



User Manual
for the
MIG Management Information System
Release 2.04



Contents

Contents	2
Introduction	4
How to use this document	4
Getting started	5
Home page	5
Registration	5
Logging in.....	5
Screen layout.....	5
What's new in Version 2.04	7
Project overview	7
Tutorial	9
Working with forms	9
<i>Capturing a new form</i>	9
<i>Finding a form</i>	11
<i>Recommending a form</i>	12
Fund administration	13
Generating reports	14
<i>Project reports</i>	14
<i>Funding reports</i>	15
REFERENCE	16
Access Control and Permissions.....	16
Time Cycles	16
Library	17
Fund Administration	17
Project Life Cycle	18
<i>Forms</i>	19
<i>Project registration (MIG 1)</i>	20
<i>Request for Payment (MIG 6, 8 and 10)</i>	21
<i>Project overview</i>	21
<i>Filters</i>	23
Backlogs.....	24
<i>Establishing the baseline</i>	24
<i>Remaining backlogs</i>	25
<i>Workflow and Communication</i>	26
Workflow	26
<i>Work List</i>	26
<i>Workflow process</i>	27
My Profile	29
Reporting, Mapping and Graphing.....	31
<i>Filter criteria</i>	32
<i>Maps</i>	33
System Administration.....	35
Annexure A: Workflow status	36
<i>Project Life Cycle</i>	36

<i>Fund Administration</i>	37
<i>Backlogs</i>	37
Annexure B: Backlog Definitions	2
Definitions: Community Services.....	2
Definitions: Electrification.....	3
Definitions: Enterprise Infrastructure	4
Definitions: Emergency Services	4
Definitions: Public transport	5
Definitions: Roads and Related Stormwater	6
Definitions: Sanitation	7
Definitions: Solid Waste Removal	8
Definitions: Storm Water.....	8
Definitions: Water	8

Introduction

Municipal
Infrastructure
Grant



The vision of the MIG programme is to "provide all South Africans with at least a basic level of service by the year 2013 through the provision of grant finance aimed at covering the capital cost of basic infrastructure for the poor".

The main contributions of the MIS in assisting DPLG to realise this vision include:

- Serving as an overall control mechanism in terms of the allocation and disbursement of MIG funding to municipalities, monitoring the actual expenditure by municipalities and recording the assets resulting from the spending of MIG funds.
- To put municipalities in control of the planning and implementation of infrastructure development in their areas of jurisdiction by providing the practical means through which MIG funding can be tied to the approved Integrated Development Plan of a municipality (through integration with the IDP Nerve Centre).
- Serving a dual purpose of providing municipalities with a tool for controlling their own programmes while at the same time providing consolidated reporting of financial, progress and performance indicators on a provincial and national scale.

How to use this document

After reading the fundamentals of how to use the MIS in Getting started, we recommend that you work through one or more of the Tutorials. You may not find it necessary to read through all of the Reference section, as this is intended to answer questions as and when they arise.

Suggestions

If you have suggestions for improving this manual please send an email to mig@dplg.gov.za.

Getting started

Home page

To access the home page of the MIS, enter the URL mig.dplg.gov.za into your browser and press **Enter**.



The MIS only works with Microsoft Internet Explorer Version 6.0 or higher. Plans are in place for later releases of Version 2 to be compatible with at least one other browser.

Registration

Except for the home page and parts of the library, you need to be a registered user to access the MIS.

Register as a user

To register as a user click **Register as new user** under **Quicklinks** on the home page.

Roles

Please note that registration is intentionally not automatic because the system administrator needs to validate your role within the organisation, which in turn determines your permissions.

Logging in

To log in, enter your **User name** and **Password** and click **Submit** or press **Enter**.

Passwords

Acceptable passwords are at least 6 digits long and contain a mixture of upper case, lower case and numbers e.g. pR311x.



Always bear in mind that your password is the equivalent of a signature on a MIG form. Do not therefore share your password with anybody. If you require others to do work on your behalf, rather request your system administrator to them with alternate logins, otherwise the transactions performed by them will reflect against your name in the audit trail.

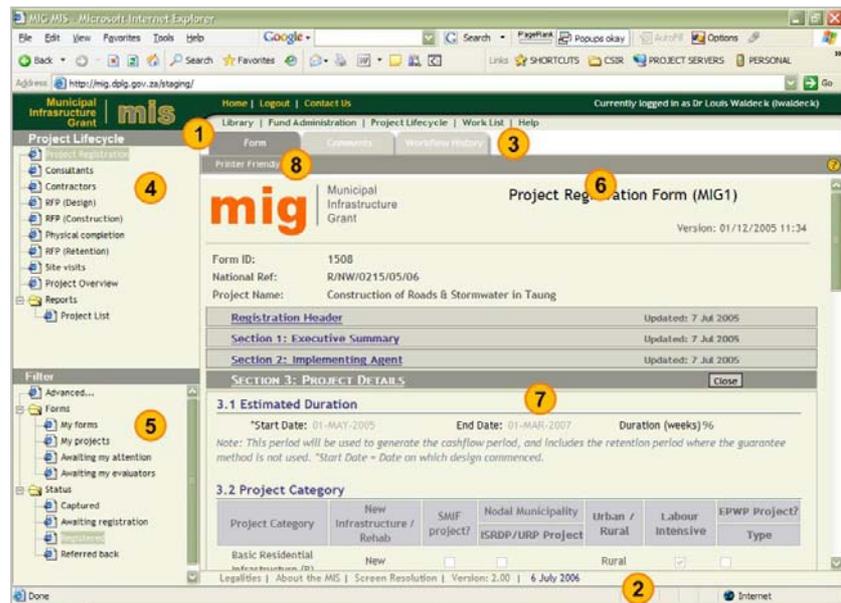
Screen layout

The screen layout can be divided into areas for static content, navigation and dynamic content presentation.

Static content

1 Identity

The identity of the MIS is established by means of a strip-like image at the top of the screen. This area also contains non-application specific hyperlinks to Home, Login/Logout, Contact Us and identifies the current user.



2 Legalities

Statements regarding privacy policy and disclaimers are displayed at the bottom of the screen together with system version information.

Navigation

3 Application menu

The application menu bar allows you to access the main applications contained within the MIS. You will only see the applications that your system administrator have given you access to.

4 Content tree

The content tree displays the content of the application that you have selected in the form of a hierarchy of folders. Folders can be opened or closed by clicking the plus/minus sign, the folder icon or the name itself.

5 Filters

Filters can be used to hide complexity from the user by limiting content to what the user needs to see. A simple filter such **Forms awaiting my attention** is for example technically equivalent to retrieving all forms in a specific workflow status from one or more municipalities.

Filters are also used to enhance performance by limiting the volume of information retrieved from the MIS database.

Dynamic content

6 Action bar

The action bar lists the actions that you are able to perform based on permissions that you have been given by your system administrator. Actions could include **Capture**, **Submit**, **Recommend**, **Refer back**, **Download**, etc.

7 Results

This is where your results are displayed.

8 Tabs

The tabs provide different views of the same content. Once you have for example navigated to a given project, one tab may show the forms belonging to the project while another shows the cash flow for the same project.

What's new in Version 2.04

The enhancements released in Version 2.04 allow users involved in project management to maintain the following categories of project information:

- Budget
- Cash flow
- Target dates
- Planned employment generation
- Actual employment generation
- Planned socio economic impact
- Actual socio economic impact

The maintenance functionality only becomes available after a baseline has been set by registering an appropriate form. For example, once a cash flow baseline has been set by registering a MIG 4 form, the cash flow can be maintained without the need to register MIG 6 or 8 forms. MIG 6 and 8 forms are of course still required as requests for payment, but not to update the cash flow or target dates. The cash flow sections have consequently been disabled on all forms except MIG 4 and target dates have been disabled on all forms except MIG 1.

All changes to project information made through project maintenance screens are recorded in a comprehensive audit trail.

Other enhancements include project suspension, project termination and site visit reports.

Project overview

The project maintenance functionality can be accessed by clicking **Project Overview** in the content tree of the **Project Lifecycle Application** or by clicking the **Project Overview** button displayed on the [Action bar](#) of any form that is related to the project in question.

Maintenance Tab

Budget

The Budget Section allows a Project Manager, PMU Manager or Municipal Manager to update the Project Funding of a project. The baseline for this information is obtained from MIG 1 Section 6.2. The amount by which the total project funding (Incl. VAT) can be changed without re-registration is 20% of the amount that the project was first registered for.

If the change exceeds 20% of the original amount, the MIS initiates an amendment by opening a copy of the last registered MIG 1 form. Section 3 of the copy will show the updated budget but the MIS cannot update Section 6

automatically. Once you have amended Section 6 and submitted the amendment, it will follow the normal workflow process from Municipal Manager to Senior Manager Finances.

Note: The budget maintenance screen will not show the updated budget until the amendment has been registered and no further changes are allowed until the amendment is either registered or deleted.

Target dates

This section allows a Project Manager, PMU Manager or Municipal Manager to update the Target Dates of a project. The baseline for target dates is obtained from MIG 1 Section 7. It is no longer possible to update Target Dates on MIG 4, 5, 6 or 8.

Cash flow

This functionality was released in V2.03. A warning message is now displayed if there is an unregistered MIG 4 in the workflow to alert the user that any changes made will be overwritten when the form is registered.

Planned Employment Generation and Socio Economic Impact

These sections allow a Project Manager, PMU Manager or Municipal Manager to update the planned Employment Generation obtained from MIG 5 Section 5 and the planned Socio Economic Impact first obtained from MIG 1 Section 5 and then MIG 5 Section 6.

Actual Employment Generation and Socio Economic Impact

These sections allow a Project Manager, PMU Manager or Municipal Manager to adjust the actual Employment Generation and Socio Economic Impact **once the project has been completed**. During the implementation phase of the project, this information is obtained as before from MIG 8 Sections 4 and 5.

Audit Trail Tab

Audit trail

The new audit trail functionality allows any user to trace the history of changes made through any of the project maintenance screens. To view the audit trail:

1. Select an information group from the dropdown list.
2. Optionally specify a start and end date to restrict the number of audit trail entries returned.
3. Click **View** on the Action Bar.

