GOAL's Online Project Monitoring System (OPMS)

Why OPMS?

In order to determine whether the projects we implement are achieving their intended purpose, we monitor them closely. One of the most important tools in a MEAL (monitoring, evaluation, accountability & learning) practitioner's monitoring toolbox is the indicator. The indicator allows us to define what the project's success metrics are at different levels (output, outcome, impact). Indicators allow us to set targets we feel should be attained before we can call the project a success. Obviously, reliance on this type of monitoring can't necessarily measure whether the project will have a sustainable impact (evaluation), that our clients will be satisfied with the outcomes (accountability) or that we won't repeat mistakes in future projects (learning). However, we can assume that if the targets we set for our project are not being met, there's a good possibility that our project is failing, or at the very least that we need to revise the indicators/targets that were set for the project.
GOAL’s monitoring system is in the process of undergoing a digital transformation. This means that, where possible, data is collected digitally, stored in the cloud and benefiting from automated analyses in the form of dashboards. In order to achieve this, we rely on two software services: CommCare (collection & storage) and Power BI (analysis). This approach results in a number of advantages, including greater security, quality, transparency, and efficiency at all stages of the monitoring process. For more information on our approach to information systems in monitoring, please watch this video (starting at minute 2:00).

Despite the greater centralization of data as a result of this digitization strategy, data, tools and indicator results are still not easily locatable beyond the project or country level. For example, templates of paper tools are often still stored locally on laptops within the MEAL team. A country might have tens, even hundreds of data exports and as many Power BI reports which contain indicator analyses, and the raw data they are based on. This can lead to data loss even within a country, especially during times of staff turnover. Even if you know where to locate the analyses for your indicators, there currently isn’t a system that allows you to neatly create an aggregated overview of indicator progress for the country or global level.

These are some of the main reasons that the Online Project Monitoring System was created. The principal functions of the OPMS are:

- **Master Data Management**: the OPMS provide a uniform user interface, enabling users to register and retrieve indicator results and associated data collection tools, data sets and dashboards.

- **Data Ownership and Sign-Off**: the OPMS is not just a handy tool, but also seeks to change the way in which the organization as a whole view and use data. As monitoring systems move towards greater digitization, and indicator results become more easily accessible, there is more time to thoroughly analyze and interpret results. Project managers should be...
the ultimate owners of the data resulting from a project, with the MEAL team playing a supporting role by ensuring that this data is easily accessible in a readily analyzable format. MEAL and programs teams should come together once a month to review which indicator results need to be entered into the OPMS and analyze and interpret those results together. The project manager should be the one who ultimately enters the results into the OPMS, thereby ‘signing off’ on the data and taking ownership over their project’s results.

- **Task Management:** the OPMS also contains an aspect of task management. Users can define when they plan to finalize data collection tools and who is responsible for their development. Data collection and reporting schedules can also be defined at the indicator and data source levels. Both dashboards and data sources (tools and data sets) and dashboards can be linked to indicators, creating a closed-loop monitoring system that creates transparency about aspects of the monitoring system still need to be developed in time for data collection. After all, ensuring that project monitoring is digitized makes it a lot easier to enter indicator results into the OPMS.

The OPMS makes use of the same software services for data entry and analysis as GOAL’s monitoring systems: CommCare and Power BI. CommCare was trialed alongside PowerApps and eventually emerged as the preferred solution as a result of its offline data entry capabilities, the ability to make quick changes to forms without having to worry about the backend and the fact that PowerApps was still in its infancy. You can access the two sides of the system using the following links:

- **OPMS Web Apps**
- **OPMS Dashboard**

The first image below gives an example of how the OPMS might interact with a digitized monitoring system. The second image gives an example of the 'complex' nature of the multiple relationships that can exist between indicators, data sources, and dashboards which the OPMS is able to capture.
Online Project System (OPMS)

2 - OPMS Data Flow

- Data Source 1
- Data Source 2
- Data Source 3
- Data Source 4

- Dashboard 1
- Dashboard 2

- Indicator 1
- Indicator 2
- Indicator 3

3 - Many to many relationships between indicators, dashboards and data sources.
Getting Started - User Registration

It is important to know that two levels of users can be defined in the OPMS: country and project. The country level users are those who will have access to the data of all projects and will likewise be responsible for registering the project and data sources. In most cases, this will be the MEAL coordinator/manager. Project level users will only be able to view and access the data for their projects. They also won't have the ability to register data sources, which is done at the country level. Project managers are expected to be the project level users. In the ideal situation, project managers will sit down with the MEAL team on a monthly basis to review their project indicators. This should be feasible when a country has switched to digital project monitoring, as the indicator results should be accessible to the project manager in a few clicks. By entering the results into the OPMS, project managers are in essence 'signing off' on the results. If it's your first time using OPMS please e-mail a member of the MEAL tech team, to request a username and password (rmyers@goal.ie).

