitted reports



4.2. Acceptance of the form by nearest moderator

When operator fills the data, nearest moderator will receive a notification about filled form to review. See **Figure 23**.

When entering to reporting documents moderator will see the published forms, with action to view. This helps moderator to be aware what kind of data operator should fill.

In submitted reports moderator will see submitted data from nearest operator. See **Figure 24**.

Moderator can see initial data about submitted report in table. At the end of the row moderator have action to do - view report. See **Figure 25**.

Section 1: Moderator will see who submitted the form from which department.

Section 2: Moderator will see when form was submitted.

Section 3: Moderator will see submitted forms year, periodic type and the period of filled data.

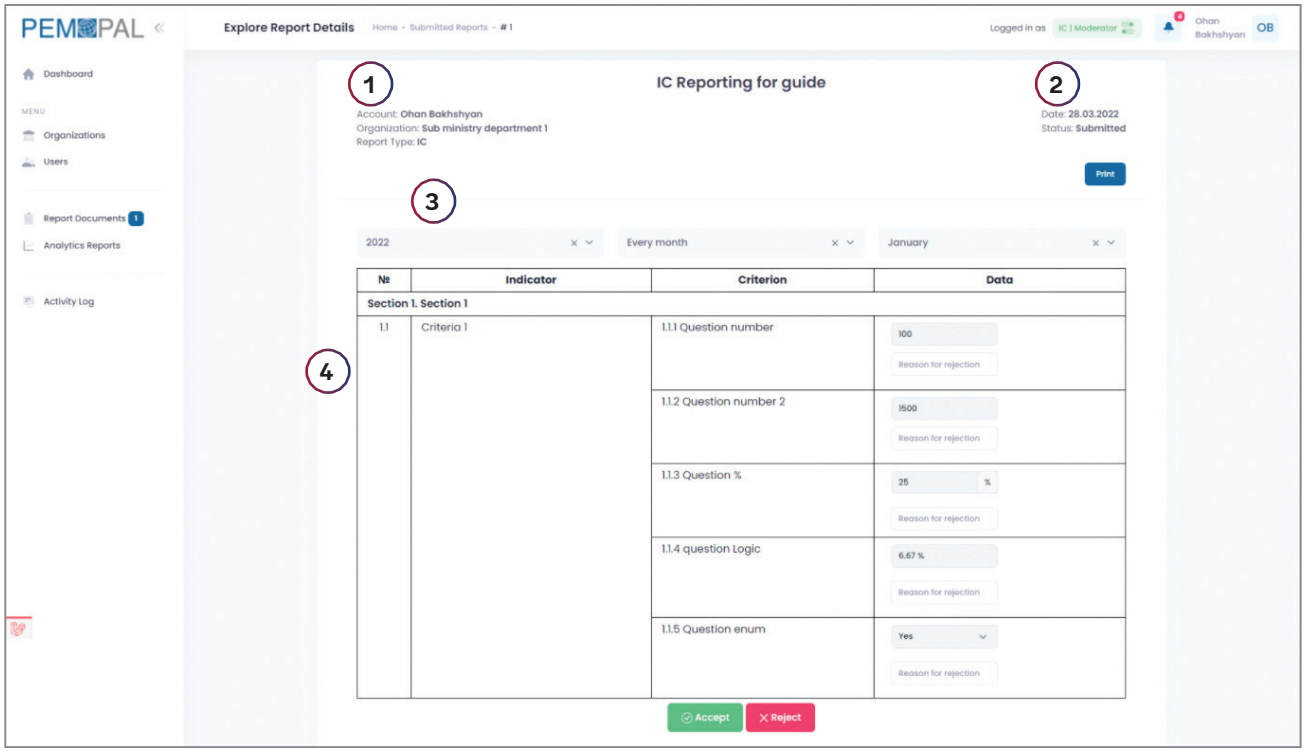
Under every answer moderator has possibility to fix a comment in case form has incorrect data. Comment will be available to operator if form is rejected.

Under the form moderator has two action. Either accept the form, either reject it.

When moderator accepts the form:

1. In case there is no any suborganization to current organization where moderator is assigned,

Figure 25. Example of submitted reports



accepted from will be consolidated automatically and will moved up to higher organization's moderator.

2. In case there is a suborganization to current organization where moderator is assigned, form will move to "ready to move up" tab. And will wait to be consolidated with other available forms.

When moderator rejects the from with commenting or without. Form will be sent back to operator who filled the data. Comments will be available near every number so operator can understand what to change. After submitted form again, Moderator will see the new values with already changed ones. (one step change tracking).

4.3. Consolidation of collected information.

Consolidation of accepted forms is merging the data together by logics of indicators. As we already know there are 4 main types of indicators

1. Number
2. Percent
3. Logic
4. Enum

For all types system has it own way to consolidate the data:

- Number consolidation – system will sum all the data within the same indicators
- Percent consolidation – system will calculate average percent within the same indicators
- Logic consolidation – system will calculate the weighted average based on the logic indicators within the same indicators
- Enum consolidation – System will calculate and present the values of how many times which answer were picked before consolidation. After which moderator who does consolidation will pick the relevant answer before consolidation.