Tutorial

Working with forms

The **Project lifecycle** application is based almost entirely on the familiar MIG 1, 4, 5, 6, 8, 9, 10 forms. Although the forms differ in content and purpose, the tutorial only deals with the Project registration form (MIG 1). Since the MIS deals with all forms in a consistent manner, the other forms should not present any difficulty.

For the MIS to be different things to different people and encourage a sound business process, it limits functionality according to the role of the person that is logged in (see [Registration](#)) as well as the step within the applicable workflow process.



If you are therefore unable to perform the actions described in the next paragraphs, it could be for one of the following reasons:

- The role that you have been assigned does not allow the action. For example, the Senior Manager MIG is not allowed to capture a new MIG 1 form. Please refer to **Annexure A** to find out what role is required for every action.
- The action is not permitted at the current workflow step. A form cannot for example be recommended before it has been submitted.

Capturing a new form

To capture a new form proceed as follows:

1. If you are not already in the Project Life Cycle application, click **Project lifecycle** on the [Application Menu](#).
2. Click **Project registration (MIG1)** on the [Content](#) tree.
3. Click **Capture** on the [Action Bar](#). A blank form will appear in the Results pane. All forms are split into sections that are displayed in an outline view containing only the headings, until you expand a particular section by clicking the hyperlink. The only exception to this rule occurs when you capture a new form. The first section is then automatically expanded because most of the later sections depend on the first.

Data entry

Before you start entering data, note that borders and background colours are used for a specific purpose:

- All fields with a border and white background, such as **Project name** and **Provincial reference** will accept free-form typing.
- Fields with a border but coloured background, such as **Municipality** and **Date received** can only be completed by clicking the icons to the right of them , .
- Fields without a border, such as **National reference** are calculated by the MIS.

Data entry in tables

Many tables behave similar to a spreadsheet, in which you select the first cell, enter data and move to the next cell by clicking it or pressing the **Tab** key on your keyboard. **Shift** + **Tab** will take you to the previous cell.

Depending on the nature of the validations that must be done by the MIS, some tables use popup windows to capture the data for an entire row. The clue to which tables behave in this way (apart from visual styling clues) is that the whole row is selected when you click any cell in the row as illustrated below. If this happens, double click the row to open the popup window. Once in the popup window you can also use **Tab** or **Shift** + **Tab** keys on your keyboard to move between cells.

Adding rows to a table

Another clue to tables that work with popup windows is the presence of an **Add Row** button below the table.

3.4 Project Funding

Project Type	Total	VAT	Direct Costs	Indirect Costs	Accredited Training	Non-Accredited Training
Water	500000.00	0.00	500000.00	0.00	0.00	0.00
Project Type	Water					
VAT	0					
Direct Costs	500000					
Indirect Costs	0					
Accredited Training	0					
Non-Accredited Training	0					
		0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00

Border indicates whole row selected. Double click to edit in popup window.

Add Row Button.

- When you have completed a section, click either of the **Save** buttons above or below the expanded section.
- Expand the next section by clicking anywhere on the heading and work through the form until you have saved Section 7.
- You are now ready to submit the form into the workflow process. This is done by clicking **Submit** on the [Action Bar](#). Although some validation is done as you enter data, the **Submit** action subjects the entire form to a final validation. Any problems encountered at this stage are listed at the bottom of the form.
- The MIS sends an e-mail to the person(s) responsible for recommending the form.

Submitting the form



Once you have submitted a form you will no longer be able to edit anything on the form, unless it is referred back for revision and neither the Project Manager nor the PMU Manager can attend to the revision.

Finding a form

Finding an existing form depends very much on your current context. To find the form that you just submitted, you could simply click on **My forms** in the **Filters** pane. This will present you with a list of all the forms that you have captured, with the most recent at the top.

In the more general case you may have to click **Project lifecycle** on the [Application Menu](#) and Project registration (MIG1) on the [Content](#) tree. Thereafter you could take one of the following approaches to select an appropriate filter.

- If you are a data capturer and you are looking for one of your own forms the simplest is probably to click **My forms**. Depending on how many forms you have captured, the MIS may have to split the list over several pages (see working with lists below).
- If you are looking for forms in a particular workflow status, for example those that have been referred back, it may be easier to click **Referred back** under the **Status** folder, but remember that this will return all

forms in this status within your agency, not only your own.

3. Provincial and national users need to be particularly careful in selecting a filter such as **Registered** because a list containing several thousand forms could hardly be considered a filter! In these cases it is advisable to rather use the **Advanced...** filter which allows you to limit the search to a specific municipality, date range, etc.

Working with lists

Many filter and search actions in the MIS produce a list in [Results pane](#). These lists could contain forms, projects, people, companies, etc. The better the filter, the fewer rows will be returned. If more than a hundred rows are returned, the MIS will split the list into separate pages. You could then display the pages by clicking the page number at the bottom-right corner of the list or choose to refine the search criteria.

Results	
▼	Form ID
☰	1324
📄	934
📄	936
📄	933
📄	937

Another useful feature of the lists is that any column can be sorted by clicking the column heading. This may be useful if you are after one of a few similar rows. For example, if there is one submitted project in a list of many, you could get it to the top of the list by clicking the column heading of the status icons once, or at most twice. Alternate clicks toggle the sort order between ascending and descending.

Please refer to [Annexure A](#) for the meaning of the status icons.

Recommending a form

To best way of recommending forms depends on whether you have one or many forms to attend to.

If you **only have one** e-mail notification that you have not attended to, the easiest way is to click the hyperlink "[click here to recommend the form or to refer it back for revision](#)" contained in the e-mail. This will take you to the login page of the MIS and then open the form in question.

1. If you are satisfied with the contents of the form and want to recommend it, click **Recommend** on the [Action Bar](#). The next person in the workflow process will receive an e-mail notification that a form is awaiting his/her attention. If previous workflow participants added [Comments](#) / [Concerns](#) to one or more sections you will be able to view these by clicking on the corresponding "traffic light" icons. You may also add Comments / Concerns of your own by clicking one of the two **Add Comment** buttons at the top or bottom of an opened section.
2. If you are not satisfied with the contents, click **Refer back** on the [Action Bar](#). Everybody that recommended the form up to this point in the workflow process will be notified by e-mail that you have referred the form back and the Project Manager will be requested to revise the

form. If the Project Manager is not a registered user of the MIS the PMU Manager (first municipal and then district) will be requested to attend to the form.

3. If you have **more than one** e-mail notification that you have not attended to, the easiest way to attend to the form in question is to click the "Work list" hyperlink in any e-mail to log in and open your work list. Click the hyperlink of the first form (or any other form if you wish) to open the form and recommend or refer the form back as described above. Then use the **Next** > or < **Previous** buttons to open and attend to all the forms in your **Work List**.

Hint: Use the **Printer friendly** button to generate a printer friendly version of the entire form for checking the content even if you do not actually want to print the form. It will free you from opening and closing the sections one by one.

Fund administration

To illustrate the Fund Administration Application we will work through capturing the payment schedule of a municipality for the next financial year.

1. If you are not already in the Fund Administration application, click **Fund Administration** on the [Application Menu](#).
2. Click **Schedule** on the [Content](#) tree to open the folder and then **Infrastructure**.
3. Select the next financial year from the **Filters** pane.

You will now be presented with a list of all municipalities that you are responsible to submit payment schedules for. In the example below, the user is logged in as the PMU Manager for Capricorn DM. As such the list will include the DM itself (own projects) as well as all the non-funding municipalities that the PMU is responsible for. Note that it does not show funding municipalities such as Polokwane because the PMU is not responsible for submitting their payment schedules.

Schedule		
Save	Submit Selected	
District Municipality		Apr 2005
<input type="checkbox"/>	Total for Capricorn DM	6500000
Municipality		Apr 2005
<input type="checkbox"/>	Capricorn DM	6500000
Municipality		Apr 2005
<input type="checkbox"/>	Capricorn DM (own projects)	6500000
		Apr 2005
Allocated Funds		0
Unallocated Funds		6500000
<input type="checkbox"/>	Blouberg LM	0
<input type="checkbox"/>	Aganang LM	0
<input type="checkbox"/>	Molemole LM	0
<input type="checkbox"/>	Lepele-Nkumpi LM	0

Capture schedules

- For every month of the year, enter an amount into the **Unallocated** field so that the sum of the **Unallocated** and **Allocated** amounts equal the desired schedule for the month. Remember that the **Allocated** field is calculated from the sum of all project cash flows for the month in question (see [Reference](#)). In the example above there are no registered projects reflecting a cash flow for Apr 2005, so the schedule consists entirely of unallocated funds.

Note that the rightmost column **Variance** decreases as you complete each month and that it should become zero after completing the last month because the total of the 12 payment schedules must equal the allocation.

Save schedules

+	<input checked="" type="checkbox"/>	Blouberg LM
+	<input type="checkbox"/>	Aganang LM
+	<input checked="" type="checkbox"/>	Molemole LM
+	<input type="checkbox"/>	Lepele-Nkumpi LM



- Once you have completed a municipality (or earlier if you wish) it is advisable to click **Save** on the [Action Bar](#) to save your work. The Save action saves everything that you might have changed for later use. It does not submit the Schedule(s) into the workflow process.
- Once you have completed all the municipalities that you are responsible for and you are satisfied with the correctness of the information, you are ready to submit the Schedule(s) into the workflow process. This is achieved by selecting the municipalities that you want to submit (by clicking the relevant check boxes and then clicking **Submit selected** on the [Action Bar](#)).

Note that the status icon  appears to indicate that the schedule was successfully submitted. Once it has also been recommended by the Senior Manager MIG the icon will change to .

Versions of the schedule

- It is extremely important to note that what was captured above represent a version (snapshot) of the payment schedule for the monthly cycle that it was captured in. When you open the same page in the next monthly cycle you may notice some differences. The scheduled amount for the previous month will have been replaced by the amount actually transferred but this will not normally be obvious because the transfers rarely differ from the schedule. It is more likely that committed portion of the schedule would have changed if project cash flows were updated between when you submitted the schedule and the end of the monthly cycle. The MIS will reflect such changes by adjusting the uncommitted portion. You will not be able to update the schedule for previous months.