Project Registration & Defining Levels of Disaggregation

You can start using OPMS the moment a grant goes live. The majority of data inputting should be done at the start of a project, preferably within the first month of the grant becoming active, after which keeping the system up to date should be relatively easy. The first step is to register the project and populate the system with indicator data, which you can initially take from the logframe submitted in the proposal. You can access the data input section of OPMS either by navigating to the Web Apps in your browser or installing the application on your mobile device/Bluestacks (2QaoNU2). This should bring you to the following home screen (on BlueStacks this will look different):

![Home Screen](image)

Project Registration

Initial project registration needs to be done by a member of the MEAL tech team (rmyers@goal.ie). Once this has been completed, you will see the grant management system (GMS) number appear in
a list when clicking on *Project Registration*, within the *Project Registration & Disaggregation Levels* menu.

If you have already registered the project, you will see a validation message letting you know that you are unable to register the same project twice.
8 - Project Registration Validation

Project Details
The next step is to register the Project Details, from within the Project Registration & Disaggregation Levels menu.

9 - Project Menu - Project Details

If you have correctly registered your project you should see it appear on the next page.

10 - List of Registered Projects

Notice that the Grant Name and Project Manager Name fields are empty. By clicking on the grant you can start filling out these details and more. Once on the project details page, you will see the following fields:

- **Project Status**: Initially this will be active but on completion, you might want to archive this project, so that it no longer shows up in the system.

- **GMS Number**: As a result of some idiosyncrasies in CommCare, we ask you to retype the GMS number. Take care as this is the unique identification number for the project.
• **Grant Name:** You can view all active grants on the 'Global Overview' tab of the OPMS dashboard. The grant name is also a unique identifier, but usually a bit more user-friendly. The grant name always starts with a two-letter country code (e.g. UG for Uganda) followed by a donor code (e.g. CW for Charity Water), a year (e.g. 16-17) and a short title for the grant (e.g. SWiM2): **UG_CW_16-17_SWiM 2**

• **Project Manager Name & E-Mail Address:** this information, like other information on this page, can be entered or updated at a later date.

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**Levels of Disaggregation**

For most projects, donors require you to disaggregate some or all of your indicators. Typical examples are age and gender, but you can also think of disaggregations for location, implementing partner, transfer modality, etc. These disaggregations might not be applicable for all indicators and can simply be ignored when entering indicator results. You are allowed up to 6 disaggregation types and 8 levels per type. You can define the Levels of Disaggregation by clicking on the **Project Registration & Disaggregation Levels** menu and proceeding to the **Levels of Disaggregation** form. Once there you can define the disaggregation types by typing them in the empty boxes. In the example below only 3 disaggregation types are defined: Gender, Age Group, and Location. You do not have to enter the levels of disaggregation in the order mentioned here. You might find it more useful to first register the project's indicators and fill out their details and then come back to the levels of disaggregation.
After having defined the disaggregation types, you will see them appear automatically when scrolling down to the disaggregation levels. The minimum number of disaggregation levels is 2. Additional levels appear as you enter them. The new level only appears when validated, so you might have to click outside of the box you are typing in. Once you have entered all the levels for a certain disaggregation type, simply leave the final level blank.

Indicators

After having registered the project it is time to load your indicators into the system. An obvious starting point is adding in the logframe indicators, but you are free to add as many indicators as you like. To start registering indicators, select the Indicators menu from the home screen:
As with the section on project details and disaggregation levels, you will be presented with a list of registered grants, or the grant that your user is assigned to in the case of project managers. You should then be presented with the following screen:

The list is empty because you haven't entered any indicators yet. By clicking on the green 'Add New Indicator' button you can register the first indicator. You will be presented with a single field asking for the indicator name. Enter the name of the first indicator in the logframe and click 'Submit'.
Do this for all the indicators in the logframe and you will end up with a list like the one in the image below. Due to an issue with copy-pasting, you might see a red error message on the top of your screen. In most cases, you can safely ignore this. Remove them by pressing the 'x' to the right side of the message.