Every moderator who has several forms collected from operators or subordinate organization will have that forms in the ready to move up tab (see **Figure 26**) in reports documents.

Figure 26. Ready to move up tab

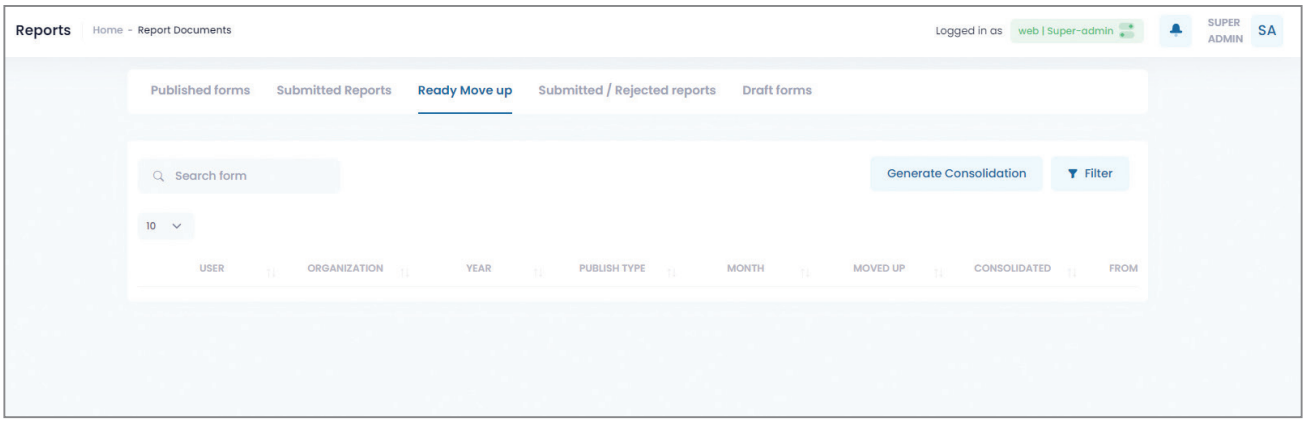
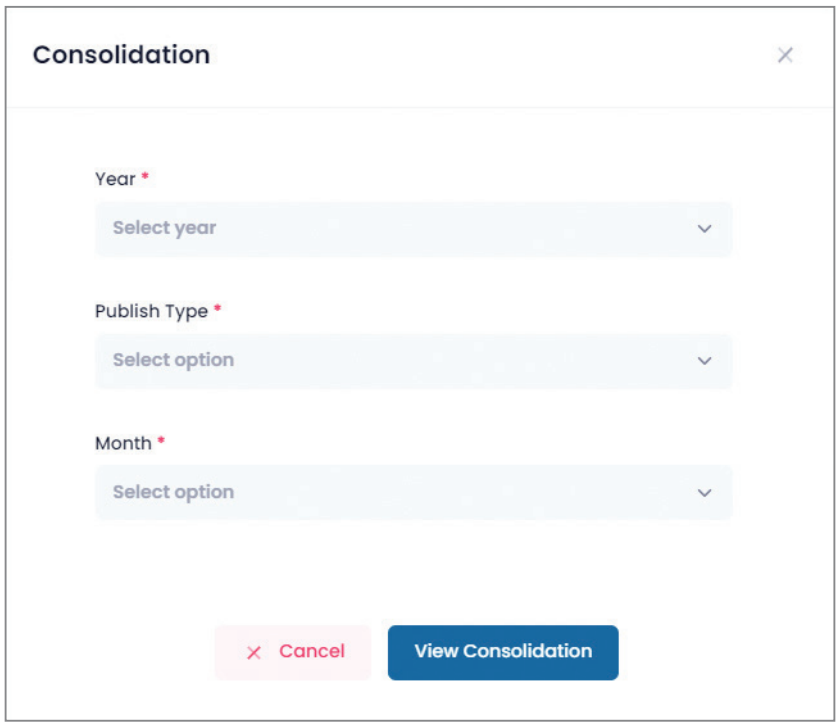


Figure 27. "Generate consolidation" example



If all documents are accepted by and will be marked to accept and ready to move up, system will be ready to consolidate data.

When data are ready to consolidate moderator should hit the button "generate consolidation", a form will open as shown in **Figure 27**.

Moderator should pick from this form in order to clarify for system which type of reports should be consolidated together into one form.

- **Year** – is the year of collected reports which are not consolidated yet
- **Publish type** – is the published type of report
- **Month** – is the specific period

After these parameters are fixed moderator should hit view consolidation, and system will percent the new created form with consolidated data in it.

Whenever moderator finishes the consolidation new form will be created. If the organization, for which consolidation is created considers to be subordinate to some other organization, later will receive the consolidated report in ready to move up table for further consolidation till the CHU level.

After consolidation is finished, moderator can find consolidated report in the Submitted / rejected forms tab in reports documents, where moderator can view the consolidation. On the down of the page, system will show which reports were used to create this consolidation for further checks I needed.