Generating reports

Project reports

To obtain a project list, proceed as follows:

1. If you are not already in the **Reports** application, click **Reports** on the [Application Menu](#).
2. Click **Projects** under **Project lifecycle** in the [Content](#) tree and then click **List**.
3. Optionally specify one or more filter criteria to filter the project list. The Implementing agent field is pre-populated according to your login. Do not blank this field out unless you want a list of all MIG projects and do not select anything from the Aggregate by drop down box.
4. Click **Report** on the Action Bar.

Exporting a report

To export a report:

1. Choose **Excel** or **Acrobat (PDF)** from the **Select a Format** dropdown box.
2. Click Export on the Report Toolbar.
3. Select **Open** or **Save** on the **File Download** dialog that follows.

Funding reports

Except for adding comments to the DORA report, the MIS does not require you do take any action to prepare or submit monthly reports. It is assumed that reporting is done on a fixed monthly schedule (see [Time cycles](#)) and that the reports simply reflect what has been processed up to the closing date of the cycle.

To obtain a project list, proceed as follows:

1. If you are not already in the Fund Administration application, click **Fund Administration** on the [Application Menu](#).
2. Click **Reports** on the [Content](#) tree.
3. Select monthly or annual cycle in the [Results](#) pane if applicable and click **Generate report**.
4. When the report is ready to download, the **Generate report** button changes to a **View report** hyperlink.
5. Click the **View report** link to download the report file to your computer in a Comma Separated Variable (CSV) format. You can Save the file for later use or open it first and then save it in a format of your choice, for example as an Excel Spreadsheet (XLS).

REFERENCE

Access Control and Permissions

Except for the home page and the Library, users require a user name and password (6 digit mixed case and mixed alphanumeric) to gain access to functionality.

Once logged in, the framework limits access to functionality through what is exposed to a user and what actions the user is permitted to perform on what is exposed.

Visibility

The framework manipulates the visibility of applications and nodes of the content directory on the basis of the role(s) that have been assigned to them by their system administrator(s).

The visibility of individual records are determined by the position of the user's organisation in the organisation hierarchy in a way that records are visible within the record owner's organisation as well as any organisation lower down in the organisation hierarchy. This is done by way of adjusting the root of the organisation dimension in the filtering mechanism.

This model can accommodate several hierarchies but each additional hierarchy increases the maintenance overhead. Examples of hierarchies could include:

- Government entities such as national government, provincial government, metropolitan, district and local municipalities.
- Programme entities such as NMMU, PMMU and PMU.

Note: There are exceptions (such as gazetted allocations) where visibility is not restricted.

Permitted Actions

The actions that a user is permitted to perform on a visible record depend on the role(s) assigned to the user by his/her system administrator(s), the permissions associated with such role(s), the devolution option of municipality and the current workflow status associated with the record.

In addition to record level permissions, the model also caters for field level permissions linked to workflow status. The project budget section may for example be changed until the registration has been signed off by the SMM. Thereafter it can only be changed by means of an addendum that goes through the same approval process.

Time Cycles

The MIS makes extensive use of annual and monthly time cycles to stabilise reporting. These are similar to a calendar year or month except that the last day of a MIS cycle does

not have to be the last day of the year or month. The last day of the March cycle may for instance be the 10th of April. This allows certain actions to be completed beyond the end of the calendar month that will still for reporting purposes reflect against the March cycle.

Annual cycles

Annual cycles apply primarily to **Allocations** and **Payment Schedules** in the Funding Administration application.

Monthly cycles

Monthly cycles apply primarily to:

1. Cash flow projections provided in MIG 4, 5, 6 and 8 forms.
2. Manipulation of cash flows in the **Cash flow** Tab of the **Project overview** module.
3. Updating schedules in the **Payment Schedules** module.

The implication of the above is that if the monthly cycle is set for the March cycle to end on the 10th of April, cash flows updated before midnight on the 10th of April will reflect under the March cycle. Once the cycle has closed, you will no longer be able to the update cash flow for that month, only future months.

Library

Application Overview

The Library application provides convenient access to the latest MIG forms as well as policy, legislation and guideline documents that may be relevant to MIG.

Fund Administration

Application Overview

The fund administration application controls the annual allocation of MIG funding as well as monthly disbursements to municipalities after taking account of previous transfers, actual expenditure and projected expenditure for the next monthly cycle.

In addition, the fund administration application provides the means for all three spheres of government to comply with the MIG-specific provisions of the Division of Revenue Act (DORA).

The same controls apply to funding allocated to infrastructure projects and management fees. The main features of the Fund Administration Application were derived directly from the DORA as explained in the following four paragraphs.

Allocations

This is where the gazetted annual allocations for infrastructure and management fee are recorded. It is recorded once and perhaps revised once or twice by the dplg Senior Manager Finance.



Throughout the application, funds allocated to funding municipalities (Devolution option 1 and 2) reflect against the name of the municipality while funds allocated to a District

Municipality reflect under DM (Own projects). Funds allocated to non-funding municipalities (Devolution option 3) are also reflected against the name of the municipality but in the same grouping as the DM, indicating that the funds are actually managed by the DM.

Payment schedules

The payment schedule specifies the monthly amount to be transferred from dplg to funding municipalities. There are separate schedules for infrastructure funding and management fees. Please refer to the [Tutorial](#) for an example of capturing and submitting a payment schedule for a municipality.

In the case of infrastructure funding, the schedule is calculated as the sum of committed and uncommitted funding. The committed funding is obtained from the cash flow projections of registered projects. There are two ways of updating cash flows and both of these reside in the **Project Life Cycle** application:

1. Capturing and **recommending** MIG 4, 5, 6 and 8 forms.
2. The cash flow Tab in Project overview

Transfers

This is where dplg records the BAS Reference and Action Date for transfers actually made. Unless an intervention is required, the amount transferred will be the exact amount provided for in the payment schedule.

Expenditure

This is where the actual expenditure incurred by a LM or DM is declared. Once again there are separate processes for declaring infrastructure and management fee related spending.

In the case of infrastructure spending, the expenses are actually captured in the **Project Life Cycle** application while capturing the "Payment requested" section of MIG 6, 8 and 10 forms. In these sections, the payment requested is built up from tax invoices submitted by consultants, contractors and suppliers after retention has been dealt with.

All that is added in the expenditure module is to declare that the invoices have actually been paid and this is done by recording the payment stub number obtained from the municipality's financial system against each invoice.

Project Life Cycle

Application Overview

The project life cycle application provides a variety of participants in the life cycle of a MIG-funded infrastructure project with the means to manage the project from submission of the business plan through the design, tender and construction phase to physical completion. The registration process ensures that MIG funds cannot be spent outside the framework of a municipality's approved IDP.

A forms-driven approach is used through which the project registration form forms the baseline against which suppliers

report financial and physical progress as a precondition to monthly progress payments.

Forms

The project life cycle application contains one module for each of the MIG forms. Once you have selected the appropriate form, you will be able to (depending on your role and associated permissions) capture and save a new form, submit a form, add comments / concerns and recommend or refer a form back for revision. These actions are dealt with in the [Tutorial](#).

Section headings

All forms are split into sections that are displayed in an outline view containing only the headings, until you expand a particular section by clicking the hyperlink. The only exception to this rule occurs when you capture a new form. The first section is then automatically expanded because most of the later sections depend on the first.

Any section can contain evaluation notes (comments), the presence of which is indicated by red, amber or green "Traffic light" icons. Clicking the icon displays the comments and clicking the hyperlink **Section 3: Project Details** opens the section.

Comments

Comments can be added by clicking one of the two **Add Comment** buttons at the top or bottom of an opened section. These buttons will always be present if you have opened the form from the Work List, but could be absent if you have opened the form via another route if the form is in a workflow state that does not allow you to edit it at that moment, even if you were able to edit it before or may be able to edit it in future.

Concerns

A **comment**, symbolized by a green traffic light, usually contains additional information or clarification intended to expedite or document workflow actions, without requiring a subsequent user to act on it.

Comments could also be expressed as a **concern** (amber traffic light) or **severe concern** (red traffic light), when you believe that the matter is serious enough for subsequent users to note and potentially refer the form back for revision.

Note: Even if you raise a severe concern, it will not stop you, or any subsequent workflow participant to recommend the form. It simply draws attention to an issue.

Form Tab

If the form was opened from your **Work List**, the [List navigator](#) allows you to attend to all forms without returning to the **Work List**.

Clicking the **Printer Friendly** button displays a printable version of the entire form and a print preview that allows you to see the page breaks and only print specific pages.

Comments Tab

The **Comments** tab provides a separate view of the comments added to each section of the form. Sections with comment can be opened by clicking the traffic light icon or you can click the **Printer Friendly** button to open a print preview of all the comments.

Workflow History Tab

The **Workflow History** tab provides a complete record of all workflow transactions on the form from the first time that it was submitted into the workflow process.

Project registration (MIG 1)

Project location

To positively locate a project, the fields "Nearest Business Centre" and "Distance to Business Centre" have been replaced with the Sub-place name and a validation to confirm that the coordinates specified are indeed within the boundaries of the Sub-place.

3.5 Project Location					
Project Location		Co-ordinates of the Project			
Province: Limpopo		Degrees °	Minutes '	Seconds "	
District Municipality: Capricorn DM		Longitude (E):	29	48	26
Local Municipality: Molemole LM		Latitude (S):	24	56	43
Sub-place: Hopetown NU					
<input type="button" value="Validate Coordinates"/>					

Note: Most users would capture the latitude degrees as a positive number (indicating the number of degrees South of the equator) but the MIS will also accept a negative number to accommodate users that obtained the coordinates from a GPS device.

Click **Validate Coordinates** button to find out whether the coordinates you entered fall within the sub-place. If the coordinates fall outside the sub-place, an error message will provide you with the name of the sub-place that matches the coordinates. If you are absolutely sure about the coordinates, please select this sub-place in the next attempt.