Indicator Details

Once you have copied all of the indicators to the OPMS, you can proceed with entering the indicator details by clicking on the indicators themselves. You will be presented with an empty 'Case Detail' pop-up for which you can press continue. The next screen contains two forms. Click on Indicator Details to continue.

The indicator details should be filled out by the MEAL and programme teams together. The Indicator Details form contains the following elements:

- **Delete Indicator**: If you accidentally register too many indicators, you can use this option to delete the indicator. If you delete an indicator by mistake, contact a member of the MEAL tech team to rectify this (rmyers@goal.ie).

- **Indicator Name**: this field is pre-filled with the name of the indicator. It is included here to allow you to make changes to the name if mistakes were made during initial registration.

- **Unit of Measure**: this option is important for understanding how data is to be aggregated at a later stage.

- **Numerator and Denominator**: these questions only appear in the case that percentage or ratio is chosen in the previous question. Use these fields to explain how the indicator is measured. For the indicator **% of participants that report a shift of priorities from basic**
survival to recovery, the numerator is number of participants that report a shift of priorities from basic survival to recovery and the denominator is total number of participants.

- **Entity Type**: indicate whether the entity type is a beneficiary, community, infrastructure or something else. This will help in calculating total beneficiary numbers automatically.

- **Beneficiary Type**: if beneficiary is selected as the entity type you can further define whether it is a direct or indirect beneficiary.

- **Level of Analysis**: select whether the indicator in question is at the level of impact, outcome, output or input

- **Contribution**: does the indicator contribute to either the global indicators or the country strategic plan?

- **Reporting Requirements**: for the initial indicator registration the logframe is used. You are free, however, to add other types of indicators. These include indicators that you report on outside of the logframe, or indicators that the project manager wishes to analyze on a regular basis.

- **Sector and sub-sector**: choose the relevant sector from a list. The sub-sector field is currently free-form but this will be changed at a later date.

- **Estimated Baseline and Overall Target**: The OPMS uses the baseline and overall target to calculate indicator progress. In previous reporting templates, the baseline was assumed to be 0. In a number of cases, however, the baseline might be greater than the target. Consider, for example, nutrition or morbidity rates. These are indicators for which we want to see a decrease over time. Let’s say we are trying to reduce malnutrition rates from 30% to 10%. The first time we report on this indicator, the malnutrition rate is likely to be around the baseline figure of 30%. Without factoring in the baseline figure our progress against overall target would be 30/10*100 = 300%. By factoring in the baseline this figure becomes: (30-30)/(30-10)*100 = 0%. Halfway through the project, we might expect the malnutrition rate to have dropped to 20%. Again, ignoring the baseline our progress against target would be 200%, a decrease from the previous result, even though malnutrition rates have dropped. Factoring in the baseline we get (30-20)/(30-10)*100 = 50%. These fields are numeric only, which is why it needs to be clear from the indicator what they capture. This forces users to develop clear indicators that measure one thing at a time.

- **Indicator Definitions**: This is an extremely important field as it creates transparency about indicator calculations and the meaning of terms in the indicator name. For the indicator % of participants that report a shift of priorities from basic survival to recovery, we need to know what we mean by and how we calculate a shift of priorities, as well as how we define basic survival and recovery. It is important that these definitions are agreed on by both the MEAL and programme teams. If the indicator is taken from literature you can reference the source by copying in a URL. During the pilot phase of the OPMS, it appeared that for many projects there were different definitions of words used in the indicator, leading to entirely different ways of calculating the indicator. By registering the definition in the OPMS, we ensure that even in the case of turnover within the MEAL/programmes teams, indicator definitions can easily be referenced.