5. Data comparison and visualization: Analytic reports

In the left menu all moderators have “analytics reports” section (see **Figure 28**) where they can do data analysis based on collected data from operators. Every moderator can do data visualization on their level of organization chart. No one can see data visualization from above organizations.

There are 4 steps for creating a report analysis.

1. **Report type** – here moderator should pick which type of report data they want to analyze or compare.
2. **Compare type** – here moderator should pick which organization and which report they want to include in analysis

Figure 28. “Generate consolidation” example

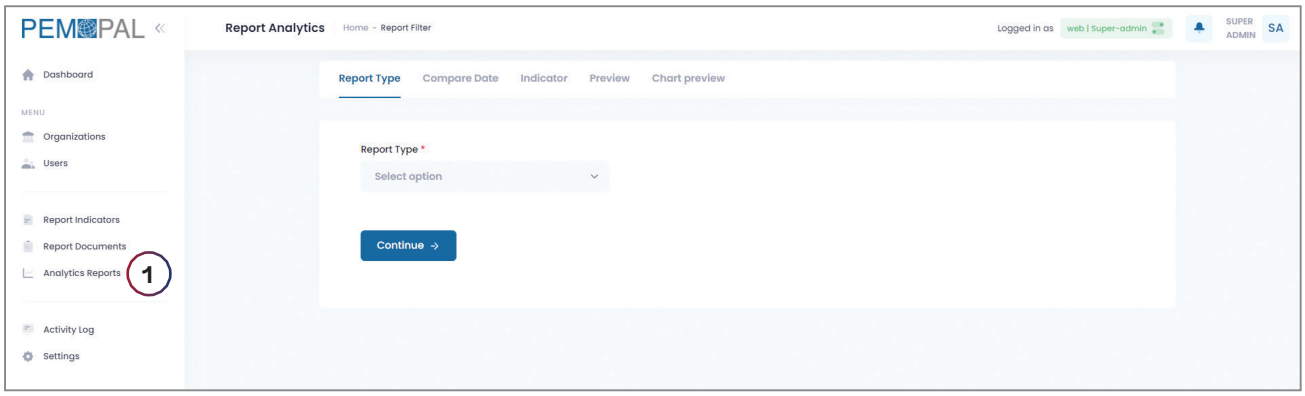
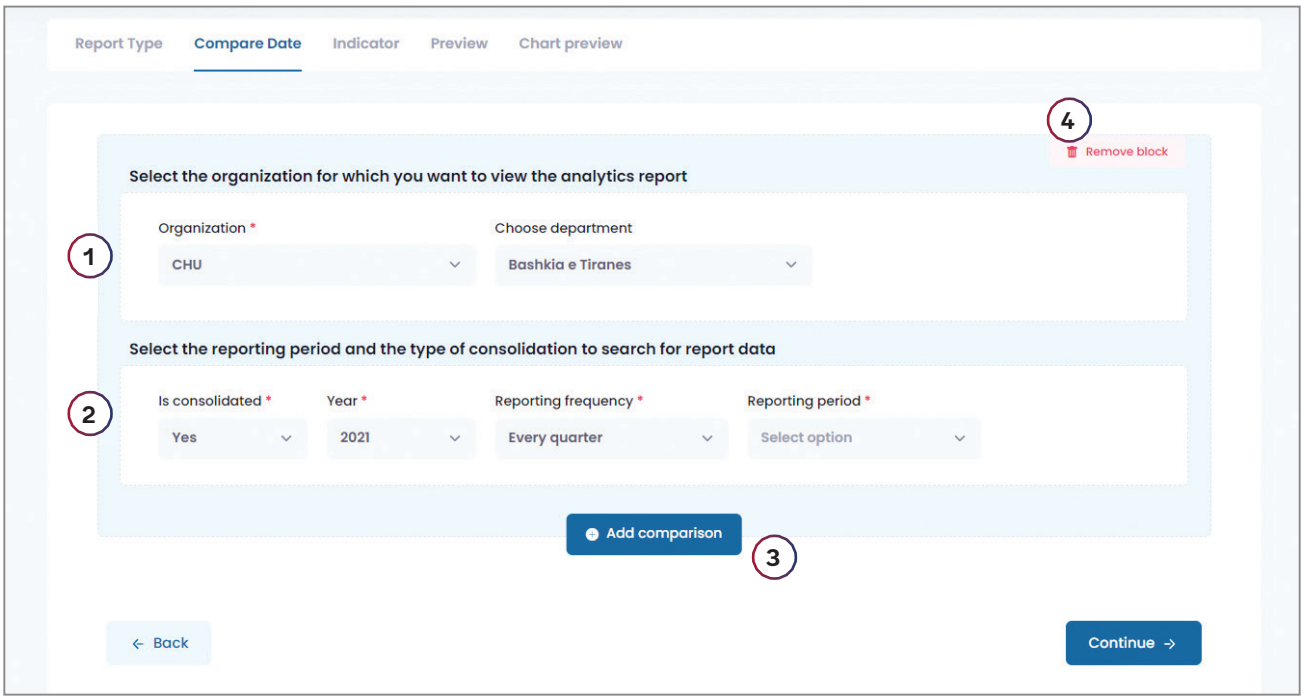