If you are unable to supply coordinates that match the sub-place, you will be able to save the form but you will not be able to submit the form into the workflow until matching coordinates have been supplied.

Unit cost validation

As from version 2.03, the unit-cost of outputs are validated against the National Guidelines as specified in “Basic Level of Services and Unit Costs: A guide for municipalities – December 2005”. The National Guidelines do not specify unit costs for all outputs, but where possible the MIS will calculate the unit cost of the component in the units specified by the guidelines (for example per household, per km, etc.) For projects that do not involve counter funding the component cost is taken as MIG funding and the unit cost can be accurately assessed. For projects that do involve counter funding the MIS calculates a MIG Funding Ratio from Section 3.4.1 can only assume that this ratio of MIG Funding to Total Funding applies to all component costs. Since this may not always be the case you will be requested to provide a motivation whenever the MIS finds a component cost that exceeds the guidelines.

6 Specific Indicators	
6.1 Basic Residential Infrastructure (B)	
Water (NB: Technical Report to be submitted to DWAF) - MIG unit cost: 3,768.18 per household	
Water: Bulk Services: Boreholes:	
Total Component Cost: 1,931,606.83	Construction Duration (months): 3
Number of boreholes planned: 11	Level of Service to be provided: Basic
Capacity of borehole planned (l/s): 23.00	

Please note that the unit cost validations will not prevent a form from being recommended by users participating in workflow process. It merely alerts the data capturer of the fact, allows a motivation or explanation to be entered and alerts all subsequent workflow participants of the irregular unit cost, who may accept the explanation or refer the form back for revision.

● The unit cost for sanitation exceeds the national guideline of R3 000 per household.

Request for Payment (MIG 6, 8 and 10)

The Request for Payment forms (MIG 6, 8 and 10) contain features that are not found on other forms. These can be found on the **Claims** Tab of these modules. These features are intended to assist you in deciding whether the RFP should be recommended.

The **Claims** Tab provides a complete history of all previous payments summarised by funding source as well as by company. It also keeps track of retention held by company. As long as there is a positive balance by funding source and by company, you at least know that there is sufficient funding available to process the claim.

Project overview

The project overview provides a convenient access point to everything that is related to a specific project.

Overview Tab

The **Overview** Tab displays general information about the project.

Forms Tab

The **Forms** Tab displays all the forms relevant to the selected project. Clicking on any form will open it in exactly the same way as if you found the form through one of the other means described in the [Tutorial](#).

Maintenance Tab

The **Budget Section** allows a Project Manager, PMU Manager or Municipal Manager to update the Project Funding of a project. The baseline for this information is obtained from MIG 1 Section 6.2. The amount by which the total project funding (Incl. VAT) can be changed without re-registration is 20% of the amount that the project was first registered for.

If the change exceeds 20% of the original amount, the MIS initiates an amendment by opening a copy of the last registered MIG 1 form. Section 3 of the copy will show the updated budget but the MIS cannot update Section 6 automatically. Once you have amended Section 6 and submitted the amendment, it will follow the normal workflow process from Municipal Manager to Senior Manager Finances.

Note: The budget maintenance screen will not show the updated budget until the amendment has been registered and no further changes are allowed until the amendment is either registered or deleted.

The **Target Dates Section** allows a Project Manager, PMU Manager or Municipal Manager to update the Target Dates of a project. The baseline for target dates is obtained from MIG 1 Section 7. It is no longer possible to update Target Dates on MIG 4, 5, 6 or 8.

The **Planned Employment Generation and Socio Economic Impact Sections** allow a Project Manager, PMU Manager or Municipal Manager to update the planned Employment Generation obtained from MIG 5 Section 5 and the planned Socio Economic Impact first obtained from MIG 1 Section 5 and then MIG 5 Section 6.

This **Actual Employment Generation and Socio Economic Impact Sections** allow a Project Manager, PMU Manager or Municipal Manager to adjust the actual Employment Generation and Socio Economic Impact **once a project has been completed**. During the implementation phase of the project, this information is obtained as before from MIG 8 Sections 4 and 5.

Cash Flow Tab

The **Cash Flow** Tab allows you to update the cash flow for the selected project without submitting MIG 5, 6 or 8 forms. A warning message is displayed if there is an unregistered MIG 4 in the workflow to alert you that your changes will be overwritten when the form is registered.

Note: You can only update current and future monthly cycles.

Claims Tab

The **Claims** Tab provides a history of all previous payments summarised by funding source and by company. It also keeps track of retention held by company. As long as there is a positive balance by funding source and by company, there is sufficient funding available to process the claim.

Audit Trail Tab

The audit trail functionality allows any user to trace the history of changes made through any of the project maintenance screens. To view the audit trail:

1. Select an information group from the dropdown list.
2. Optionally specify a start and end date to restrict the number of audit trail entries returned.
3. Click **View** on the Action Bar.

Filters

Filters are useful for retrieving the specific forms or projects that a specific user may have an interest in such as **My forms**, **My projects** and **Awaiting registration**. Some of these are self explanatory and are not dealt with here.

Filters also enhance performance by limiting the volume of information retrieved from the MIS database.

Captured

The **Captured** filter selects all the forms captured and saved by anyone in the agencies that you have permission to view. For example, if you are registered as a provincial user, you will see all the forms captured by the districts and municipalities in your province.

My projects

The **My projects** filter assists project managers to select all the projects that they are responsible for, that is all projects where the Contact Person in Section 2 of MIG 1 matches the user logged in.

Awaiting my evaluators

This filter only applies to users with primary responsibility for workflow actions (such as Municipal Manager and Provincial Manager MIG). It selects all the forms that are awaiting the attention of users appointed by them to evaluate forms on their behalf.

Advanced...

The Advanced filter should be used when you need to combine more than one parameter refine a search for forms or projects.

Some criteria, such as the Reference Number contain a drop down menu to further specify the parameter. You could for example choose to filter on a National, Provincial or Municipal Reference Number.

Click **Find** to select all the forms or projects that match the criteria that you have specified. The results are displayed underneath the search criteria without altering the criteria to

allow you to refine the search by changing the criteria and clicking **Find** again.

Search Criteria

Reference Number: [dropdown] Contains [dropdown] [text input]

Form ID: equals [text input]

Project Name: Contains [dropdown] [text input]

Implementing Agency: Contains [dropdown] [text input]

Project Type: equals [dropdown]

Project Category: [dropdown] and [dropdown] And [dropdown]

Project Status: equals [dropdown]

Workflow Status: equals [dropdown]

Date: [dropdown] between [date picker] and [date picker]

[Find]

Backlogs

Application Overview

The backlog reporting application provides a mechanism for improving the quality of scarce backlog information through a **periodic review** process involving all three custodians of backlog information: Statistics SA, sector departments and municipalities.

The application allows each of the three custodians to capture and sign-off their own backlog baseline(s). The MIS then calculates the remaining backlog after deduction of services that have been delivered since the baseline was frozen.

Establishing the baseline

Capturing backlogs

To capture the baseline backlogs for a municipality:

1. If you are not already in the Backlog Reporting application, click **Backlogs** on the [Application Menu](#).
2. Select one of eleven infrastructure types in the [Content](#) tree to capture backlogs for that type of infrastructure.

Note: Sector users only see the infrastructure types applicable to their sector.

3. Select the baseline year from the **Filters** pane. For consistency with the rest of the MIS, the baseline year is taken as the last year of a financial year pair, for example 2005/2006 represents the 2006 baseline.
4. The appearance of the next "Quantum of backlogs" screen will depend on your role. If you are registered as a **sector user**, you will be able to capture backlogs for all municipalities, but you need to navigate to a specific municipality by expanding the relevant province, DM and LM by clicking the appropriate plus sign. If you are registered as a **municipal user** this will not be necessary because you can only see your own municipality.

- If your role permits you to capture backlog information one of the columns (STATS SA, Sector or Municipality) will have a different colour to indicate that it is editable.
- Note also that there are two calculated variance columns, one indicating the difference between the backlogs maintained by STATS SA and the Municipality and the other indicating the difference between the Municipality and the Sector.

Outputs	Stats SA	Variance	Municipality
<input type="checkbox"/> Bulk Services: Oxidation ponds - Number of new	0	0	0
<input checked="" type="checkbox"/> Bulk Services: Treatment works - Number of new	0	2	2
<input type="checkbox"/> Bulk Services: Treatment works - Number to be rehabilitated	0	0	0
<input type="checkbox"/> Bulk Services: Oxidation ponds - Number to be rehabilitated	0	0	0
<input type="checkbox"/> Bulk Services: Pump stations - Number	0	0	0
<input type="checkbox"/> Connector Services: Main outflow lines - Km	0	0	0
<input type="checkbox"/> Connector Services: Pump stations - Number	0	0	0
<input checked="" type="checkbox"/> Reticulation: Toilets - Number of households	16,767	233	17,000
<input checked="" type="checkbox"/> Reticulation: Toilets - Number of buckets eradicated	1,966	34	2,000

- Capture the backlog for each of the outputs and save them for later use or submit them into the workflow by clicking the **Save** or **Submit** buttons on the [Action Bar](#). Note that Save and Submit only affect lines that have been selected by clicking the corresponding check box.



It is possible to select all the outputs for a LM, DM or even province, but this time-saving feature should only be used when backlogs have been captured for all outputs, otherwise those that have not been captured will be saved as a zero backlog.

Confirming backlogs

- As the backlogs are submitted, users with appropriate permission to sign the backlogs off on behalf of each of the three custodians will receive an e-mail notification requesting them to confirm the figures by clicking **Confirm** on the [Action Bar](#) or request that the figures be amended by clicking **Request Amendment**.

Like **Save** and **Submit**, **Confirm** and **Request Amendment** only affect lines that have been explicitly selected by clicking the corresponding check box.

Remaining backlogs

Once a baseline has been captured, the MIS calculates the remaining backlog by subtracting outputs already delivered in a municipality from the baseline. Outputs already delivered are obtained from all Physical completion (MIG 9) forms registered after the baseline was frozen.

Click the **Remaining Backlog** tab to view the remaining backlog.

Workflow and Communication

To avoid e-mail clutter, a user responsible for confirming backlogs will only receive one notification per day (generated overnight) no matter how many backlog items were submitted during the day.