- **Reporting - Years & Months**: use this section to indicate when you wish to report results into the OPMS. This can differ from the donor reporting schedule. Ideally, if we are collecting
data once a month or more, we want to register the results on a monthly basis. By analyzing indicator results monthly we will be able to take corrective action before, for example, reporting quarterly results to the donor. The OPMS should not be seen as an additional reporting burden, rather as part of a recurring exercise for project managers to come together with the MEAL team and analyze indicator results. If the project monitoring is digitized, this should not take up more than one or two hours each month. For indicators that have data collected less than once a month, irrelevant months can simply be left blank. Thus for quarterly reporting, you might skip two months in between reporting periods. For indicators with results relying on a baseline and endline, we would expect to see only 2 reporting periods selected.

- **Blank Reporting Schedule:** this field appears when the reporting schedule is left blank. Use it to explain why a reporting schedule for the indicator has not been registered.

- **Comment:** use this space to leave a comment about the indicator.

- **URL to Dashboard:** this field will be left blank when you originally register the indicator. It is expected that, where relevant, indicators will be calculated and reported on using (Power BI) dashboards. Once a Power BI report for an indicator is created and published to the relevant workspace, the URL for that indicator can be entered into the system. This will simultaneously count towards the OPMS metric: % of indicators with a dashboard

- **Empty Dashboard URL:** use this field to indicate why the previous field was left blank. In some instances, it is not relevant to create a dashboard. Some indicators might have a very low target (e.g. number of policy documents written) for which it doesn’t make sense to set up a dashboard. In this case, the indicator will be excluded from the previously mentioned OPMS metric.

**Indicator Relationships**

You can define indicator relationships using the form with the same name in the *Indicators* menu. Logframes that are based on a theory of change should exhibit a hierarchy with regards to how outputs contribute to outcomes and outcomes contribute to impacts. Use this form to define for each indicator, which parent indicator it contributes to.
Data Sources

Data Source Registration & Details

You can register new data sources by selecting the Data Sources menu from the home screen, and then the Data Source Registration form. Similar to indicator registration, all you have to do is enter the name of data source you would like to register and click 'Submit'.

21 - Home Screen - Data Sources

After having registered a data source, you can enter details about it by clicking on the Data Source Details form in the same menu. This will bring you to a list of data sources that you have previously registered:

22 - Data Source Registration

23 - Data Sources List
The data source details form has four main functions:

1. **Planning Tool**: the form collects information about whether paper and/or digital tools need to be developed, who is responsible and what the deadline is for developing the tool. By inserting URLs for the location of paper tools, digital tools, and raw data sets, the system knows that a development task has been completed.

2. **Master Data Management**: submitting the aforementioned URLs to the system will create greater oversight as to where tools and data are located, without taking away the autonomy of countries as to where and how they store it. For example, a country MEAL team might have their own filing system for soft copies of paper tools in SharePoint. By submitting the URL to the system, they don't have to keep multiple copies of a tool, but it makes it easy for someone from a different country to find the tool and request read-only permission so they can use it for their own project. In another example, a recently hired MEAL coordinator might want to review the data that was used to calculate a particular indicator. Instead of having to search through potentially hundreds of data exports, they can easily find the data sources relating to a particular indicator and click on a link to bring them to the raw source of the data.

3. **Linking Indicators to Data Sources**: by linking indicators to data sources, we can guarantee that we have registered all data sources required for reporting on the indicators. The data source details form allows you to select which projects and subsequently which indicators the data source informs.

4. **Risk Management**: the final section of the form lets the user indicate if the data source contains any personal (e.g. names, address, id numbers, etc.) or sensitive (health status, religious affiliation, etc.) data. This will allow users to quickly identify which projects or tools need extra attention from a data protection angle.

**Data Collection Schedule**

You can define the data collection schedule for each data source by clicking the **Data Collection Schedule** menu on the home page. You will first be prompted to select the data source and then to assign the data source to a project. This is because you might use a single data source (tool) across multiple projects. For example, you might use the same SMART survey for different nutrition projects. This setup allows you to define a different data collection schedule for each project. By clicking on the green 'Assign Data Source to Project' button, you are presented with a list of available projects. Simply select the project you would like the data source to be assigned to and click 'Submit'.
Once the data source has been assigned to one or more projects, they will appear in the list. By clicking on the project you can define the data collection schedule for that combination of data source and project. As with the indicator reporting schedule, you are first asked to select the year(s) for which data collection will take place and thereafter which specific months. There is also some additional fields to fill out, such as the data collection type (e.g. survey, routine monitoring) and the data collection frequency (e.g. daily, weekly, less than monthly, etc.).