Figure 29. Creating a report analysis example



See **Figure 29**:

1. First section is where moderator should pick the relevant organization. In default the main organization will be fixed for moderators from lower levels. As you can see picking organization who has a subordinate organization will open a new box from right, so moderator can filter deep to select the relevant report to view.
2. Second section is for picking the parameters for reports.
    a. If moderator wants to see a report which is under a specific organization they should pick "is consolidated = no"
    b. If moderator wants to see a report for upper organization they should pick "is consolidated = yes"
    c. Year is the data collection year
    d. Reporting frequency is the same as publish type. For year type we do not pick anything
    e. Reporting period is set to be or month or quarter or half year.
3. Add comparison button is for adding another comparison organization or period with the same time period to see indicators change through time or organizations. It is possible to view total country report with a specific organization. It is possible to compare one period of the same report with another period.
4. If you add a block and want to remove it there is a remove block button.

See **Figure 30** for a final example of Step 2. It is picked one organization to compare with whole information from all organizations

See **Figure 31** for indicator step is for picking the relevant indicators moderator wants to see the reporting or data visualization. Here only active indicators in fixed form will be visible. So, if CHU moderator will deactivate a specific indicator in picked form type, in this step that indicator will not be hidden. You can see indicator name with section / criteria / indicator form. So it is easy to understand what indicator is presented. In this step for presentation we picked all indicators.