Non-municipal users in particular are assisted with navigation by the MIS displaying the number of outstanding items for each LM, DM and province in brackets.

Workflow status

The workflow status of every backlog item is indicated by the familiar , ,  and  icons explained in [Annexure A](#).

An icon unique to the Backlog Reporting application, , indicates that no backlogs have been captured for the selected year and that the figures shown have been carried over from a previous baseline.

Communication

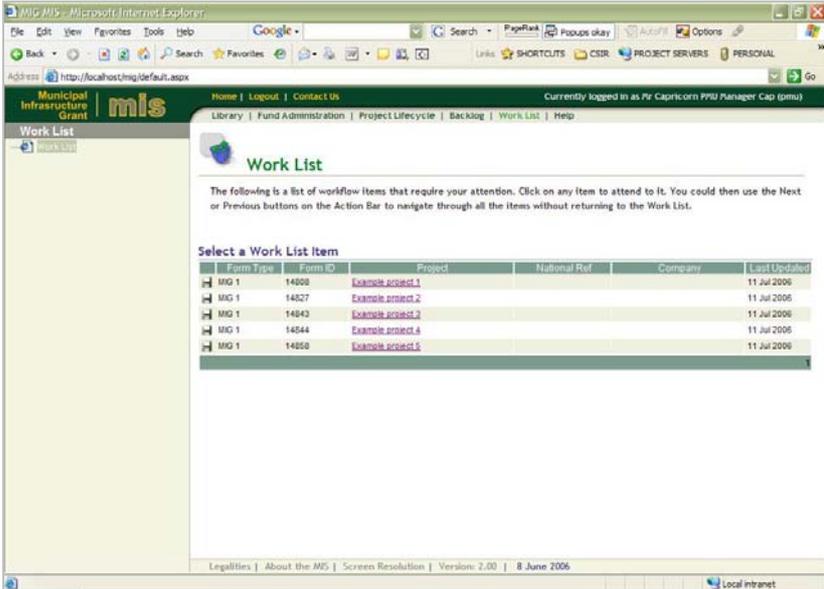
To facilitate a discussion about the backlogs posted by each of the custodians any user can click the  icon for a complete history of who captured, submitted, confirmed or requested an amendment, complete with contact numbers and e-mail address of any of the custodians.

Workflow

Work List

The **Work List** is automatically displayed as the first page after you have logged in. It lists all the forms (MIG 1 to 10) that require your attention.

Work list



The screenshot shows the 'Work List' page in the MIS application. The page title is 'Work List' and it includes a brief description: 'The following is a list of workflow items that require your attention. Click on any item to attend to it. You could then use the Next or Previous buttons on the Action Bar to navigate through all the items without returning to the Work List.'

Below the description is a table titled 'Select a Work List Item' with the following columns: Form Type, Form ID, Project, National Ref, Company, and Last Updated. The table contains five rows of data:

Form Type	Form ID	Project	National Ref	Company	Last Updated
MIG 1	14898	Example project 1			11 Jul 2006
MIG 1	14827	Example project 2			11 Jul 2006
MIG 1	14843	Example project 3			11 Jul 2006
MIG 1	14844	Example project 4			11 Jul 2006
MIG 1	14858	Example project 5			11 Jul 2006

The footer of the page includes: 'Legalties | About the MIS | Screen Resolution | Version: 2.00 | 8 June 2006' and 'Local intranet'.

If you click on the hyperlink in the Project column of the list it will open the form just like any other list in the MIS would have done (see [Working with lists](#)).

List navigator

Once the form is open you will notice two new buttons on the [Action Bar](#). Clicking the **Next >** or **< Previous** buttons will open the next or previous form in your **Work List**. The buttons become inactive when you reach the first or last form in the list. These two buttons (the list navigator) allow you to attend to all the forms requiring your attention without returning to the **Work List**. If you do return to the **Work List** after attending to all the forms it will be empty, indicating that there is nothing that requires your attention.

Should you want to return to the **Work List** from anywhere in the MIS, you can do so by clicking **Work List** on the [Application Menu](#).

In the above we have described how the Work List enables you to attend to all forms that require your attention without ever using the [Application menu](#), [Content tree](#) or [Filter](#). We will now describe how some users, particularly those that use the MIS infrequently, will be able to do all of the above without even using the Work List.

This is made possible by a hyperlink contained in the enhanced e-mail notification sent by the MIS to alert you that a workflow item is awaiting your attention. If you click this hyperlink it will take you to the login page of the MIS. Once you have logged in the next page you will see is the form that you need to attend to, opened and awaiting your input.

E-mail notification

Dear Mr Provincial Coordinator
This message is system generated. Please do not reply to it because the mailbox is not attended to. If you have problems please call (012) 334 4860 or 082 578 5659 or send an e-mail to mig@dplg.gov.za.
The form awaiting your attention belongs to project:
Example project
Municipality: Polokwane LM
The form was submitted by:
Mr Capricorn PMU Manager
Acting on behalf of: Municipal Manager
Position: PMU Manager
Telephone: 015 5555555
Fax: 015 5555556
Cell: 0825555555
E-mail: example@agency.gov.za
If you prefer to attend to this now, [click here to](#)

Workflow process

The workflow process followed by a form differs from one form to another and whether users with primary responsibility to attend to forms, such as the Municipal Manager, Provincial Manager or Senior Manager MIG appointed evaluators to assist them and whether they delegated their responsibility to someone else.

MIG 1

Despite these variations the typical workflow process of a MIG1 form can be described as follows:

1. When a data capturer submits a form it is submitted to the Project Manager or the PMU Manager if the Project Manager is not a registered user of the MIS. If the latter, the MIS will attempt to locate a PMU within the municipality or failing that a district PMU. Project Managers and PMU Managers act as "Special Evaluators" in the sense that they have edit permissions on the form up to the point where they submit the form and also when a form is referred back for revision by anyone.

Note: The term "submitted to" means that the next user in the workflow process receives an e-mail that a form is awaiting his/her attention and that the form appears in his/her Work List.

2. When the Project Manager or PMU Manager submits the form it is submitted to the Municipal Manager (MM) or someone acting on behalf of the MM by virtue of delegation or escalation. If the form is submitted by the Project Manager, the PMU Manager is notified by e-mail.
3. When the MM or acting MM recommends the form it is submitted to one of the nine DWAF Regional Coordinators or someone acting on their behalf.

Note: In the following it is taken for granted that any workflow participant can delegate responsibility and that it is not necessary to repeat the phrase "or someone acting on his/her/their behalf".

4. When a Regional Coordinator recommends the form it is submitted to the Provincial Manager MIG.
5. When the Provincial Manager MIG recommends the form it is submitted to the Senior Manager MIG.
6. When the Senior Manager MIG recommends the form it is submitted to the Senior Manager Finances.
7. When the Senior Manager Finances registers the form all participants in the workflow process are notified by e-mail as well as the MM, even though he/she may not have taken part in the process.
8. When a form is referred back for revision by anyone, all previous workflow participants are notified by e-mail and the Project Manager is requested to revise the form. If the Project Manager is not a registered user of the MIS the PMU Manager (first municipal and then district) will be requested to attend to the form.
9. Other forms follow a similar process up to Step 2 above but then ends with Step3 when the MM or someone acting on his/her behalf registers the form.

Referring a form

MIG 4 to 10

My Profile

Your profile contains personal information such as your e-mail address and telephone number that are essential to the proper functioning of the MIS. Much of this information can be updated at any time by clicking the **Maintain My Profile** link on the login page.

From the **Responsibilities** tab of this page, most users can also nominate alternate users and delegate their responsibility to one of the alternate users for a fixed period or until the delegation is retracted. Some users may even appoint evaluators to assist them with the task of reviewing the contents of a form, for example checking that unit costs do not exceed guideline costs.



It is important to note that the person you delegate to will inherit all your permissions for as long as the delegation is active. If a Municipal Manager for example delegates to a Data Capturer, the Data Capturer will be able to recommend all the forms that the Municipal Manager is normally responsible for.

Alternate users

Before you can delegate responsibility you first need to nominate one or more alternate users by clicking the **Maintain My Profile** link on the login page and then selecting the **Responsibilities** tab. To nominate the first alternate click the  icon in the first row. In the resulting user dialogue click **Find** to display a list of persons that you may nominate as alternates. Depending on where you are located in the MIS permission hierarchy, you may want to refine the search by specifying a **Role** and/or **Agency**. If you do not, it will display all users above you in the MIS permission hierarchy. For example, if you are a municipal user, it will display all the users in your municipality, all district users in your district, all provincial users in your province and all national users.

It is highly recommended (even required) that you nominate at least one alternate user to act on your behalf when you are unable to do so yourself.

Note: Nominating alternates is not the same as delegating your responsibility to them. A person that has been nominated is not notified by e-mail.

Delegation

To delegate responsibility, you have to click one of the **Delegate to** checkboxes, optionally fill in an **Until** date and click **Submit** on the [Action Bar](#). If you do supply a date (for example the last day of your leave) the delegation will automatically expire at midnight on that date and you will start receiving workflow notifications from your first day back in the office. If you do not supply a date, the delegation will remain active until you retract it by again clicking the **Delegate to** checkbox and clicking **Submit**.

Personal		Responsibilities			
Submit					
Alternates					
Please define up to four other MIS users that could attend to workflow items in your absence. Depending on your profile, you may delegate your responsibility to one of these alternate users for a specified period. If you neglect to do this, items will automatically be escalated to Alternate 1 if they are not attended to in 5 working days.					
	Person	Agency	Role	Delegate to	Until
Alternate 1:	LP Provincial MIG Manag 	Limpopo	Provincial MIG Manage	<input checked="" type="checkbox"/>	14-JUL-2006 
Alternate 2:				<input type="checkbox"/>	
Alternate 3:				<input type="checkbox"/>	
Alternate 4:				<input type="checkbox"/>	

Escalation

Escalation is the process through which the MIS provides alternate users with the necessary permission to attend to a workflow item that has not been attended to within 5 working days. For example, if you are responsible for recommending a form and neglect to do so in 5 working days, the MIS will request your first alternate by e-mail to recommend the form. If this person also neglects to attend to the matter, the MIS will request the second alternate to stand in, etc.