**Indicator Targets and Results**

It is desirable to register the indicators and data sources, before starting data collection. Depending on the type of project, you might wish to also define targets for specific reporting periods (monthly, quarterly, etc.). This can be done before starting data collection. It is important however that the reporting periods you register, match with the reporting schedule defined in the indicator section. If you do not have intermediary targets, you can simply register new reporting periods as required, throughout the life of the project.
To register a reporting period, select the *Indicator Targets & Results* menu. You will be presented with a list of grants and thereafter the list of indicators pertaining to that grant. Click on an indicator to view the reporting periods registered for that indicator (which should be empty at first). Click on the "Add New Data Reporting Period" and a page with three fields should open up. To register a data reporting period you must select the year and month, and if relevant for your project the target for that reporting period.

The example below is for an indicator for which data is collected every 6 months (March and September) and then one final time at the end of the project (December 2019).
To enter the results for a particular data reporting period, simply select it from the list. In case you made a mistake you can use this form to either edit the year-month combination or delete the reporting period altogether. The next section is for entering the aggregated (as opposed to disaggregated) results. The result entered here should always reflect the **progress against the overall target**. Let's take the example of an indicator that captures the number of midwives trained throughout a year-long project, with an overall target set at 240. If 20 midwives are trained each month, we would expect the results to be entered into the OPMS as follows: 20, 40, 60, etc. Entering the unique number of midwives trained each month (20, 20, 20, etc.), means the indicator remains stuck at 20/240*100 = 8.3% It is the responsibility of the in-country MEAL teams to ensure that indicators are properly calculated for easy entry into the OPMS. Where possible this should be done using Power BI reports, which ensure that calculations are done transparently and directly on the raw data.

If the aggregate result is left blank, a field will appear asking why the result for the reporting period in question is not being entered. You can use this space to highlight issues with data collection, cleaning or analysis which are causing a delay in reporting. If the aggregate result is entered, you will be presented with an option to choose a progress rating. This is left up to the discretion of the in-country project and MEAL staff to decide, although a good rule of thumb is: 20% above or below the expected value can respectively be classified as “better than expected” and “worse than expected”.

If levels of disaggregation have been defined, the results for these can be entered next. All of the disaggregation types for the project will automatically appear. If a particular disaggregation type is not relevant, it can be left blank.
The Online Project Monitoring System Dashboard

Once results have been entered, they can be viewed on the OPMS Power BI dashboard. The OPMS dashboard can be divided into three sections with associated tabs:

1. **Indicator Related Metrics**: Global Overview, Project Health, Indicator Details
2. **Task Management**: Collection & Reporting (C&R) Schedule, Data Source Development
3. **Data Protection**: Data Protection

Because of the structured nature of data that has been submitted to the system, it is very easy to aggregate results from project to country and even the global level. The dashboard makes use of row-level-security, meaning users can only view the data for their own country. HQ users are however permitted to view data at the global level. The current section looks at each tab in the OPMS dashboard individually. *The data contained in these slides comes from the pilot phase, results shown do not reflect actual project or indicator progress in any way.*

**Global Overview**

The Global Overview tab displays a number of key metrics at the project and country level:
• **Number of OPMS Project Registrations**: compares the Grant Management System (GMS) active grants to projects registered in the OPMS. This allows both in-country MEAL teams and the global tech team to be aware of which projects have become active.

• **Number of Indicators**: the number of indicators registered in OPMS. All logframe indicators should be registered as a minimum.

• **% Indicators Performing Well**: percentage of indicators that are on target or performing better than expected compared to the total number indicator progress ratings. Only the most recent rating for each indicator is used in the calculation.

• **% On Time Reporting**: percentage of registered reporting periods with results compared to the total number of registered reporting periods. The metric ignores future reporting periods. A 30 day grace period is given to allow for data cleaning and analysis prior to inputting data.

• **% of Indicators with Target**: this metric tells us if indicators have been merely registered or whether details about the indicator have also been supplied. The minimum requirement for having a relevant indicator is a target.