Figure 30. Final example of Step 2

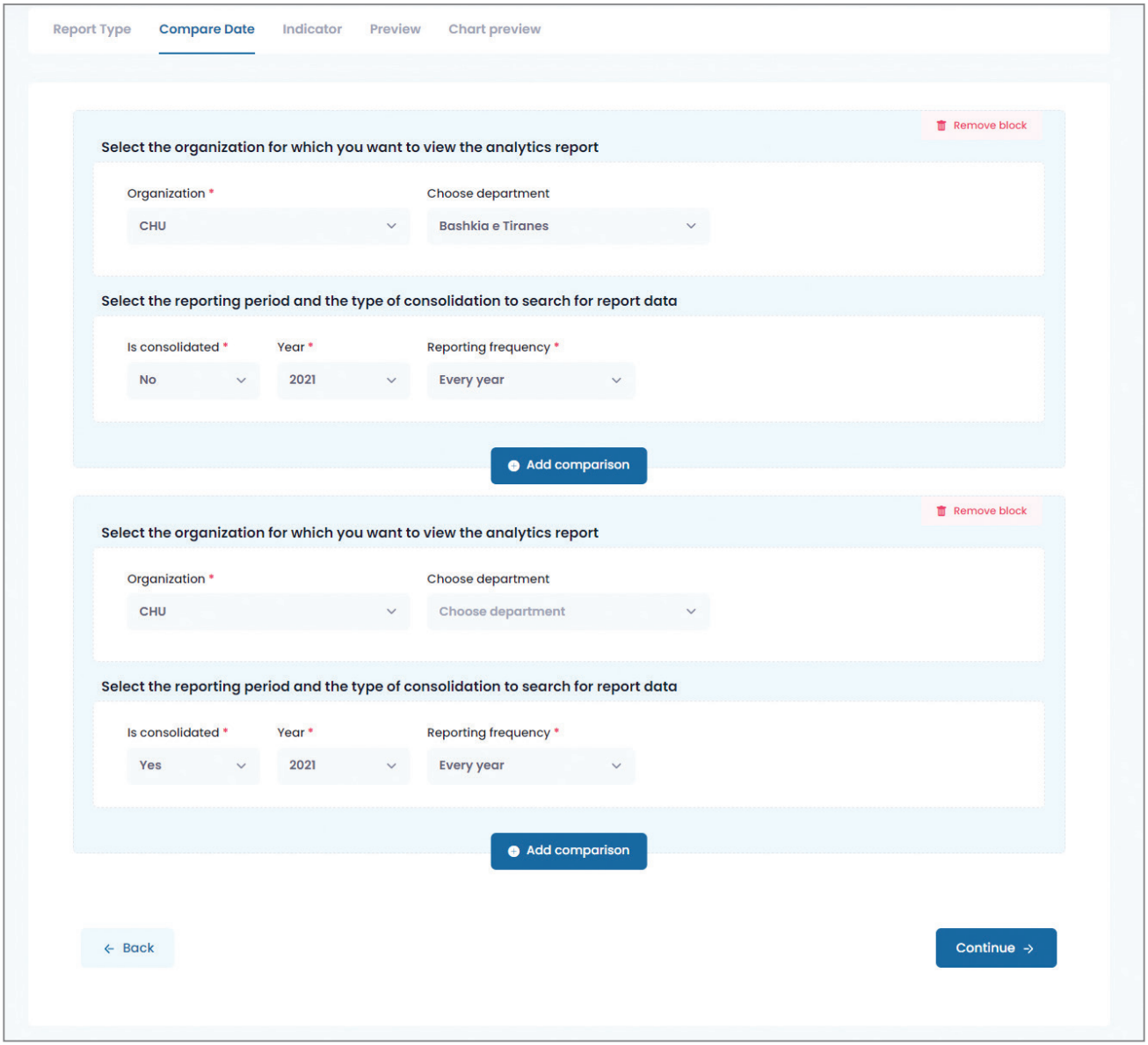


Figure 31. Indicator