Note: The fact that the MIS temporarily provides an alternate person with permission to attend to the form, does not mean that your permission has been taken away. You can still attend to the form even after you receive the copy of the e-mail, requesting the alternate to attend to the form.

Evaluators

Users with primary responsibility for workflow actions (such as the Municipal Manager and Provincial Manager MIG) are allowed to appoint evaluators to assist them with the task of reviewing the contents of a form, for example checking that unit costs do not exceed guideline costs. If an evaluator is appointed, an e-mail notification is sent to the evaluator and the form appears in the evaluator's work list. The user with primary responsibility for the form is not notified at this stage and the form does not appear in his/her Work List.

Note: The primary user can still access the form through the [Awaiting my evaluators](#) filter and will still be able to add comments, recommend or refer the form back.

When the evaluator has reviewed and submitted the form the person with primary responsibility receives an e-mail that the form has been reviewed and the form will appear in his/her Work List. The workflow status icon will contain an E in the upper left hand corner to indicate that the form was submitted by an evaluator, for example . The person with primary responsibility (or the person acting on his/her behalf) may then examine the comments/concerns added by the evaluator and decide to recommend the form or refer it back for revision.

Appointing evaluators

Appointing an evaluator is done in exactly the same way as nominating alternates on the **Responsibilities** tab. Once you have selected an evaluator, a number of **Responsible for** checkboxes will appear to allow you to make the

evaluator responsible for one or more areas one level below your own in the MIS permission hierarchy. In the example below a Provincial Manager sees all the districts in the province. Likewise the Senior Manager MIG will see all provinces. Up to ten evaluators can be appointed. If more than one evaluator is made responsible for the same area, they will all receive e-mail notifications and be allowed to attend to the same form. This is nevertheless allowed because it provides a mechanism through which the workload can further be divided by informal arrangement. In the example below, the two evaluators responsible for the same district may split the workload informally by municipality.

Person	Agency	Role	Delegate to	Until
Alternate 1: Capricorn PMU Manager	Capricorn DM	PMU Manager	<input type="checkbox"/>	
Alternate 2:			<input type="checkbox"/>	
Alternate 3:			<input type="checkbox"/>	
Alternate 4:			<input type="checkbox"/>	

Evaluators
Evaluators can assist you to evaluate and comment on forms before they are submitted to you. Please define up to ten evaluators and assign them to one or more areas of responsibility.

Person	Responsible for
Evaluator 1: Polokwane PMU Manager	<input type="checkbox"/> Capricorn DM <input checked="" type="checkbox"/> Greater Sekhukhune DM <input type="checkbox"/> Mopani DM <input checked="" type="checkbox"/> Vhembe DM <input type="checkbox"/> Waterberg DM
Evaluator 2:	
Evaluator 3:	

Reporting, Mapping and Graphing

Application Overview

The new reporting, mapping and graphing module allows you to now generate on screen reports, maps and in the future also graphs.

The GIS module provides a spatial view of MIG registered projects, thematic layers for MIG expenditure and service delivery backlogs. At present the capability of the GIS module is confined to the display of thematic layers. In the next phase of development the updating of spatial information at community level will be possible.

Benefits of the GIS Module:

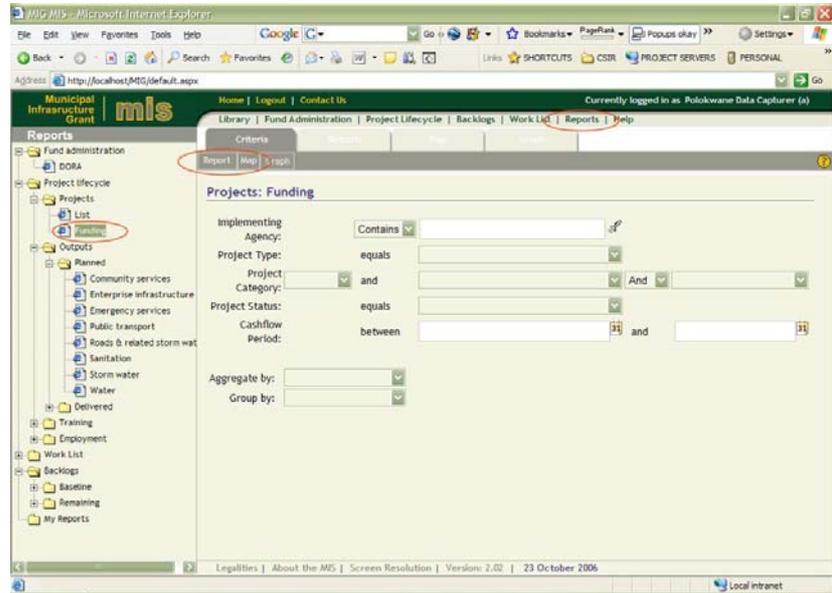
- All the data that resides in the MIG-MIS is spatially enabled.
- The geographic spread of MIG registered projects in relation to other entities can be analysed.

Reports

To generate a report:

1. Click **Reports** on the [Application Menu](#).
2. Select a **Report topic** of your choice.

3. **Optionally** specify filter criteria to restrict your report to a specific Implementing Agent, Project Type, Project Status, etc.
4. Click **Report** on the [Action Bar](#).



Filter criteria

If you want to adjust the filter criteria after looking at the Report or Map, click the Criteria Tab, adjust the criteria and click **Report** on the [Action Bar](#).

Implementing agent:

The implementing agent field is pre-populated according to your login.

Note: Unlike the rest of the MIS, you are not restricted to change this field to view the reports and maps of other implementing agents or to obtain a provincial or even national view.

Aggregate by:

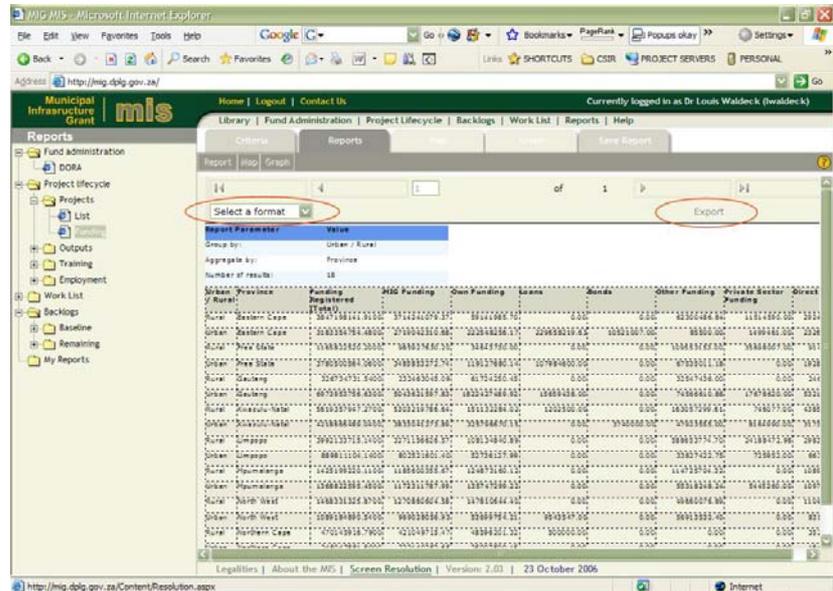
The **Aggregate by:** parameter allows you to obtain results aggregated by Sub-place, Municipality, District or Province or even the whole of SA. The exception to this rule is that the lowest level of aggregation for Backlog information is Municipality.

If you leave this parameter blank, the Project Lifecycle reports will produce a list of all projects that match the other filter criteria that you may have specified and the Project Lifecycle maps will map the location of all projects that match the filter criteria.

Group by:

If you choose to aggregate the results, you may also elect to **group** the aggregated results by one other dimension such as Project type, Project status, Urban/Rural, etc. This could also be viewed as a breakdown of the aggregated results by the chosen dimension.

In the example below, with **Aggregate by** = Province and **Group by** = Urban/Rural, the result obtained consists of 18 lines, two for each province showing the breakdown of Project Funding by Urban and Rural dimensions.



Exporting reports

To export any report:

1. Choose **Excel** or **Acrobat (PDF)** from the **Select a Format** dropdown box.
2. Click Export on the Report Toolbar.
3. Select **Open** or **Save** on the **File Download** dialog that follows.

Maps

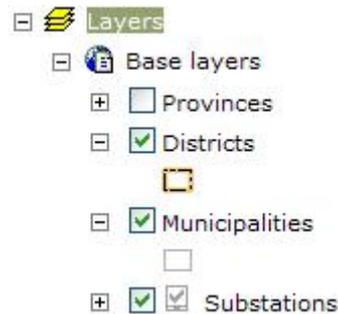
To generate a map:

1. Click Reports on the Application Menu.
2. Select a report topic of your choice.
3. Optionally specify filter criteria to restrict your report to a specific Agency, Project Type, Project Status, etc.
4. Click **Map** on the **Action Bar**.

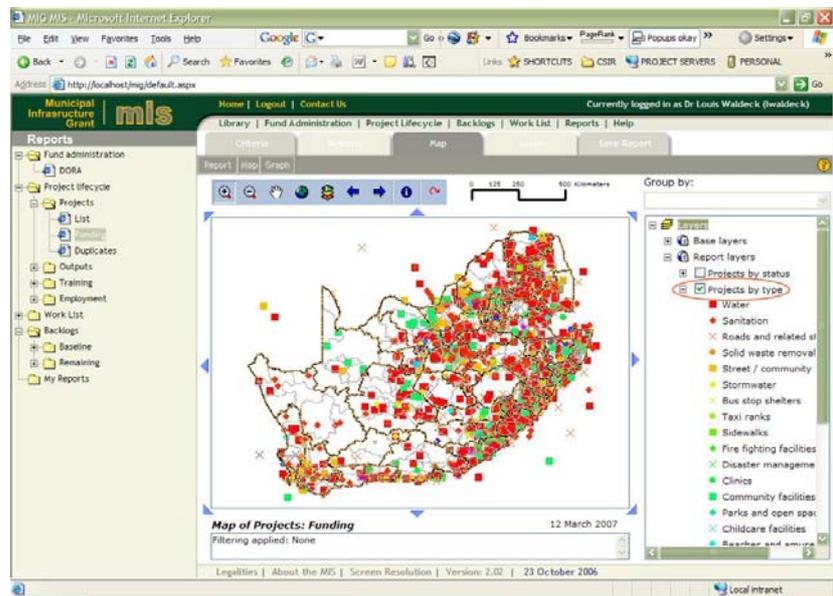
Note that this is exactly the same procedure as generating a report, except for the last step where you click Map instead of Report

5. Select a **Report layer** by clicking the appropriate check box in the tree view on the right hand side of the map frame. Only one Report layer should be selected at a time.
6. **Optionally** expand the **Base layers** node in the tree view and select one or more base layers. A next to the layer checkbox indicates that the layer is scale

dependant and that it contains too much detail to be displayed at the current scale. To display such layers [zoom in](#) more.