• **% of Indicators with Definition**: indicator definitions are crucial as they are integral to indicator calculations. Even a seemingly innocuous term as 'regular', as in # of beneficiaries receiving regular food rations over the life of the project, can lead to very disparate results depending on its interpretation. For example, does regular mean they received all food rations? A minimum number of food rations at project end? A minimum number of food rations at specific intervals? And so forth. By including a definition it indicates program and MEAL teams have sat together and agreed on a definition to be used for indicator calculations.

• **% Indicators with Reporting Schedule**: without a reporting schedule the metric for timely reporting cannot be accurately calculated. As with the previous two metrics, this tells us to what degree the indicator details section has been completed. Indicators that don’t require a reporting schedule are not included in this calculation, e.g. emergency indicators that are only reported on in the event of an emergency.

• **% of Indicators with a Data Source**: all indicators must get their data from one or more data sources. The OPMS allows users to register data sources and link them to indicators. This same section allows users to plan when they intend to complete their data sources and who is responsible. Thus, the metric ensures that relevant data sources are registered to the system, in order to create a complete overview of the required work needed to set up a comprehensive monitoring system.

• **% Indicators with Dashboard**: a monitoring system consists, broadly speaking, of three components: data collection, data storage and analysis. The first two are covered in the **Data Sources** section of the OPMS, the last can be linked directly to individual indicators in the **Indicator Details** section. This indicator does not take into account indicators for which a dashboard is not relevant (e.g. number of policy documents produced with a target of 2).

• **% Active Grants Registered in the OPMS**: this metric can be found in the bottom right hand corner of the page and is closely related to the first metric at the top of this section.
The dashboard contains three filters that allow users to filter by country, by whether or not projects have been registered to the OPMS and by the grant end date.

Project Health

The Project Health tab is meant for analysis at the project level, and exhibits some of the same metrics as the Global Health tab. The progress rating is split out into 'worse than expected', 'better than expected', and 'on target', thereby conveying slightly more detail.

At the top of the page you can find some general information about the project such as: start and end date, and who the project manager is. You can filter the page by Country and Project (recommended), but also by Sector and Reporting Requirements. Filtering by sector is useful to view indicator progress from a programmatic rather than a project perspective. By clearing the filters on country and project you are able to view overall progress by a specific sector such as WASH or Health. Filtering by reporting requirements allows users to just focus on logframe indicators, or choose to include other indicators as well.

At the center of the page is a table with the key metrics per indicator:

- **# of Associated Data Sources**: indicates whether data sources have been registered for a particular indicator, and if so, the number.
- **Last Reported**: the most recent reporting period for which results have been entered.
- **Progress Rating**: a largely subjective measure of how the indicator performed during the most recent reporting period.
- **Estimated Baseline**: an estimated baseline figure for the indicator.
- **Aggregate Result**: the most recent cumulative result at the aggregate level (see the WebApps Indicator Targets & Results section).
- **Overall Target**: the target expected to be achieved by the end of the project.
- **Progress Against Overall Target**: percentage of result achieved compared to the target whilst factoring in the baseline. The progress against overall target for an indicator with a baseline of 50, a target of 150 and an aggregate result of 100 will have and progress of 50%.
• **URL to Dashboard:** quick link to the dashboard (and section) containing the analysis for a specific indicator.

• **Comment:** comment on indicator result for the most recent reporting period.

### Indicator Details

The indicator details contains three graphs:

- **Aggregate Results Compared to Reporting Period Target:** this graph contains the actual results of the indicator over time alongside the target for each reporting period (where defined).

- **Disaggregated Results Over Time:** shows indicator results for different disaggregation types. These can be viewed one at a time using the 'Disaggregation Type' filter. In the example below we can see that the sudden spike in results is due to GOAL beginning operations in April/May, with the contributions of the partner remaining stable throughout the project.

- **% Progress Against Overall Target Over Time:** shows the indicator results as a percentage of the overall target.

Each of these graphs can be viewed with quarterly and annual time axes by using the 'Drill Up' button in the top right hand corner of the visual.