step example

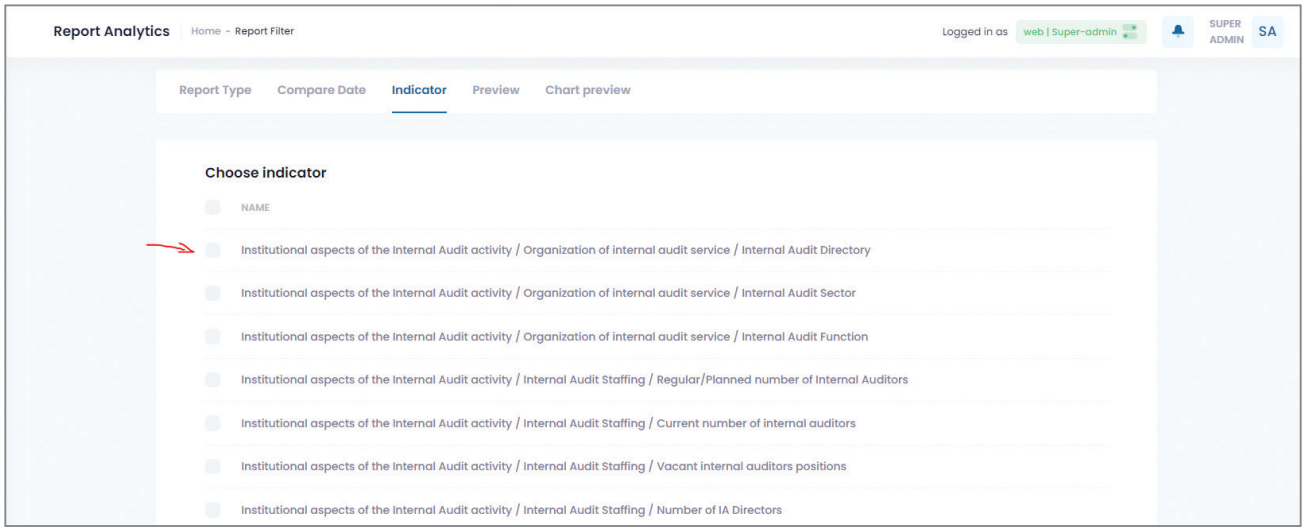
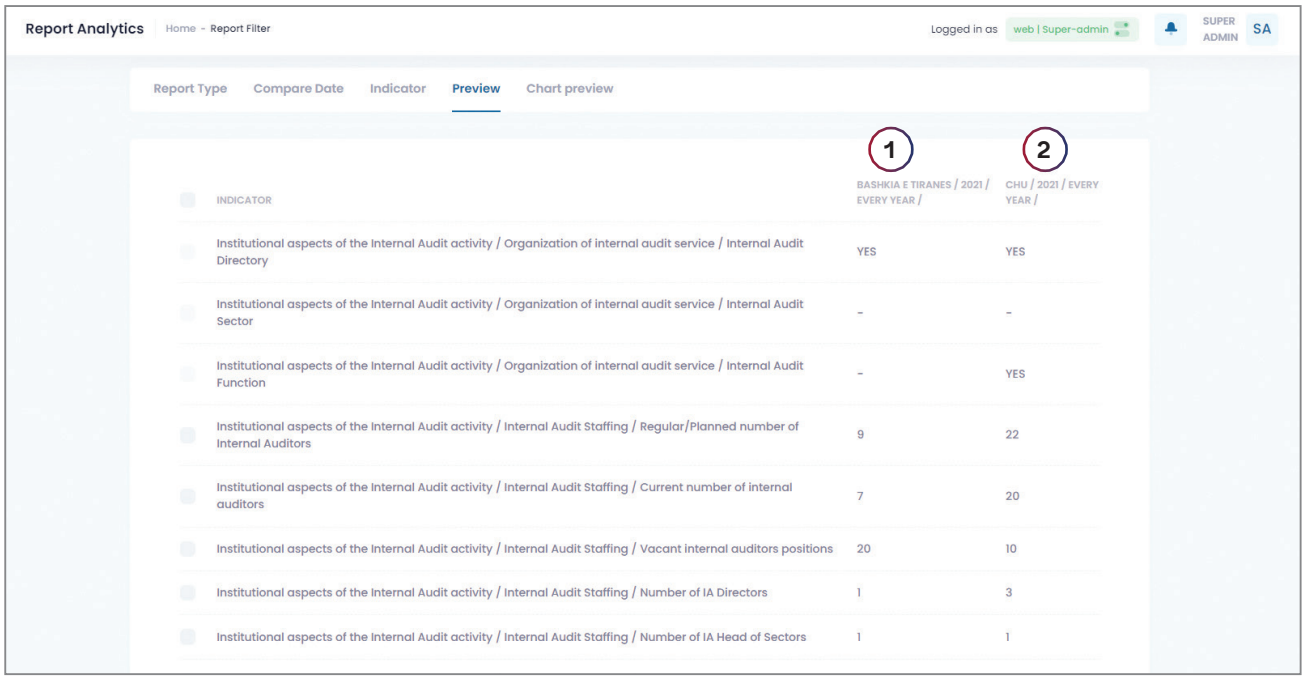