7. Click the **Refresh** button on the **Map Navigation Bar** to display the map. The checkboxes have no effect until the **Refresh** button is clicked.



If you want to adjust the filter criteria after looking at the Report or Map, click the Criteria Tab, adjust the criteria and click **Map** on the **Action Bar**.

Navigation bar



The **Map Navigation bar** is used to navigate your way around a map.

Refresh. Click to refresh the map after selecting Base layers, Report layers and a Group by.



Identify. To identify features displayed on the map, first click this button and then click as close as possible to a feature (for example a project) on the map. A popup window will appear displaying the attributes of all visible layers in the map. Select a specific layer from the dropdown box on the popup window if you wish.



Previous, Next. These buttons allow you to navigate through all the zoom levels that you used since the map was first displayed.



Default extent. This button resets the zoom extent to the default determined from your login and Aggregate by parameters.



Full extent. This button will zoom out to the full extent of SA.



Pan. This button allows you to pan the map by clicking the button, then left-clicking on the map and moving the mouse pointer while keeping the left mouse button depressed.



Zoom in. To zoom in, click this button and then click-and-drag a rectangle on the map that identifies the area of the map that you want to zoom in to.



Zoom out. To zoom out, click this button and then click-and-drag a rectangle on the map that identifies an area on the map that will be used to calculate the ratio of what you currently see and what you would like to see. If you select a small area on the map, the ratio will be large and the map will be zoomed out a lot (potentially to full extent).

System Administration

Application Overview

The system administration application is used by designated system administrators to:

- Configure organisation, role, region, time cycle hierarchies and status (Type 1, 2 or 3) of municipalities.
- Maintain company (consultant and contractor) contact details, bank account details. Hierarchical to accommodate branch offices of the same company.
- Validate the registration of new users
- Manage user login, password and permission settings.

Annexure A: Workflow status

Workflow icons are used to indicate the status of a workflow item. A workflow item can be a form in the [Project Life Cycle](#) Application or a line in the [Fund Administration](#) Application. The workflow status only changes in response to actions such as Submit, Recommend or Refer back.

The meaning of the icons is explained below.

Note: Since any workflow participant can delegate his/her responsibility, actions are not qualified below by repeating "or someone acting on his/her/their behalf".

Project Life Cycle

 A partially or fully captured form has been saved but has not yet been submitted into the workflow process. The form is visible to other users in the same agency, as well as users higher up in the MIS permission hierarchy, but can only be edited and submitted by the original data capturer.

 The form has been submitted into the workflow process and can only be edited and submitted by one of two special evaluators (the Project Manager or PMU Manager)

 The submitted form has been reviewed by an evaluator or special evaluator.

 The form has been recommended by the Municipal Manager and can no longer be edited.

 The form was recommended by the Municipal Manager and has subsequently been submitted by an evaluator of the Provincial Manager.

 The form has been recommended by the Provincial Manager.

 The form was recommended by the Provincial Manager and has subsequently been submitted by an evaluator of the Senior Manager MIG.

 The form has been recommended by the Senior Manager MIG.

 The form was recommended by the Senior Manager and has subsequently been submitted by an evaluator of the Senior Manager Finances.

 The form has been recommended by the Senior Manager Finances. The project is now registered.

 The form was referred back for revision.

 The project has been suspended. This is usually done to temporarily shelve a project until sufficient funds are available to continue with it. Suspended projects are by default excluded from reports and no forms can be processed against the project until it is un-suspended. Projects can be suspended after registration of MIG 1 but before registration of MIG 5.

 The project has been withdrawn.

 The project has been terminated permanently and will not continue in the future. Projects can be terminated after registration of MIG 1 but before registration of MIG 6. Terminated projects are by default excluded from reports and no forms can be processed against the project, nor can project maintenance changes be made.

Fund Administration

 The item has been captured and saved, but not submitted into the workflow.

 The item has been submitted.

 The Item has been verified.

 The item has been referred back for revision.

Backlogs

 The item has been captured and saved, but not submitted into the workflow.

 The item has been submitted.

 The Item has been confirmed.

 An amendment has been requested.

Annexure B: Backlog Definitions

Definitions: Community Services

Backlog	Definition	Units
Community Lighting: High mast	A backlog is represented by dense settlements without high mast light	Number
Community Lighting: Street lights	A backlog is represented by previously reticulated areas without street lights.	Number
Health Services - Clinics	The lack of the following services represents the backlog: <ul style="list-style-type: none"> o Constructed Health centers (includes Maternity, Ophthalmic, Child guidance, Speech therapy, physio, community nursing services, health education, accommodation of General Practitioners, flexible use of space and adaptability.) o Ablution facilities 	Number of clinics
Multi Purpose Centre/ Facility	No definition available yet.	Number
Community Halls	No definition available yet.	Number
Recreational Facilities/ Sport Facilities	The lack of the following services represents the backlog: <ul style="list-style-type: none"> Swimming pools; o Combi-fields (hard court for tennis, netball, volleyball and basket ball; o Combi-fields (grass) for softball, hockey, cricket, athletics, rugby and soccer. 	Number
Admin. Facilities	No definition available yet.	Number
Multi Purpose Centre	The lack of the following services represents a backlog: <ul style="list-style-type: none"> o Multi club house/community hall o Multi purpose sports courts all weather surface (tennis, volleyball, basketball, netball, standard soccer and rugby fields with an athletic track) o Ticket office o Parking area 	Number
Parks and Open Spaces	No definition available yet.	Number
Child Care Facilities/ Nurseries	No definition available yet.	Number
Beaches and Amusement Facilities	The lack of the following services represents a backlog: <ul style="list-style-type: none"> o Access to basic water o Access to sanitation o Access to refuse removal 	Number
Cemeteries	The lack of the following services in a formalized land earmarked for a cemetery represents a backlog:	Number

	<ul style="list-style-type: none"> o Access roads and internal distributor roads o Parking areas o Public toilets o Security fencing and security gate o Storage space for equipment o Water for ablution facilities o Ablution facilities for workers o An administration block o Shelter 	
Crematoriums	No definition available yet.	Number
Fencing	<p>Service levels 1 and 2 represent the backlog: Lack of fencing</p> <ol style="list-style-type: none"> 1. Mesh fencing (not desirable due to a constant removal thereof by local communities) 2. Wall fencing 3. Palisade fencing 	Km
Local Amenities	No definition available yet.	Number
Municipal Abattoirs	No definition available yet.	Number
Libraries	<p>The lack of the following services represents a backlog:</p> <ul style="list-style-type: none"> o Library building o Ablution facilities 	Number
Solid Waste Disposal Site	No definition available yet.	
Bulk Services: Solid waste removal site	No definition available yet.	Number
Bulk Services: Refuse transfer stations	No definition available yet.	Number
Facilities for Animals	<p>The lack of the following services represents a backlog:</p> <ul style="list-style-type: none"> o Accommodation facilities o Crematoriums o Burial facilities o Dipping tanks 	Number

Definitions: Electrification

Backlog	Definition	Units
Households (Grid Connection)	<p>Service levels 1 to 3 (as energy source for lighting) represent the backlog:</p> <ol style="list-style-type: none"> 1. Other 2. Candles 3. Paraffin 4. Gas 5. Solar 6. Electrified 	Households
Households (Non-Grid Connection)	Households located in remote or rural areas and are far away from the existing electricity infrastructure and uses solar home system as	Households

		energy source for lighting, media and communication access.	
Schools Connection)	(Grid	Service levels 1 to 3 (as energy source for lighting) represent the backlog: 1. Other 2. Candles 3. Paraffin 4. Gas 5. Solar 6. Electrified	Number
Schools Connection)	(Non-Grid	Schools located in rural areas and are far away from the existing electricity infrastructure and uses solar system as energy source for lighting, media access and a computer for administration.	Number
Clinics (Grid Connection)		Service levels 1 to 3 (as energy source for lighting) represent the backlog: 1. Other 2. Candles 3. Paraffin 4. Gas 5. Solar 6. Electrified	Number
Clinics (Non - Grid Connection)		Clinics located in rural areas and are far away from the existing electricity infrastructure and uses solar system as energy source for lighting, media access, refrigeration of medicines and a computer for administration.	Number

Definitions: Enterprise Infrastructure

Backlog	Definition	Units
Street Trading	No definition available yet.	Number
Markets	No definition available yet.	Number
Local Tourism	No definition available yet.	Rand

Definitions: Emergency Services

Backlog	Definition	Units
Fire Fighting Facilities	Lack of the following represents a backlog: 1. Any urban services without operational section responsible for physical fire fighting, rescue and in-house training services and a fire safety section responsible for law enforcement and structural fire safety as well as legislation on dangerous and hazardous goods. 2. Remote or rural areas without an all terrain water tanker and/or veldt fire units available to respond on short notice stationed at central points as rapid response holds the key	Number

	to all operational activity where life and property are at stake. Such a service should be well equipped with means of communication suitable for the area and manned 24 hours by at least one preferably two persons to coordinate activities.	
Disaster Management Facilities	<p>Backlog in disaster management facilities is represented by the following:</p> <ol style="list-style-type: none"> 1. Lack of a Disaster Management Centre in any three spheres of government as required by section 29 and 43 of the Disaster Management Act, Act 57 of 2002. 2. DMC that lacks the following services: <ul style="list-style-type: none"> Risk reduction activities Incident ,event and disaster response activities Operational incident management area Tactical disaster management area Organizational disaster management area Media room Disaster relief activities Electronic equipment rooms Physical security Business continuity measures in place 	Number