A number of indicator details are also shown in the bottom left hand corner of the screen, including:

- Beneficiary Type (Direct/Indirect)
- Comment
- Entity Type (Beneficiary, Household, Infrastructure, etc.)
- Indicator Definitions (see WebApps section on Indicator Details)
- Level of Analysis (Impact/Outcome/Output/Input)
- Numerator and Denominator
• Reporting Requirements (Logframe/External Reporting/Project Management)
• Sub-Sector
• Unit of Measure (Number/Percentage/Ratio)

Data Collection and Indicator Reporting Schedule

The C&R Schedule tab displays reporting schedules for indicators, and data collection schedules for data sources in the form of Gantt charts. The Gantt charts have a monthly periodicity. The chart is colored based on information entered into the Indicator Details and Indicator Targets & Results forms. The indicator reporting schedule has five colors denoting different reporting period statuses:

- **White**: No reporting required.
- **Purple**: Future expected reporting period based on the information entered in the Indicator Details form.
- **Blue**: Expected reporting period for which a result has been entered. The color switches from purple to blue 30 days after the last day of a reporting period, but only in the case that you have entered a result. For example, if you have indicated that you will report on a particular indicator in May, you will have until the 30th of June to enter the results. This 30 day 'grace' period will allow the MEAL team to check the submitted data and clean it where necessary.
- **Red**: A registered reporting period, without a result, that has passed the 30 day data cleaning period. When a result is entered for one of these reporting periods the color will change to blue.
- **Yellow**: A result has been entered using the Indicator Targets & Results form, but was not registered in the Indicator Details form. This could mean that you accidentally selected the wrong month-year combination in the Indicator Targets & Results form or registered the wrong reporting periods in the Indicator Details form.
The data sources Gantt chart shows the data schedule for each data source - project combination. The same data source/tool might be used for multiple projects. Logically the data collection schedule for each project might be quite different, which is reflected in the chart.

You can adjust the time scale of the chart using the filter labeled 'End of Month' on the right hand side of the screen. The ‘% of on time reporting’, familiar from the ‘Global Overview’ and ‘Project Health’ tabs is shown in the top right hand corner. The metric is calculated by dividing the number of ‘red’ reporting periods by the sum of ‘red and blue’ reporting periods. This result displayed will change depending on what filters are selected (country, project, indicator).

Data Collection & Indicator Reporting Schedule

Data Source Development

The Data Source Development tab facilitates task management and easier access to both tools and raw data sets. The OPMS WebApp allows users to register data sources and link them to indicators. It also allows users to record who is responsible for developing the paper/digital tools, and set a date for when they expect to have completed these tasks.

The data table at the top of the page contains a list of registered data sources which can be filtered by country or sector. It contains the status of the paper and digital tools and who is responsible for their development. Once a paper or digital tool has been finalized, a URL to it's location can be submitted to the OPMS. This also goes for the location of the raw dataset.

Below the data table is a flow chart that gives a quick overview of data source development progress. Yellow indicates a secondary data source, blue indicates that a data source is available, and red means an action is still required. The flow chart is divided into four sections: the number of data sources (filterable by country and/or section), paper tool development, digital tool development and data export. By submitting a URL to the system, the color changes from blue to red. Where you have indicated that the development of a paper/digital tool is not necessary, the color automatically displays as red.

The Gantt Chart presents a timeline for the development of paper and digital tools. The dotted line indicates today's date. The Gantt Chart is created on the basis of the development deadline dates entered in the WebApps version of the OPMS.
The metrics on the right hand side of the screen indicate the percentage of data sources with indicators linked to them, the percentage of data sources with a data collection schedule, and the number of development tasks overdue. A development task is overdue, if a URL hasn't been supplied after the after the development deadline has passed.

**Data Protection**

The Data Protection Tab allows users to get a quick impression of which data sources contain either personal or sensitive information. An overview is also given of what percentage of data sources contain either personal or sensitive information. This tab can be used to estimate the amount of 'risk' involved in data collection and storage. High risk projects can then be followed up by members from the MEAL tech team, to ensure that sufficient data protection measures are in place.

**Learning**

Some of the things learnt from the OPMS roll-out so far:
• Interpretations of how indicators should be measured often differ amongst different stakeholders. Having a field in which to define key terms in the indicators and calculation methodology is key.

• The information systems set up for the Syria programme are some of the most advanced, but it turned out there were almost no dashboards set up for any of the logframe indicators.

• Previously indicators with disaggregated values would be recorded as separate indicators.

• When uploading documents to the Paper Tool library, MEAL teams discovered that they had misplaced these tools or had multiple versions.