Figure 32. Preview step example



In the preview step (see **Figure 32**), system will present all the indicators picked in step 3, with a values fixed during filling the data or consolidating:

1. Is presenting the data from specific organization
2. Is presenting the data from total consolidated report in CHU level.

It is possible to download this tables in excel form and do the visualization on the excel side. Moreover, several visualizations are possible to do directly from this system, just check some indicators, choose chart type and hit chart preview button (see **Figure 33**). In the result system will show the graph like in **Figure 34**.

Possible to pick three types of data visualization

- Bar chart
- Line chart
- Pie chart

Moderator can download the image of the graph.

Figure 33. Chart preview button

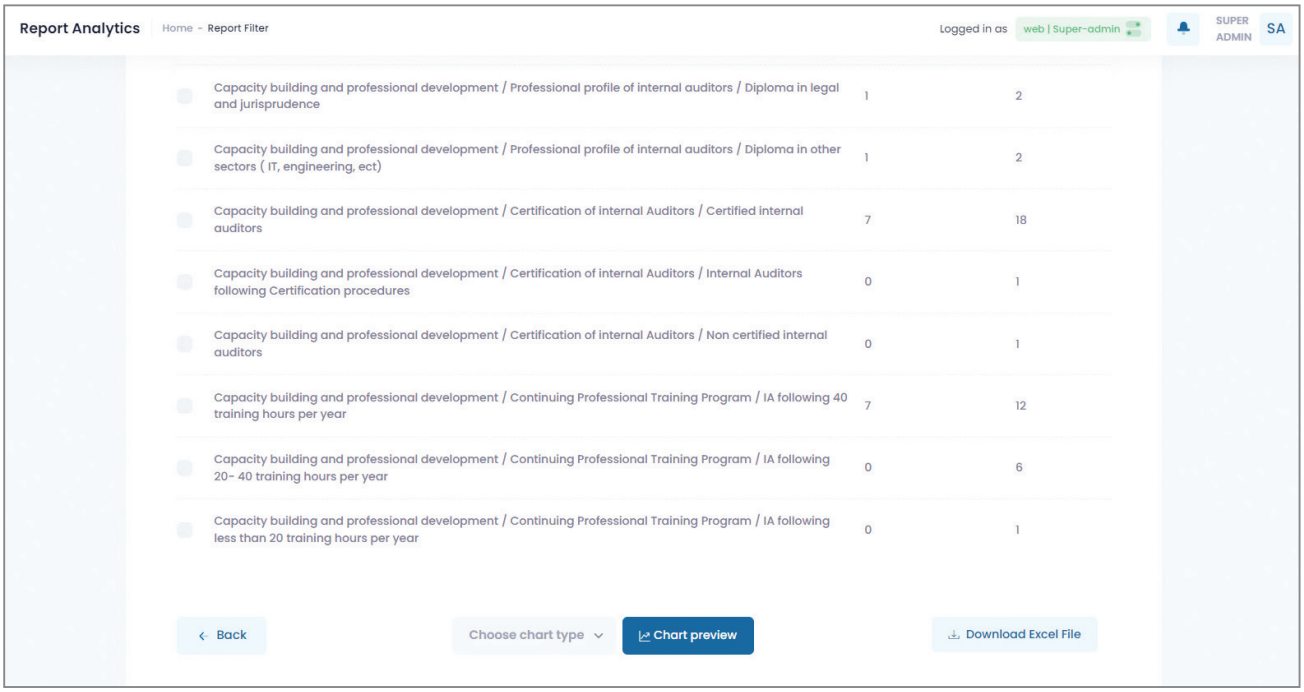
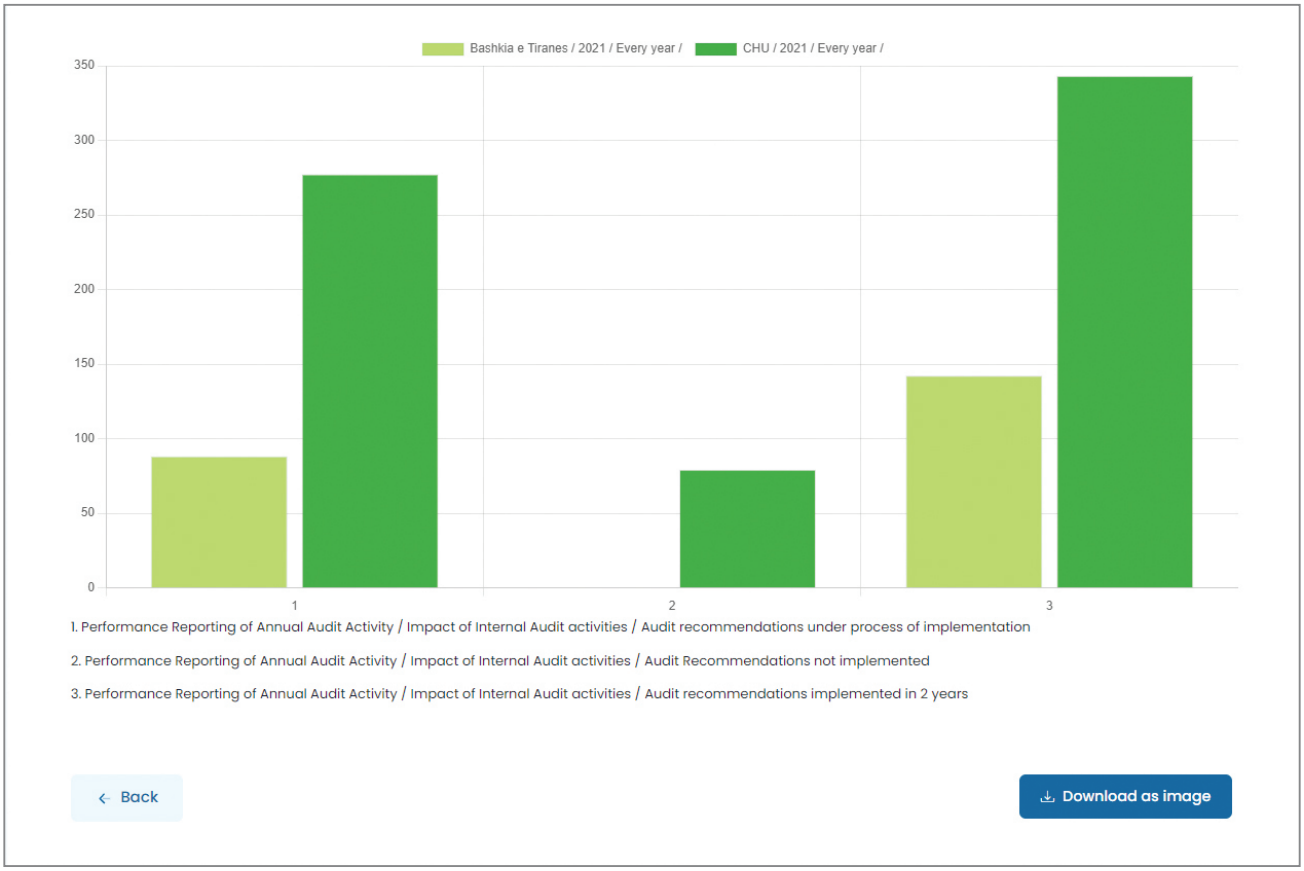