Definitions: Public transport

Backlog	Definition	Units
Bus Shelters	<p>The following represents a bus shelter backlog:</p> <ol style="list-style-type: none"> 1. No shelter-type structures erected and maintained for a mass transit district, transportation district or any other public transportation agency for the use and convenience of the customers of said district or agency. 2. A shelter cannot accommodate 10-15 passengers 3. The structure is not appropriate (e.g. it should have metal sheeting for the roof cover and side cladding; seating can also be manufactured as part of the shelter structure. 	Number
Taxi Ranks	<p>Taxi rank backlogs are defined as those official ranks catering to more than 100 passengers a day through at least 12 of the 24 hours and lacks taxi rank facilities (seats, overhead cover/shelter for commuters, paving/interlocking blocks, ablution blocks, hawker stalls, high mast lights, waste disposal, washing bay, workshops etc.)</p> <p>Lacks the following:</p> <ul style="list-style-type: none"> o 2,5m wide lanes where taxis will line up to pick up passengers o Islands between the lanes with the typical width of 1,5m o An open parking area for waiting taxis during off peak periods o Sufficient maneuvering space at the entrance and exit sections of the lanes and shall be typically be 10.0m at both end 	Number

Sidewalks		
Gravel sidewalk	<p>Backlog is represented by the following:</p> <ol style="list-style-type: none"> 1. Route not leveled and all plant material or other debris not removed 2. Not constructed/Lacks the following: <ul style="list-style-type: none"> o Top of the reworked surface shall be 150mm lower than the top of the kerb or the road level o The imported gravel shall be at least G7 quality and shall be compacted to 93% modified AASHTO density o Surface graded 1:100 towards the road in the case where no side channels are present in the streets. Where side channels are provided the surface shall be graded at 1:100 towards the side channels. 	Km
Paved sidewalk	<p>Backlog is represented by the following:</p> <ol style="list-style-type: none"> 1. Route not leveled and all plant material or other debris not removed 2. Not constructed/Lacks the following: <ul style="list-style-type: none"> o Top of the reworked surface shall be 180mm lower than the top of the kerb or the road surface, o The in-situ material shall be compacted to provide even surface before a 100mm thick layer of imported gravel is placed. o The imported gravel shall be at least G5 quality and shall be compacted to 93% modified AASHTO density o The bedding sand layer of the of approximately 25 to 30mm shall be placed on and 50mm thick paving blocks shall then be packed in a suitable pattern to form the sidewalk o The outer edge shall be restrained with either concrete garden kerbs or a concrete edge strip. o The surface shall be graded at 1:100 towards the road in the case where no side drains are present. Where side drains are present the surface shall be graded at 1:100 towards the side drain. 	Km
Tarred	No definition available yet.	Km
Pedestrian Bridges	No definition available yet.	Km

Definitions: Roads and Related Stormwater

Backlog	Definition	Units
Local Distributors: Gravel	No definition available yet.	Km
Local Distributors: Paved	No definition available yet.	Km
Local Distributors: Tarred	No definition available yet.	Km
Access Collectors: Gravel	Backlog is defined as all households with no access to at least gravel road. All other collectors and distributors are considered as a higher level of service.	Households

	The following represents a backlog regarding paved roads:	
Access Collectors: Paved	Existing road without adequate pavement section (e.g. it does not consist of asphaltic concrete or cement concrete, base course material and sub-base materials (if required) placed on compacted sub grade).	Km
Access Collectors: Tarred	No definition available yet.	Km
Low-Water Bridges:	No definition available yet.	Number

Definitions: Sanitation

Backlog	Definition	Units
Bulk Services: Treatment works	A backlog is represented by the following: 1. Lack of processes of removing contaminants from sewage. It includes physical, chemical and biological processes to remove physical, chemical and biological contaminants. Its objective is to produce a waste stream (or treated effluent) and a solid waste or sludge also suitable for discharge or reuse back into the environment.	Number
Bulk Services: Oxidation ponds	A backlog is represented by the following: 1. Lack of Oxidation ponds (other methods used during the secondary treatment that is designed to substantially degrade the biological content of the sewage such as are derived from human waste, food waste, soaps and detergent).	Number
Bulk Services: Pump stations	A backlog is defined as 1. Lack of pump stations (designed to hold pumps and equipment for pumping sanitation fluids from one place to another). 2. Existing pump stations not functional.	Number
Connector Services: Main outflow lines	No definition available yet.	Km
Connector Services: Pump stations	A backlog is defined as: 1. Lack of pump stations (designed to hold pumps and equipment for pumping sanitation fluids from one place to another). 2. Existing pump stations not functional.	Number
Reticulation: Toilets	Service levels 1 to 3 represent the backlog: 1. No sanitation (no sanitation facility available to the household); 2. A pit latrine not provided with ventilation and fly proofing; 3. Bucket latrines;	Number of households

	4. A ventilated improved pit latrine or equivalent; 5. Septic tanks; and 6. Sewer waterborne sanitation systems.	
--	--	--

Definitions: Solid Waste Removal

Backlog	Definition	Units
Bulk Services: Skips /Bins	No definition available yet.	Number
No refuse or rubbish removal by local authority	Service levels 1 and 2 represent the backlog: 1. No rubbish disposal; 2. Own refuse dump; 3. Collection less than weekly. 4. Collection at least weekly. 5. Communal refuse dump.	Number of households

Definitions: Storm Water

Backlog	Definition	Units
Storm Channels	No definition available yet.	Km
Storm Pipelines	No definition available yet.	Km
Storm Retention Ponds	No definition available yet.	Number

Definitions: Water

Backlog	Definition	Units
Bulk Services: Geo-hydrological Investigation	A backlog is represented by the following: 1. Lack of a study of the movement, distribution, and quality of water.	Number of Boreholes
Bulk Services: Boreholes	A backlog is defined as households located in small remote communities where even basic schemes are costly, where support services are difficult and where affordability is very limited and have no access to a point source of water supply such as boreholes (drilled hole used to abstract, recharge or monitor groundwater.)	Number
Bulk Services: Reservoirs	A backlog is defined as: 1. Households provided with water (either from natural or man-made reservoirs) but it is not enough to meet their demands. Hence these leads to a need to build or secure another reservoir to accommodate all households. 2. Households provided with water either from an existing natural or man-made reservoirs but needs to be rehabilitated.	Number

Bulk Water plants	Services: treatment	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> Households receiving water pumped from wells, rivers, streams and reservoirs to the water treatment plants but it is not treated according to the accepted standards (chemical processes such as disinfection or coagulation or biological processes such as lagooning or slow sand filtration or activated sludge) and it is distributed to the customers. Therefore, The treatment of water is not acceptable for a desired end-use which can include discharge into the environment. Households receiving water from wells, rivers, streams and reservoirs but have no water treatment plants. 	Number
Bulk Pump stations	Services:	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> Households located in areas not far from the wells, rivers, streams and reservoirs but do not have pump stations to draw water from the source to the water treatment plants to be treated and distributed to the customers. Households located in areas not far from the wells, rivers, streams and reservoirs but have pump stations which are not functional to draw water from the source to the water treatment plants to be treated and distributed to the customers. 	Number
Bulk Raw storage dam	Services: water	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> Households without any form of raw water (untreated water) storage dams (a barrier across flowing water that obstructs, directs or retards the flow, often creating a reservoir, lake or impoundment of untreated water) where water can be stored for further treatment and consumption by all. Households with raw water storage dams but needs to be rehabilitated. 	Number
Connector Services: lines	Supply	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> Lack of connections or distributors of fresh or drinking water through piping water mains from storage to consumption. Existing connections or distributors of fresh or drinking water through piping water mains from storage to consumption needs rehabilitation. 	Km
Connector Services: stations	Pump	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> Households located in areas not far from the wells, rivers, streams and reservoirs but do not have pump stations to draw water from the source to the water treatment plants to be treated and distributed to the customers. Households located in areas not far from the wells, rivers, streams and reservoirs but have pump stations which are not functional to draw water from the source to the water treatment plants to be treated and distributed to the customers. 	Number

Connector Services: Reservoirs	<p>A backlog is defined as:</p> <ol style="list-style-type: none"> 1. Households provided with water (either from natural or man-made reservoirs) but it is not enough to meet their demands. Hence these leads to a need to build or secure another reservoir to accommodate all households. 2. Households provided with water either from an existing natural or man-made reservoirs but needs to be rehabilitated. 	Number
Reticulation: Stand pipes	<p>Service levels 1 and 2 represent the backlog:</p> <ol style="list-style-type: none"> 1. No reticulation; 2. Public standpipes below RDP standard, i.e. more than 200 meters from the dwelling; 3. Public standpipes within 200 meters of the dwelling which is taken to the RDP standard; 4. Yard tanks: a storage tank with approximately 200 litres of water in the yard adjacent to the dwelling, which is filled via water reticulation every day; 5. Yard taps: a metered water supply delivered to a single tap in the yard adjacent to the dwelling; and 6. House connections: a metered water supply, which is piped into the house, typically with several taps. A water supply backlog is defined as below basic service level, which is inclusive of 'no reticulation' and 'standpipes more than 200 meters from the dwelling'. 	Households
Reticulation: Water meters	<p>A backlog is represented by the following:</p> <ol style="list-style-type: none"> 1. Lack of a device that measures the quantity of water used. 	Number
Reticulation: Pipe lines	<p>A backlog is represented by the following:</p> <ol style="list-style-type: none"> 1. Lack of water pipelines (a conduit made from pipes connected end-to-end for long-distance fluid transport) to transport surface or ground water from one area to another area (Water pipelines are large in diameter and can supply water to communities and industries over both short and long distances) without causing erosion and reducing the chance of evaporation. 	Km