Figure 34. Image of the graph download example



6. Activity log

This field is created for moderators to fix the activity of every user in the system. Moderators of lower level organizations will see only subordinate organizations users activity log.

As you can see from **Figure 35**, system will present in the table view information. User name with email. Log message will present the information what the user did. Type of action is specified and the date when event accrued. Moderator has possibility to make filtration by date, by users and by types of action.

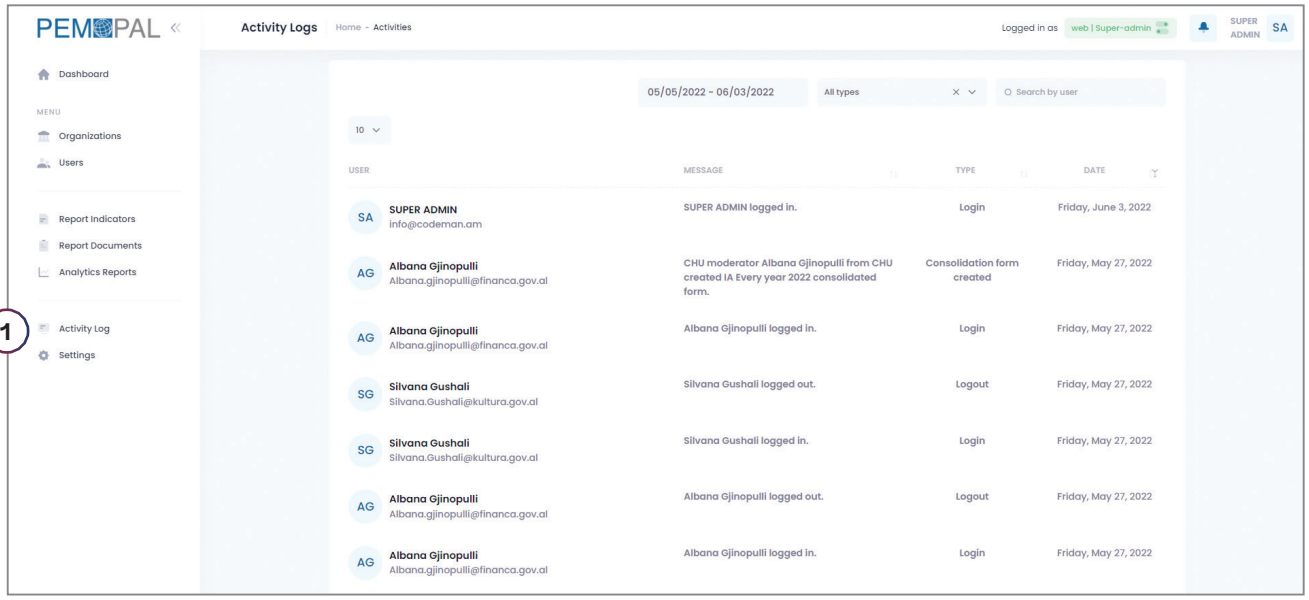
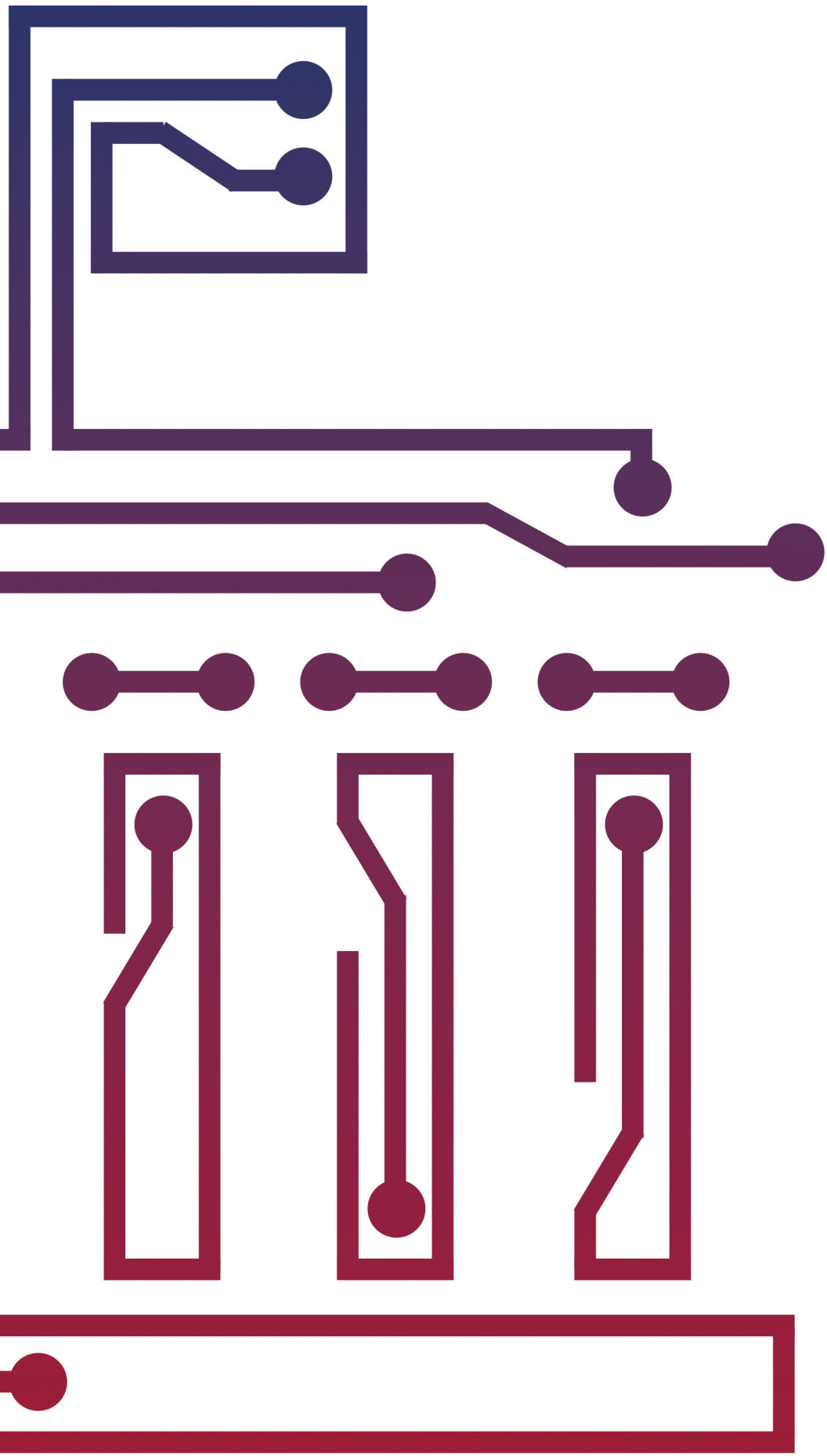



Figure 35. Activity log example